

Santa Cruz Route 1 HOV Tier I Corridor Analysis of  
High Occupancy Vehicle (HOV) Lanes and  
Transportation System Management (TSM) Alternatives  
(05 SCR-1-PM 7.24-16.13)

and

Tier II Build Project Analysis 41st Avenue to Soquel Avenue/Drive  
Auxiliary Lanes and Chanticleer Avenue Pedestrian Overcrossing  
(05 SCR-1-PM 13.5-14.9)

EA 0C7300

# **Cumulative Impact Analysis Technical Report**



**Prepared by**

**State of California Department of Transportation**

**June 2018**



**U.S. Department  
of Transportation**



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## 1.0 Introduction

This Technical Report presents the cumulative impact analysis of the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project (Tier I/Tier II Project).

The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 - 2021 following approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition. A description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/ Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a); however, following the circulation of the Draft EIR/EA, modifications were made to the Tier I build alternatives as a result of a habitat assessment for Santa Cruz long-toed salamander. The revised descriptions of the Tier I build alternatives are provided in Appendix A. Cumulative impacts of the proposed improvements were evaluated in the Draft EIR/EA; however, following the circulation of the Draft EIR/EA, this Cumulative Impact Analysis was conducted to confirm that all cumulative impacts are adequately addressed. This Cumulative Impact Analysis was conducted in accordance with the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration and the Environmental Protection Agency (Caltrans 2005).

## 2.0 Organization of the Technical Report

The main body of this technical report provides a summary of Steps 1 through 6 of the eight-step analysis of cumulative impacts, and discusses Steps 7 and 8 in detail. Appendices B through G provide detailed information regarding Steps 1 through 6, respectively. Table 2-1 shows how the components of this Technical Report correspond with the 8-step methodology.

**Table 2-1. Organization of the Technical Report**

Section of the Report	Section Title	Step(s) of the 8-Step Methodology
1	Introduction	<ul style="list-style-type: none"> <li>None</li> </ul>
2	Organization of the Technical Report	<ul style="list-style-type: none"> <li>None</li> </ul>
3	Resources Considered in the Analysis (Steps 1 through 3)	<ul style="list-style-type: none"> <li>Step 1 identifies the resources considered in the Cumulative Impact Analysis</li> <li>Step 2 describes the resource study area (RSA) for each resource, for the purpose of identifying other projects that may affect each resource</li> <li>Step 3 presents conclusions concerning the health and historical context of each resource included in the analysis</li> </ul>

Section of the Report	Section Title	Step(s) of the 8-Step Methodology
4	Impacts of Proposed Project that May Contribute to a Cumulative Impact (Step 4)	<ul style="list-style-type: none"> <li>Step 4 identifies the direct and indirect impacts from each of the proposed project alternatives on the resources included in the analysis</li> </ul>
5	Other Reasonably Foreseeable Actions that Affect Each Resource (Step 5)	<ul style="list-style-type: none"> <li>Step 5 identifies other current and reasonably foreseeable projects to be considered in the cumulative impact analysis</li> </ul>
6	Assessment of Cumulative Impacts (Step 6)	<ul style="list-style-type: none"> <li>Step 6 assesses the potential cumulative impacts</li> </ul>
7	Summary and Documentation of Results (Step 7)	<ul style="list-style-type: none"> <li>Step 7 summarizes and documents the results of Steps 1 through 6</li> </ul>
8	Mitigation Needs and Recommendations (Step 8)	<ul style="list-style-type: none"> <li>Step 8 summarizes the mitigation measures included in the proposed project and recommends actions to sustain the resources included in the analysis</li> </ul>

### 3.0 Resources Considered in the Analysis (Steps 1 through 3)

This section summarizes the analyses performed in steps 1 through 3 of the cumulative impact analysis, identifying the resources considered in the analysis (Step 1), describing the resource study area (RSA) for each resource (Step 2), and presenting conclusions concerning the health and historical context of understanding each resource (Step 3). Memoranda were prepared for each of these steps and are included as appendices. The final Step 1 Memorandum (Appendix B) was approved by Caltrans on August 15, 2016, and the final Step 2 and Step 3 memoranda (Appendices C and D) were approved by Caltrans, respectively, on January 5 and September 28, 2017.

#### 3.1 Methodology for Steps 1 through 3

Step 1 identified the resources to consider in the cumulative impact analysis. The identification of resources was based on Caltrans guidance, which states that the cumulative impact analysis must consider impacts of resource areas in which there are significant impacts. Additionally, the cumulative impact analysis must consider impacts to resource areas that at risk or are in poor or declining health, even if the impact is less than significant. Analysis of impacts and resource area health was based primarily on information presented in the Draft EIR/EA and its supporting technical studies (Caltrans 2015b). The following resources are at risk or are in poor or declining health, but were not included in the eight-step cumulative impacts analysis because they are addressed in other technical studies that evaluate cumulative impacts for these resources: growth, traffic and transportation, air quality, and greenhouse gas emissions.

Step 2 defines the resource study area (RSA) for each resource addressed by the analysis. The delineation of the RSA was based on a review of the documentation of the work that has been accomplished on the project, focusing on the Draft EIR/EA and technical studies. The review of technical studies considered the study area boundaries that were used to evaluate impacts specific to the Tier I and Tier II projects, recognizing that the RSA needs to also consider contributions from other projects that may affect each resource. Horizon then consulted, when possible, with resource specialists who prepared the technical studies to develop an understanding of the rationale for the original delineation of the study areas. The data

collected in the above manner was used to expand on the project-specific study area boundaries and to ensure that the RSA boundaries would encompass projects that have potential to affect the same resources that will be affected by the Tier I and Tier II projects. The RSAs were defined in consultation with authors of the applicable technical studies, and using source documents listed in the Step 2 Memo.

Step 3 assesses the current health and historical context of resources. This assessment was based on a review of the Tier I/Tier II Project's Draft EIR/EA and technical studies, as well as the Santa Cruz County General Plan/Local Coastal Program, the General Plan/LCP's EIR, and other data sources documented in the References section of the Step 3 memorandum. The review of these documents focused initially on considering the current health of the resources, using the RSA for each resource as the geographic boundary for considerations of resource health. The term "health" is used broadly to refer to the overall condition, stability, or vitality of a resource, as described in the Caltrans cumulative impact analysis guidance. The review of the source documents subsequently focused on the historical context, identifying key factors in the past that have affected the resource, leading to its current condition. Horizon also consulted with resource specialists that prepared the Tier I/Tier II Project's technical studies, to refine our understanding of resource health and historical context. Given the nature (life-cycle, range, etc.) of the species that were studied, the extent of the habitat types that were studied beyond Santa Cruz County, and the limitations of biological studies, the current health and trend analyses often address larger geographical areas beyond the bounds the subject RSA.

### **3.2 Results of Steps 1 through 3**

In Step 1, 25 resources were identified for inclusion in the Cumulative Impact Analysis. Some modifications to the list of resources were made subsequent to the approval of the Step 1 Memo. The final list of resources, 25 total, included in the Cumulative Impact Analysis is provided in Table 3-1.

Step 2 identified RSAs for 25 resources. In some cases, a single RSA addresses more than one resource. The final RSA maps are included in Appendix C and address all 25 resources included in the Cumulative Impact Analysis. Table 3-1 includes a description of the RSA for each of these resources.

Step 3 described the current health and historical context for each resource included in the analysis. Table 3-1 presents the conclusions regarding the health of the resources as determined in Step 3. As shown in the table, each of the 25 resources was assigned a resource number. For a full discussion of the current health and historical context of resources included in the analysis, please see Appendix D, Step 3 Technical Memo.

**Table 3-1. Summary of Results, Steps 1-3**

Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
1	Riverine/Fresh water Marsh Natural Communities	Encompasses the areas of freshwater marsh/ riverine habitat in the Coastal Zone within the BSA, and extends beyond the BSA to include the watersheds of the following resources: Soquel Creek, Nobel Creek, Tannery Gulch, Borregas Creek, Valencia Channel, Aptos Creek, Valencia Creek, Ord Gulch, Pot Belly Creek, Rodeo Creek Gulch, Soquel Lagoon, Valencia Lagoon, and Valencia Channel.	Since the 1850's, large areas of wetlands have been converted to agricultural, and more recently, urban, land uses. Regulations protecting wetlands and other coastal resources have contributed positively to the health of water resources, compared with impacts that occurred prior to the California Coastal Act. While a trend of improvement has not been specifically documented, it appears that regulations have helped to stabilize the existing condition of poor health.
2	Wetlands and Other Waters	Encompasses the areas of freshwater marsh/ riverine habitat in the Coastal Zone within the BSA, and extends beyond the BSA to include the watersheds of the following resources: Soquel Creek, Nobel Creek, Tannery Gulch, Borregas Creek, Valencia Channel, Aptos Creek, Valencia Creek, Ord Gulch, Pot Belly Creek, Rodeo Creek Gulch, Soquel Lagoon, Valencia Lagoon, and Valencia Channel.	<p>Wetlands - Wetland acreage in the Monterey Bay region has greatly decreased since the 1890s, and wetlands have become more fragmented, due primarily to human impacts, though wetland acreage may have been stable since the late 1970's. Federal, state, and local laws and regulations along with studies done nearby indicate that the health of this resource will remain poor but stable. Current and future restoration activities may eventually lead to a gradual improvement in the health of this resource.</p> <p>Other Waters - Over the past 200 years, waters in the area have been impacted by land use changes, channel alteration, levee and dam construction, flood control structures, roadway crossings, water diversions, and groundwater depletion. The efforts at multiple levels of government to protect this resource indicate that the current condition of poor health is stabilizing.</p>
3	Tidewater Goby	Encompasses the entirety of Critical Habitat Unit SC-7 (Aptos Creek) and includes Soquel Creek, Arana Gulch, Rodeo Gulch and their tributaries, as well as a 500-foot buffer around these resources.	This species faces many threats and has seen a reduction in its historic range. Data on population dynamics for this species are limited and short-term variability in local populations is common and natural. Though populations have historically declined and threats from climate change, drought, predation, and habitat loss remain, the population is thought to be relatively stable but is considered to be in poor health.

Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
4	Central California Coast Steelhead Distinct Population Segment (DPS)	Encompasses the entirety of Hydrologic Sub-areas 330412 (San Lorenzo) and 330413 (Aptos-Soquel). These hydrologic subareas include Soquel Creek and Arana Gulch and their tributaries.	Development and land use changes have caused declines in water and habitat quality which resulted in substantial reductions in population of this DPS. Given historic population declines and loss of habitat, this species is considered to be in poor health. Conservation efforts and restoration activities in the area may stabilize Steelhead populations; however, based on the documentation to date, the trend of decline appears to be continuing.
5	California Tiger Salamander	Encompasses the water bodies identified in the mapping of Santa Cruz long-tailed salamander (SCLTS) habitat and a 1.3-mile radius of these water bodies.	Historic conversion of California tiger salamander habitat to agricultural and urban land uses has caused habitat fragmentation and loss as well as a decline in the population of this species. Given its listing as a threatened species and ongoing threats to reproduction and dispersal, the species is considered to be in poor health with a declining trend in population.
6	Santa Cruz Long-Toed Salamander	Same as California Tiger Salamander above	As a result of urbanization and cultivation that have occurred since the mid-19th Century, areas of upland and aquatic habitats suitable for Santa Cruz long-toed salamanders have been removed and altered, and barriers to dispersal have been created, resulting in subpopulations which are isolated from each other. Given the endangered status of this species, it is considered to be in poor health. The threats of habitat fragmentation, drought, and pollution are likely to continue, therefore this species' population is likely to trend downwards.
7	California Red-Legged Frog	Encompasses the areas of freshwater marsh and riparian forest habitat mapped within the BSA, and extends beyond these areas to include the entirety of Valencia Lagoon, Valencia Channel, and Soquel Lagoon, as well as the length of the streams the project corridor crosses (and upstream to the ridgeline above Route 1, and downstream to the Pacific coast), encompassing a 3-mile buffer.	Once widespread in California, the California Red-Legged Frog (CRLF) has been extirpated from 70 percent of its former range and faces continued threats in the form of habitat loss, predation, and competition. While a recovery plan has been developed and initiated for this threatened species, CRLF is considered to be in poor health with a declining population trend.

Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
8	Foothill Yellow Legged Frog	Encompasses the areas of freshwater marsh and riparian forest habitat mapped within the BSA, and extends beyond these areas to include the entirety of Valencia Lagoon, Valencia Channel, and Soquel Lagoon, as well as the length of streams (extending upstream to the first ridgeline and downstream to the Pacific coast), encompassing a 1,400-foot buffer.	Due to historic population declines and continued threats from exotic species and changes in climate, the health of this resource is considered to be poor with a declining trend going forward.
9	Western Pond Turtle	Same as Foothill Yellow Legged Frog above	Given historic and recent population declines and existing threats and age trends, the health of this resource is considered to be poor and likely to continue to decline.
10	Riparian Forest Natural Community and Riparian Corridors	Includes the riparian forest natural community within the BSA, and it includes the length of each stream that crosses Route 1 within the BSA downstream from Route 1 to the Pacific Coast, and upstream either to the point at which the stream passes between two ridgelines (if applicable) or to its source (if the source is below the ridgeline). The riparian forest RSA encompasses a 500-foot buffer of each stream. This RSA also encompasses Valencia Lagoon and Soquel Lagoons and a buffer of 500 feet around these resources.	The extent of riparian habitats has been significantly decreased within the Santa Cruz region over the past 200 years, due to the encroachment of agriculture, domestic animal grazing, urban development, roadway crossings, water diversions and channelization for drainage and flood control. Given the significant loss of riparian forest that has occurred, this resource appears to be in poor health. Despite the small remaining amount of old growth forest, the regulatory protections for riparian corridors, as well as the presence of mature trees in upper watersheds of Aptos and Valencia creeks, and the full array of tree size classes and active recruitment along Soquel Creek, suggest that conditions are remaining stable, with a potential for improvement.
11	Cooper's Hawk	Includes the oak woodland and riparian forest habitat mapped within the BSA and extends along each stream crossed by the Tier I or Tier II projects, downstream to the Pacific coast, and upstream to ridgelines above the urbanized areas (thereby encompassing foothill areas). A 3-mile buffer is included along each stream, except in stream segments, such as in foothill areas and at the southern end of the proposed project, where undeveloped land extends beyond 3 miles; in such areas the RSA includes all undeveloped or largely undeveloped land, extending as far inland as the ridgeline above Route 1, and extending 3 miles south of the southern terminus of the proposed project. The RSA also includes areas of open land immediately surrounding New Brighton State Park; aerial imagery was used to identify areas of open land.	Given recent increases in population and range expansions, the health of this resource is considered to be good and is expected to be either stable or improving.

Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
12	Tri-Colored Blackbird	Encompasses areas of grasslands and freshwater marsh included in the BSA and includes areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1. The RSA also includes a 3-mile buffer around these areas, stopping at the first ridgeline above Route 1.	This species has undergone a drastic decline in population due to habitat loss that has continued in recent years. This species is considered to be in poor health with a declining trend in population.
13	Short-Eared Owl	Encompasses areas of grasslands and freshwater marsh included in the BSA and includes areas of open land immediately surrounding New Brighton State Park, which has been mapped using aerial imagery to identify areas of open land. It also includes open land from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1.	Due to the boom-and-bust nature of the species' population and its dependence on prey population and climate cycles, it is difficult to make a statement about the current health and trend of the species in the RSA or California as a whole; however the species is in good health globally and has been documented in the Elkhorn Slough area.
14	White-Tailed Kite	Same as California Red-legged Frog above	Following a severe decline in population in the early 1900s, populations and distribution increased from the 1940s -1970s. This species is considered to be in fair health and have a stable or increasing population trend.
15	Least Bell's Vireo	Encompasses the RSA for riparian corridors and riparian forest habitat, plus a 200-foot buffer around those areas.	Once widespread and abundant, this species declined in the post-World War II era due to habitat loss and the expansion of the brown-headed cowbird. The current health of this species is considered poor due to its listing as an endangered species, however the population has been increasing and that is expected to continue.
16	Southwestern Willow Flycatcher	Same as Least Bell's Vireo above.	The current health of this species is considered poor due to its listing as an endangered species, though the population trend may be stable.
17	American Badger	Same as Pallid Bat above	Agriculture, urban development, hunting, and poisoning have greatly reduced badger populations in the state. Given these historic population declines and continuing threats from habitat loss and human activities, the health of this resource is considered to be poor and may continue to decline.

Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
18	Coast Live Oak Woodland Habitat	Encompasses the riparian forest RSA (described above), the oak woodland, mixed conifer woodland, and eucalyptus woodland habitats mapped within the BSA, and areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shore to the ridgeline above Route 1.	Grazing, wood harvesting, invasive species, land clearing, and urban expansion have led to the elimination of extensive areas of coast live oak woodland in the region. Though local laws and regulations may decrease the future impact of development, the health of this resource is considered poor and may continue to decline given the remaining threat of invasive species.
19	Monarch Butterfly	Encompasses the riparian forest RSA (described above), the oak woodland, mixed conifer woodland, and eucalyptus woodland habitats mapped within the BSA, and areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shore to the ridgeline above Route 1.	Given historic habitat loss and recent population declines, the current health of this resource is poor. Monarch populations are impacted by habitat loss and land use practices in the RSA and elsewhere (including other states and countries) due to their migration patterns. Efforts to monitor, protect and improve habitat for this species are underway though threats remain, therefore the health of this resource is expected to remain poor but stabilize.
20	Coastal Scrub Natural Community	Encompasses the areas of coastal scrub habitat that are mapped within the Tier I and Tier II projects' BSA and extends beyond these areas to include the open land immediately surrounding New Brighton State Park. It also includes open land from Freedom Boulevard to San Andreas Road, extending landward from the Pacific shore to an elevation of 1,640 feet above sea level, or the first ridgeline, whichever is lower in elevation. Because of the tendency for coastal scrub to occur in pockets and intersperse among other habitat types, this RSA also encompasses the riparian forest/riparian corridor RSA, so that it also includes those areas of undeveloped land. In cases where there is open land adjacent to the riparian corridor, the coastal scrub RSA also encompasses those areas, as identified through aerial imagery.	Large areas of coastal scrub have been converted to agricultural and urban uses. Local laws and regulations relating to development suggest the health of this resource will be stable, but remain poor.



Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
21	Visual Resources	Encompasses the North Branciforte Avenue overcrossing above Route 1 on the north, and the Mar Monte Avenue overcrossing above Route 1 on the south. On the inland side of Route 1, it extends to the first ridgeline above the highway, tapering down to encompass only properties adjacent to the highway south of the southern project terminus. On the seaward side of Route 1, the visual RSA extends approximately 0.5 miles from Route 1, except in locations where there are visual obstructions due to topography, development, and vegetation. In those locations the visual RSA extends only to properties adjacent to the highway.	The sweeping changes to the visual environment that accompanied the rapid development of the mid-20th Century have left visual resources in poor health; however, the growth management policies instituted more recently, even as development continues, suggests that the trend is for conditions to remain in a stable condition of poor health.
22	Water Quality and Stormwater	Encompasses the areas of freshwater marsh/ riverine habitat in the Coastal Zone within the BSA, and extends beyond the BSA to include the watersheds of the following resources: Soquel Creek, Nobel Creek, Tannery Gulch, Borregas Creek, Valencia Channel, Aptos Creek, Valencia Creek, Ord Gulch, Pot Belly Creek, Rodeo Creek Gulch, Soquel Lagoon, Valencia Lagoon, and Valencia Channel.	Following rapid development, there are multiple impaired waterbodies in the RSA that receive runoff from roads, parking lots, and other impervious surfaces. Waste from pets, livestock, and poorly maintained sanitary sewers and septic systems also contributes to poor water quality in the RSA. However, more recently, increasingly stringent water quality regulations are addressing the water quality impacts of development. For these reasons, the health of the resource is considered to be poor but stable.
23	Pallid Bat	Encompasses the areas of grassland, riparian forest, and oak woodland habitat mapped within the BSA, and extends downstream to the Pacific Coast and upstream to ridgelines above the urbanized areas encompassing a 3-mile buffer of the streams that the Tier I or Tier II projects cross. The RSA includes areas of open land immediately surrounding New Brighton State Park, as well as open land from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1, and extending 3 miles south of the southern terminus of the proposed project.	This species is believed to be intolerant of urban development and populations are thought to have declined in recent decades. While populations are stable nationally, the health of this species is likely declining in coastal areas of California.
24	Hoary Bat	Same as Pallid Bat above	While the urbanization of the RSA may have been a factor in the lack of recorded occurrences of this species since 1940, statewide and nationwide the Hoary Bat is thought to be in relatively good health and be in stable condition.

Resource		Description of RSA	Conclusions Regarding Resource Health
No.	Name		
25	Townsend's Big-eared Bat	Same as Pallid Bat above	This species is in poor health is likely declining in California.

## 4.0 Impacts of Proposed Project that May Contribute to a Cumulative Impact (Step 4)

A Step 4 Memorandum was prepared to identify the direct and indirect impacts from each of the proposed project alternatives on the resources identified in Step 1. The final Step 4 Memorandum (Appendix E) was approved on January 22, 2018.

### 4.1 Methods

To identify direct and indirect impacts of the proposed project that might contribute to a cumulative impact, Horizon reviewed the impacts identified in the Draft EIR/EA, and its supporting technical studies. Horizon also reviewed the public comments submitted on the Draft EIR/EA that pertain to the resources addressed by the cumulative impacts analysis, and coordinated with technical study authors and Caltrans environmental staff regarding the need to update technical studies. For each impact of the proposed project, Horizon considered the specific contributions to cumulative impacts that could result from the Tier I and Tier II projects.

### 4.2 Results

The results describing potential permanent and temporary impacts of the proposed project are discussed in detail in Section 5 of the Step 4 Technical Memorandum (Appendix E) and are summarized in Table 4-1 below.

**Table 4-1. Summary of Impacts of the Proposed Project, Step 4**

Resource		Alternative <sup>1</sup>	Impacts Identified in Step 4
No.	Name		
1, 2	Riverine/Freshwater Marsh Natural Communities		
	California Department of Fish and Wildlife jurisdiction <sup>3</sup>	Tier I-TSM	0.30 acres permanent and temporary
		Tier I-HOV	1.08 acres permanent and temporary
		Tier II	0.02 acres permanent, 0.06 acres temporary
	Jurisdiction of Local Coastal Plan approved by Coastal Commission <sup>2</sup>	Tier I-TSM	3.58 acres permanent, 0.95 acres temporary
		Tier I-HOV	8.98 acres permanent, 1.41 acres temporary
		Tier II	0.15 acres permanent, 0.15 acres temporary
		Tier I-TSM	2.20 acres permanent, 0.33 acres temporary
		Tier I-HOV	3.22 acres permanent, 0.46 acres temporary
		Tier II	No impact

Resource		Alternative <sup>1</sup>	Impacts Identified in Step 4
No.	Name		
	Other Waters of the U.S.	Tier I-TSM	0.10 acres permanent, 0.02 acres temporary
		Tier I-HOV	0.15 acres permanent, 0.10 acres temporary
		Tier II	0.02 acres permanent, 0.06 acres temporary
	Wetlands (Section 404)	Tier I-TSM	0.23 acres permanent, 0.03 acres temporary
		Tier I-HOV	0.78 acres permanent, 0.22 acres temporary
		Tier II	0.0 acres permanent, 0.0 acres temporary
3	Tidewater Goby	Tier I-Both build alternatives	Permanent impacts are likely to be minimal. Fill, dewatering, and erosion from construction activities have the potential to impact the species.
		Tier II	The Tier II Auxiliary Lane Alternative project would not affect tidewater goby critical habitat. However, fill, dewatering, and erosion from construction activities have the potential to impact the species in Rodeo Gulch Creek downstream of the Tier II project area in the event that construction activities occur when flow is in the creek. Measures are identified in the NES to avoid and minimize potential impacts.
4	Central California Coast Steelhead Distinct Population Segment (DPS)	Tier I-Both build alternatives	Potential project-related impacts to steelhead are expected to be similar to those described above for the tidewater goby. Project may affect vegetation along creeks that provide critical habitat. Dewatering could disrupt normal flows and impact streambed substrate.
		Tier II	No impact
5, 6	California Tiger Salamander & Santa Cruz Long-Toed Salamander	Tier I-Both build alternatives	The Tier I Corridor Alternatives will avoid construction activities in Valencia Lagoon, as well as areas of upland habitat that may be utilized by California tiger salamander (CTS) and Santa Cruz long-toed salamander (SCLTS). Because of the fully protected status of the SCLTS, all impacts will be avoided.
		Tier II	No impact
7	California Red-Legged Frog	Tier I-Both build alternatives	Impacts to Potential Habitat: Tier I HOV Lane Alternative: 9.96 acres Tier I TSM Alternative: 4.88 acres
		Tier II	Impacts to Potential Habitat: 0.15 permanent and 0.15 temporary. May affect/likely to adversely affect.
8, 9	Foothill Yellow Legged Frog & Western Pond Turtle	Tier I-TSM	Riverine/freshwater marsh: 0.30 ac. Riparian forest: 4.58 ac.
		Tier I-HOV	Riverine/freshwater marsh: 1.08 ac. Riparian forest: 8.88 ac.

Resource		Alternative <sup>1</sup>	Impacts Identified in Step 4
No.	Name		
		Tier II	Riverine/freshwater marsh: 0.02 ac. Permanent, 0.06 ac. Temporary Riparian forest: 0.13 ac. Permanent, 0.09 ac. Temporary
10	Riparian Forest Natural Community and Riparian Corridors	Tier I-TSM	4.58 acres permanent and temporary
		Tier I-HOV	8.88 acres permanent and temporary
		Tier II	0.13 acres permanent, 0.09 acres temporary
11, 13	Cooper's Hawk & Short-Eared Owl	Tier I-Both build alternatives	Unless avoidance and minimization measures are implemented, there is potential for the removal of vegetation to directly affect nesting birds and any eggs or young residing in nests.
		Tier II	No impact
12, 14	White-Tailed Kite & Tri-Colored Blackbird	Tier I-Both build alternatives	Because of the fully protected status of the white-tailed kite, and state-listing of the tricolored blackbird, all impacts will be avoided.
		Tier II	No impact
15	Least Bell's Vireo	Tier I-Both build alternatives	Least Bell's vireo would only receive impacts from the Tier I project to the extent that impacts would occur under the Tier II Auxiliary Lane Alternative, as described below.
		Tier II	Although sightings of least Bell's vireo are rare in northern California, there is potential for the species to occur in Rodeo Creek Gulch.
16	Southwestern Willow Flycatcher	Tier I-Both build alternatives	Southwestern willow flycatcher would only receive impacts from the Tier I project to the extent that impacts would occur under the Tier II Auxiliary Lane Alternative, as described below.
		Tier II	There is potential for the species to occur in Rodeo Creek Gulch.
17	American Badger	Tier I-Both build alternatives	No badgers were observed to be using grassland areas within the biological study area during field surveys, and the potential for such impacts is considered low. Annual Grassland Impacts: Tier I-HOV: 4.53 acres, Tier I-TSM: 0.58 acres
		Tier II	No impact
18	Coast Live Oak Woodland Habitat	Tier I-TSM	4.89 acres permanent and temporary
		Tier I-HOV	9.45 acres permanent and temporary
		Tier II	0.001 acres permanent, 0.12 acres temporary

Resource		Alternative <sup>1</sup>	Impacts Identified in Step 4
No.	Name		
19	Monarch Butterfly	Tier I-TSM	Eucalyptus Woodland - 0.28 acres Mixed Conifer Woodland - 2.03 acres
		Tier I-HOV	Eucalyptus Woodland - 1.02 acres Mixed Conifer Woodland - 6.08 acres
		Tier II	No impact
20	Coastal Scrub Natural Community	Tier I-TSM	0.87 acres permanent and temporary
		Tier I-HOV	2.76 acres permanent and temporary
		Tier II	Not present in study area
21	Visual Resources	Tier I-Both build alternatives	The proposed improvements under either of the Tier I Corridor Alternatives would have an adverse impact on the visual quality of the corridor due to the associated structural, landscaping and miscellaneous elements. Temporary impacts during the construction period would result from the use of equipment, stockpiling soils and materials, and clearing of vegetation.
		Tier II	Similar temporary and permanent impacts as those for Tier I, but smaller in scale.
22	Water Quality & Stormwater	Tier I-Both build alternatives	Stormwater runoff volumes and velocities from the proposed project area are expected to increase with implementation of the proposed project due to the increase in impervious surfaces; therefore, pollutant loading may also be increased. Temporary impacts from construction such as increased siltation, erosion, and water turbidity could result.
		Tier II	Similar temporary and permanent impacts as those for Tier I, but smaller in scale.
		No Build	This alternative may have potential permanent water quality impacts due to continuing congestion, leading to a greater deposition of particulates from exhaust and heavy metals from braking in comparatively worse stop-and-go traffic.
23, 24, 25	Pallid Bat, Hoary Bat, and Townsend's Big-eared Bat	Tier I-Both build alternatives	The removal of structures or vegetation used by roosting bats could impact these species.
		Tier II	The removal of vegetation used by roosting bats could impact roosting bats.
26	Environmentally Sensitive Habitat Areas (ESHAs) / Coastal Resources	Tier I-Both build alternatives	Potentially inconsistent with policies from the Santa Cruz County and City of Santa Cruz Local Coastal Programs regarding biological resources, and wetland and creek protection. More detail is provided in Appendix E, Step 4 Technical Memo.
		Tier II	Located outside of coastal zone jurisdiction; therefore, no coastal zone determination would be required.

Resource		Alternative <sup>1</sup>	Impacts Identified in Step 4
No.	Name		
		No Build	Consistent with coastal zone policies protecting ESHAs/coastal resources.
<sup>1</sup> The No Build Alternative is assumed to have no impact, unless stated otherwise. <sup>2</sup> Local Coastal Plan/California Coastal Commission jurisdiction includes U.S. Army Corps of Engineers areas. <sup>3</sup> California Department of Fish and Wildlife jurisdiction includes U.S. Army Corps of Engineers areas.			

## 5.0 Other Reasonably Foreseeable Actions that Affect Each Resource (Step 5)

A Step 5 Memorandum was prepared with the purpose of identifying other current and reasonably foreseeable projects to be considered in the cumulative impact analysis. The final Step 5 Memorandum (Appendix F) was approved on December 20, 2017.

### 5.1 Methods

To identify current and reasonably foreseeable projects, a spreadsheet of projects was compiled by first identifying projects listed on the websites of the Cities of Santa Cruz, Capitola, Scott's Valley, and Watsonville, as well as Santa Cruz and Santa Clara counties, and the Governor's Office of Planning and Research's CEQANet database. The Regional Transportation Plan, local General Plans and Specific Plans, and Caltrans Transportation Concept Reports were also consulted to identify projects that have reasonable probability to be implemented over the next 20 years. Staff from planning departments of the cities and county were consulted to assess the likelihood that the projects identified in the respective General Plans would be built over the next 20 years, and to identify any other reasonably foreseeable projects. The locations of the identified reasonably foreseeable projects were compared to the boundaries of the Resource Study Areas (RSA) developed in Step 2. This information was used to prepare a list of reasonably foreseeable projects located in each RSA. Information about the projects, including anticipated environmental impacts and mitigation was obtained to the extent available. However, some projects included in this analysis were too small to require the preparation of an environmental document, and other projects are in an early planning phase, prior to the initiation of environmental review. In such cases, general qualitative statements were made regarding the anticipated impacts based on a Google Earth/GIS desktop analysis, using available scientific information and best professional judgment, as described in more detail in Appendix F, Step 5 Memorandum.

### 5.2 Results

Table 5-1, below, provides summary information about the anticipated impacts of reasonably foreseeable projects for each resource. Other reasonably foreseeable actions that affect each resource are summarized below and described in greater detail in the Step 5 Memorandum (Appendix F).

**Table 5-1. Summary of Impacts from Future Actions, Step 5**

Resource		
No.	Name	Impacts from Future Actions Identified in Step 5
1	Riverine/ Freshwater Marsh Natural Community	A total of 16 reasonably foreseeable projects within the RSA for riverine/ freshwater marsh were identified to have potential impacts to this resource. Of the 16 projects, eight were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining eight projects, which were identified to have potential for riverine/freshwater marsh impacts based on a desktop analysis using Google Earth imagery and USGS blue-line stream data. Potential impacts include the permanent and temporary loss of riverine/freshwater marsh, and the potential for indirect impacts such as direct discharges of sediment and other pollutants during construction.
2	Wetlands and Other Waters	A total of 19 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to wetlands and other waters. Ten of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining nine projects, which were identified to have potential for impacts to wetlands and other waters based on a desktop analysis using Google Earth imagery, USGS blue-line stream data, and National Wetlands Inventory (NWI) data. Potential impacts include the permanent and temporary loss of wetlands and other waters.
3	Tidewater Goby	A total of 15 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for six of these projects. The environmental documents for five of the projects identified potential for impacts to tidewater goby. For projects with no available environmental document, the potential for impact to tidewater goby was identified based on whether the project location is directly adjacent to a stream, using Google Earth imagery, USGS blue line stream data and CNDDDB data. This review identified six projects that have no available environmental documents that may have potential to result in impacts to this species. Potential impacts include disturbance of identified tidewater goby habitat, project-induced runoff to identified habitat, or reduction in streamflow.
4	Central California Coast Steelhead	A total of 37 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to central coast California steelhead. Eighteen of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining 19 projects, which were identified to have potential for impacts to central California coast steelhead habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream data and CNDDDB data. Potential impacts include the disturbance of habitat, runoff to habitat, or changed streamflow.
5	California Tiger Salamander	A total of seven reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to CTS. Five of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining two projects, which were identified to have potential for impacts to CTS based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include the disturbance of habitat.



Resource		
No.	Name	Impacts from Future Actions Identified in Step 5
6	Santa Cruz Long-Toed Salamander	A total of seven reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to SCLTS. Five of these projects were evaluated in environmental documents that identified potential impacts to this resource; however, because this is a fully-protected species under the California Fish and Game Act, take of this species must be avoided. No environmental document was available for the remaining two projects, which were identified to have potential for impacts to SCLTS based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts identified in other environmental documents include the disturbance of breeding, foraging, or migration patterns.
7	California Red-Legged Frog (CRLF)	A total of 21 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to CRLF. Seven of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining 14 projects, which were identified to have potential for impacts to CRLF based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include the disturbance of habitat.
8	Foothill Yellow-Legged Frog (FYLF)	A total of 11 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to FYLF. Five of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining six projects, which were identified to have potential for impacts to FYLF habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream data, NWI data, and California Natural Diversity Database (CNDDDB) data. Potential impacts include the permanent and temporary loss of habitat.
9	Western Pond Turtle	A total of 11 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to western pond turtle. Five of these projects were evaluated in environmental documents that identified impacts to this resource. No environmental document was available for the remaining six projects, which were identified to have potential for impacts to western pond turtle habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream and NWI data, and CNDDDB data. Potential impacts include the permanent and temporary loss of habitat.
10	Riparian Forest	A total of nine reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to riparian forest. Of the nine projects, four were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining five projects, which were identified to have potential for riparian forest impacts based on a desktop analysis using Google Earth imagery and USGS blue-line stream data. Potential impacts include the permanent and temporary loss of riparian forest, including land disturbance and tree removal within areas of riparian forest habitat.
11	Cooper's Hawk	A total of 25 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to Cooper's hawk. Ten of these projects were evaluated in environmental documents that identified potential impacts to Cooper's hawk, nesting raptors, nesting birds, or unspecified animal species. No environmental document was available for the remaining 15 projects, which were identified to have potential for impacts to Cooper's hawk nesting habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream and NWI data, and CNDDDB data. Potential impacts include the permanent and temporary loss of nesting habitat.

Resource		
No.	Name	Impacts from Future Actions Identified in Step 5
12	Tricolored Blackbird	A total of 13 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to tri-colored blackbird. Nine of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the other four projects, which were identified to have potential for impacts to tri-colored blackbird based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include the alteration or degradation of tricolored blackbird habitat.
13	Short-Eared Owl	A total of five reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to short-eared owl. All five of these projects were evaluated in environmental documents that identified impacts to nesting birds or unspecified animal species, although they did not specifically discuss short-eared owl. Potential impacts include the permanent and temporary loss of habitat.
14	White-Tailed Kite	A total of 26 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to white-tailed kite. Ten of these projects were evaluated in environmental documents that identified potential impacts to this resource; however, because this is a fully-protected species under the California Fish and Game Act, take of this species must be avoided. No environmental document was available for the other 16 projects, which were identified to have potential for impacts to white-tailed kite based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts identified in other environmental documents include tree removal or nest disturbance.
15	Least Bell's Vireo	A total of 12 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to least Bell's vireo. Six of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the other six projects, which were identified to have potential for impacts to least Bell's vireo based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include any disturbance of brush or trees which may affect least Bell's vireo habitat.
16	Southwestern Willow Flycatcher	A total of 12 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to SWWF. The RSA for this species is identical to the RSA for least Bell's vireo. Six of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the other six projects, which were identified to have potential for impacts to SWWF based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include any disturbance of brush or trees which may affect SWWF habitat.
17	American Badger	A total of eight reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to American badger. Two of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining six projects, which were identified to have potential for impacts to American badger habitat based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include the permanent and temporary loss of habitat.
18	Oak Woodland	A total of eight reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to oak woodland. Four of the eight projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining four projects, which were identified to have potential for oak woodland impacts based on a desktop analysis using Google Earth imagery. Potential impacts include the permanent and temporary loss of oak woodland, including land disturbance and tree removal within areas of oak woodland habitat.

Resource		
No.	Name	Impacts from Future Actions Identified in Step 5
19	Monarch Butterfly	A total of 13 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to monarch butterfly. Four of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining nine projects, which were identified to have potential for impacts to monarch butterfly overwintering habitat based on a desktop analysis using Google Earth imagery. Potential impacts include the permanent and temporary loss of overwintering habitat.
20	Coastal Scrub	Two reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to coastal scrub. No environmental documents were available for these projects, which were identified as having potential to affect coastal scrub identified based on a desktop analysis using Google Earth imagery. Potential impacts would include the permanent and temporary loss of coastal scrub habitat, including land disturbance and the removal of vegetation.
21	Visual Resources	A total of twelve reasonably foreseeable projects in the visual resource study area were identified to have potential for visual impacts to occur. Of these twelve projects, six were evaluated in environmental documents that identified potential visual impacts. No environmental document was available for the remaining six projects, which were identified to have potential for visual impacts based on a desktop analysis using Google Earth imagery as part of the Cumulative Impact Analysis. Potential impacts include the removal of trees and the construction of new infrastructure in areas that are undeveloped or sparsely developed.
22	Water Quality and Stormwater	A total of 39 reasonably foreseeable projects within the resource study area (RSA) for water quality and stormwater were identified to have potential impact to this resource. Of the 39 projects, 13 were evaluated in environmental documents that identified potential water quality/ stormwater impacts. No environmental document was available for the remaining 26 projects, which were identified to have potential for water quality/stormwater impacts based on a desktop analysis using Google Earth imagery and US Geological Services (USGS) blue-line stream data as part of the Cumulative Impact Analysis. Potential impacts include increases in the amount of impervious surface area, resulting in an increase in stormwater runoff volumes and velocities, and pollutant loading.
23, 24, 25	Pallid Bat, Townsend's Big-eared Bat, and Hoary Bat	Eight reasonably foreseeable projects within the RSA for pallid bat, Townsend's big-eared bat, and hoary bat were evaluated in environmental documents and found to have potential for impacts to pallid bat, hoary bat, or both of these species, or to unspecified bat species. An additional 12 reasonably foreseeable future projects were identified that had no available environmental document but may have potential to impact pallid bat and Townsend's big-eared bat, while nine such projects were identified that may have potential to impact hoary bat. A desktop analysis using Google Earth imagery and CNDDB data was conducted to consider the potential impact to these species that may result from projects for which no environmental document was available. Potential impacts include tree removal.

## 6.0 Assessment of Cumulative Impacts (Step 6)

A Step 6 Memorandum was prepared with the purpose of assessing potential cumulative impacts. The final Step 6 Memorandum (Appendix G) was approved by Caltrans on January 22, 2018.

## 6.1 Methods

The Step 6 analysis began with a review of the information gathered in steps 3 through 5 regarding the historic context and current health of each resource included in the cumulative impact analysis, the impacts of the Tier I and Tier II projects on these resources, and the impacts of reasonably foreseeable future projects on the resources.

The next step was to assess, for each resource, whether cumulative impacts exist, and whether the identified cumulative impacts could be considered beneficial or adverse. This assessment was based on the information regarding the historic context, current health, the anticipated impact of the proposed project, and the impacts anticipated from reasonably foreseeable actions.

After cumulative impacts were identified, the project team assessed whether the proposed project would have a considerable contribution to the cumulative impact. For each resource found to have an adverse cumulative impact, this included a consideration of the current health and trend of the resource, the sensitivity of the resource, whether the project's impact to the resource is proposed to be fully mitigated (no net contribution), and any available information regarding the abundance of the resource. The considerations and conclusions regarding the proposed project's contribution to identified cumulative impacts were documented in Table A-1 of the Step 6 Memorandum.

## 6.2 Results

Table 6-1 below, provides summary information about the potential cumulative impacts of reasonably foreseeable projects to each resource. For each resource in the table, the analysis concluded that there is an existing cumulative impact occurring to it within the RSA. The table also indicates whether the proposed project's contribution to an adverse cumulative impact would be considerable, along with an explanation of the factors that led to these conclusions.

**Table 6-1. Summary of Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects**

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
1	Riverine/ Freshwater Marsh Natural Community	Yes	No	Although the trend for the riverine/ freshwater marsh natural community is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.1 of the Draft EIR/EA, and that the overall scale of riverine/ freshwater marsh would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the riverine/ freshwater marsh natural community would not be considerable.
2	Wetlands and Other Waters	Yes	No	Although the trend for wetlands and other waters is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.2 of the Draft EIR/EA, and that the overall scale of wetlands and other waters would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to wetlands and other waters would not be considerable.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
3	Tidewater Goby	Yes	No	Although the trend for tidewater goby is considered to be generally stable condition, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II project, has potential to further degrade the resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.5 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II project to the cumulative impact affecting tidewater goby would not be considerable.
4	Central California Coast Steelhead	Yes	No	Central California coast steelhead is considered to be in a condition of poor health, with potential for a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to central California coast steelhead would not be considerable. The Tier II Project would not contribute to the cumulative impact.
5	California Tiger Salamander (CTS)	Yes	No	CTS is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that there would be full avoidance of habitat for this species, that the Tier I Project would implement the avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA, and that the Tier II Project area does not include CTS habitat. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to CTS would not be considerable. The Tier II Project would not contribute to the cumulative impact.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
6	Santa Cruz Long-Toed Salamander (SCLTS)	Yes	No	SCLTS is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource, due to the continued discharge of stormwater runoff from Route 1 to Valencia Channel, and the incremental increase in volume of runoff due to the increase in impervious surface resulting from the proposed improvements; however, as described in the Water Quality Study Report, these effects will be mitigated by providing onsite treatment of stormwater runoff before it is discharged to receiving waters. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that there would be full avoidance of habitat for this species, that the Tier I Project would implement the avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA and the stormwater and water quality mitigation measures described in Section 2.2.2, and that the Tier II Project area does not include SCLTS habitat. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to SCLTS would not be considerable. The Tier II Project would not contribute to the cumulative impact.
7	California Red-Legged Frog (CRLF)	Yes	No	CRLF is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the project area is an existing transportation corridor, the Tier I and Tier II Projects would implement the avoidance and minimization measures and compensatory mitigation described in Section 2.3.5 of the Draft EIR/EA, and that the overall scale of riparian forest and riverine/freshwater marsh habitat would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to CRLF would not be considerable.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
8	Foothill Yellow-Legged Frog (FYLF)	Yes	No	FYLF is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA, and that the overall scale of riparian forest and riverine/ freshwater marsh habitat would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to FYLF would not be considerable.
9	Western Pond Turtle	Yes	No	Western pond turtle is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA, and that the overall scale of riparian forest and riverine/ freshwater marsh habitat would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to western pond turtle would not be considerable.



Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
10	Riparian Forest	Yes	No	Although the trend for the riparian forest natural community is considered to be generally stable with a potential for improvement, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would not introduce new stream crossings in previously undeveloped areas, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.1 of the Draft EIR/EA, and that the overall scale of riparian forest would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the riparian forest natural community would not be considerable.
11	Cooper's Hawk	Yes	No	Cooper's hawk is considered to be in a condition of good health, with a trend that is stable or improving. However, the effect of past, current, and future development, including the proposed Tier I Project, could potentially degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA, and that the overall scale of riparian forest and potential nesting habitat would not be substantially affected. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to Cooper's hawk would not be considerable. The Tier II Project would not contribute to the cumulative impact.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
12	Tricolored Blackbird	Yes	No	Tri-colored blackbird is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that that the Tier I Project would implement the avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA, and that the Tier II Project area does not include tri-colored blackbird habitat. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to tri-colored blackbird would not be considerable. The Tier II Project would not contribute to the cumulative impact.
13	Short-Eared Owl	Yes	No	The health condition of short-eared owl in the RSA is uncertain, although the population is in good health globally, and there is a possibility that the trend for the local population may be one of stability. Given the uncertainty regarding the health of this resource locally, there is potential for the past, current, and future development, including the proposed Tier I Project, to degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures as described in Section 2.3.4 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to short-eared owl would not be considerable. The Tier II Project would not contribute to the cumulative impact.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
14	White-Tailed Kite	Yes	No	White-tailed kite is considered to be in a condition of fair health, with a stable or improving trend. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Avoidance and minimization measures will avoid all take of white-tailed kite; however, as described in Section 4.3.9 of the NES, birds can be sensitive to noise disturbance, and temporary indirect impacts may result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that there would be full avoidance of habitat for this species, that the Tier I Project would implement the avoidance and minimization measures described in Section 4.3.9 of the NES and Section 2.3.5 of the Draft EIR/EA, and that the Tier II Project area does not include white-tailed kite habitat. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to white-tailed kite would not be considerable. The Tier II Project would not contribute to the cumulative impact.
15	Least Bell's Vireo	Yes	No	Least Bell's vireo is considered to be in a condition of poor health, Although the trend for this species is one of improvement, the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that that the Tier I and Tier II Project would implement the avoidance and minimization measures described in the Natural Environment Study Addendum, and that a finding of "may affect, not likely to adversely affect" was made for both the Tier I and Tier II projects. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to least Bell's vireo would not be considerable.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
16	Southwestern Willow Flycatcher (SWWF)	Yes	No	SWWF is considered to be in a condition of poor health. Although the trend for this species may be stable, the effect of past, current, and future development, including the proposed Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the Tier I and Tier II Project would implement the avoidance and minimization measures described in the Natural Environment Study Addendum, and that a finding of "may affect, not likely to adversely affect" was made for both the Tier I and Tier II projects. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to SWWF would not be considerable.
17	American Badger	Yes	No	American badger is considered to be in a condition of poor health, with potential for a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures described in Section 2.3.4 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to American badger would not be considerable. The Tier II Project would not contribute to the cumulative impact.
18	Oak Woodland	Yes	No	Oak woodland is considered to be in a condition of poor health, and the trend for this resource may be in decline, although there is a possibility for improvement. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.1 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the oak woodland natural community would not be considerable.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
19	Monarch Butterfly	Yes	No	Although the trend for monarch butterfly is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to monarch butterfly would not be considerable. The Tier II Project would not contribute to the cumulative impact.
20	Coastal Scrub	Yes	No	Although the trend for the coastal scrub natural community is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures as described in Section 2.3.1 of the Draft EIR/EA, and that the Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to the coastal scrub natural community would not be considerable. The Tier II Project would not contribute to the cumulative impact.
21	Visual Resources	Yes	Yes	Although the trend for visual resources is considered to be a generally stable condition, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II project, has potential to further reduce the visual quality in the resource study area. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II project's contribution to this cumulative impact was considered, noting the distribution of visual impacts of the Tier I project, including the loss of mature trees, along the project corridor; the length of time required for replacement trees to reach maturity; and the inability to mitigate the visual impacts of the Tier I build alternatives to less than significant even after mitigation, as described in Section 3.2.4 of the Draft EIR/EA. These factors suggest that the incremental contribution of the Tier I and Tier II project to the cumulative visual impact may be considerable.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
22	Water Quality and Stormwater	Yes	No	Although the trend for water quality and stormwater is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II project's contribution to this cumulative impact was considered, noting that the increase in flow due to the proposed increase in impervious surface for the Tier I or Tier II build alternatives would not be substantial in comparison with the overall watershed of the creeks affected by the project (the RSA for this resource), that the project would address permanent impacts by incorporating stormwater treatment facilities and erosion control measures, and the project's temporary impacts would be addressed with construction best management practices. These factors indicate that the incremental contribution of the Tier I and Tier II project to the cumulative stormwater and water quality impact would not be considerable.
23	Pallid Bat	Yes	No	Pallid bat is considered to be in a condition of declining health in California, although global populations are stable. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to pallid bat would not be considerable.
24	Hoary Bat	Yes	No	This species is considered to be in relatively good health and stable condition. However, the effect of past, current, and future development, including the proposed Tier I and Tier II Project, could potentially degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to hoary bat would not be considerable.

Resource		Would the Proposed Project Contribute to An Adverse Cumulative Impact?	Would the Proposed Project's Contribution Be Considerable?	Considerations for Identifying Adverse Cumulative Impacts and the Proposed Project's Contribution
No.	Name			
25	Townsend's Big-eared Bat	Yes	No	Townsend's big-eared bat is considered to be in a condition of declining health in California, although nationally the populations may be more stable. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to Townsend's big-eared bat would not be considerable.

## **7.0 Summary and Documentation of Results (Step 7)**

The purpose of Step 7 is to document the results of the step-wise cumulative impact analysis process. The activities associated with Step 7 consisted of preparing the summaries of Steps 1 through 6 that are presented in Sections 3 through 6 of this technical report, based on the detailed information provided in Appendices B through G.

## **8.0 Mitigation Needs and Recommendations (Step 8)**

Step 8 of the cumulative impact analysis involves assessing the need for mitigation to address the overall cumulative impact to each resource.

### **8.1 Methods**

In accordance with the Caltrans guidance for conducting cumulative impact analyses (Caltrans 2005), Step 8 of the cumulative impact analyses included a review and summary of the mitigation measures identified in the project's Draft EIR/EA. The NES Addendum was also consulted with regard to species such as southwestern willow flycatcher, which was included in the biological resource studies for the proposed project following the circulation of the Draft EIR/EA. The Step 8 analysis also identified the agencies with regulatory authority over each resource identified in Step 6 as receiving adverse cumulative impacts. Additionally, given the difficulty associated with identifying feasible mitigation measures for cumulative impacts, in accordance with Caltrans guidance for conducting cumulative impact analyses (Caltrans 2005), the Step 8 analysis recommends actions to sustain these resources, which the identified agencies could potentially take to influence the sustainability of the resource.

### **8.2 Results**

The results of the Step 8 analysis are organized by habitat type, with individual resources discussed together with the appropriate habitat. Following the discussions of mitigation recommendations by habitat type, Table 8-1 provides a summary overview of mitigation recommendations.

There are four types of natural habitats, plus a category of “developed areas” within the project area that include resources addressed by this cumulative impact analysis and could be impacted by construction activities:

- riverine/freshwater marsh
- riparian forest
- oak woodland
- coastal scrub
- developed areas

Resources that are found within each habitat, or as part of developed areas, are discussed according to habitat type, in the following sections. Each section provides summary information regarding the mitigation for project impacts, refers the reader to the applicable technical study for more information, identifies the agencies with regulatory authority over each resource, and provides recommendations for these agencies to mitigate overall cumulative impacts. All discussions of mitigation for the proposed project apply to the current Tier II project and the future Tier II projects that will be developed as part of the phased implementation of the Tier I project, unless specified otherwise for a particular resource. For biological resources, general avoidance and minimization measures will be implemented that protect all biological resources, including flagging or fencing of the project site, the implementation of an erosion control plan



and hazardous materials response plan and biological monitoring – as discussed in Section 4.1.1, Jurisdictional Wetlands and Other Waters, of the NES.

### **8.2.1 Riverine/Freshwater Marsh**

Riverine/Freshwater Marsh habitat is associated with a number of resources included in the cumulative impact analysis that utilize this habitat type in a variety of ways. These resources are: riverine/freshwater marsh natural community, wetlands and other waters, tidewater goby, central California coast steelhead, California tiger salamander, Santa Cruz long-toed salamander, California red-legged frog, California yellow-legged frog, and western pond turtle. Mitigation measures for impacts to these resources are presented at the beginning of this section, followed by recommendations for agencies with regulatory authority over these resources to mitigate overall cumulative impacts. Please note that, although riverine/freshwater marsh habitat is important to various species of birds, such as short-eared owl, tri-colored blackbird, and white-tailed kite, all bird species are addressed in Section 8.2.2, Riparian Forest, due to the similarity of mitigation requirements for avian species.

#### ***Mitigation for Project Impacts - Riverine Freshwater Marsh / Associated Resources***

The following paragraphs summarize the mitigation for project impacts specific to riverine/freshwater marsh habitat and resources associated with this habitat type.

#### ***Resources 1 and 2 – Riverine/Freshwater Marsh Natural Community and Wetlands and Other Waters***

As described in Section 4.1.1, Jurisdictional Wetlands and Other Waters, of the NES, compensatory mitigation will be provided for impacts to wetlands and other waters, which will address impacts to the riverine/freshwater marsh natural community, as well as impacts to tidewater goby, central California coastal steelhead, California red-legged frog, foothill yellow-legged frog, and western pond turtle, and impacts to any freshwater marsh habitat that may be utilized by nesting migratory bird species. Compensatory mitigation for the Tier II Auxiliary Lane Alternative impacts shall include in-kind, on-site replacement of vegetation.

#### ***Resource 3 – Tidewater Goby***

As described in Section 4.3.2, Discussion of Tidewater Goby, of the NES, the project will implement avoidance and minimization measures specific to tidewater goby, including post-construction restoration of vegetation used as sheltering areas, and additional measures in the event of dewatering.

#### ***Resource 4 – Central California Coast Steelhead***

The project will implement avoidance and minimization measures specific to central California coastal steelhead, including the implementation of a Diversion and Dewatering Plan (if dewatering/stream diversion is necessary), and the relocation of steelhead if necessary during dewatering/diversion activities, or if tidal fluctuations breach a formerly dewatered and isolated project site. More information is provided in Section 4.3.3, Discussion of Central California Coast Steelhead (*Oncorhynchus mykiss*), of the NES.

#### ***Resource 5 and 6 – California Tiger Salamander and Santa Cruz Long-Toed Salamander***

Because the proposed project will avoid construction in Valencia Lagoon, as well as areas of upland habitat that may be utilized by California tiger salamander and Santa Cruz long-toed salamander, no mitigation measures specific to either of these species are needed, as discussed in the NES Addendum (Caltrans 2018), in Section 2.2.6, Santa Cruz Long-Toed Salamander, and in Appendix C, *Habitat Assessments*.

***Resources 7, 8 and 9 – California Red-Legged Frog, Foothill Yellow-legged Frog, and Western Pond Turtle***

The project will implement avoidance and minimization measures specific to California red-legged frog, as discussed in Section 4.3.6, Discussion of California Red-legged Frog (*Rana draytonii*), of the NES, including pre-construction surveys and relocation of identified individuals to suitable habitat. These measures will also address project impacts to foothill yellow-legged frog and western pond turtle, as discussed in the NES, respectively, in Sections 4.3.7, Discussion of Foothill Yellow-legged Frog (*Rana boylei*), and Section 4.3.8, Discussion of Western Pond Turtle (*Actinemys marmorata*).

***Recommendations for Agencies - Riverine Freshwater Marsh / Associated Resources***

Recommendations for agencies to mitigate overall cumulative impacts for resources within this habitat include are described below.

***Resources 1 and 2 – Riverine/Freshwater Marsh Natural Community and Wetlands and Other Waters***

Agencies with regulatory authority over wetlands and other waters and the riverine freshwater marsh natural community include the Army Corps of Engineers, Central Coast Regional Water Quality Control Board, County of Santa Cruz, City of Santa Cruz, and the City of Capitola. Within the Coastal Zone, the California Coastal Commission also has regulatory authority over this resource. Recommendations for agencies to mitigate overall cumulative impacts include supporting local efforts to restore these resources. As an example, the U.S. Fish and Wildlife Service is undertaking efforts at the Ellicott Slough National Wildlife Refuge to remove non-native invasive plant species such as eucalyptus species and pampas grass, and to revegetate with native plant species. Efforts to restore wetland and other waters would benefit species that utilize these habitats, including tricolored blackbird, short-eared owl, and white-tailed kite.

***Resource 3 – Tidewater Goby***

Agencies with regulatory authority over this resource are the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Recommendations for agencies to mitigate overall cumulative impacts include supporting local efforts to restore habitats for tidewater goby. As a specific example, in 2016, the Friends of Santa Cruz State Parks, California State Parks and the Watershed Stewards Program hosted a volunteer-driven restoration effort to remove invasive species along Moore Creek, which supports tidewater goby (Friends of Santa Cruz State Parks 2016).

***Resource 4 – Central California Coast Steelhead***

The National Marine Fisheries Service of the National Oceanic and Atmospheric Administration and the California Department of Fish and Wildlife have regulatory authority over central California coast steelhead. Recommendations for agencies to mitigate overall cumulative impacts include the support and funding of fish passage projects, and identifying opportunities for habitat enhancement, such as enlarging bridges and culverts to better facilitate the passage of woody debris in creeks that support central California coast steelhead. The enlargement of bridges and culverts can support the movement of woody debris within creeks, which is important for salmonid habitat, and may also result in long-term lower annual maintenance costs (Lassettre and Kondolf 2011).

***Resource 5 and 6 – California Tiger Salamander and Santa Cruz Long-toed Salamander***

The California Department of Fish and Wildlife and U.S. Fish and Wildlife Service have regulatory authority over CTS and SCLTS. Recommendations for agencies to mitigate overall cumulative impacts include

prioritizing the preservation of areas of undeveloped land that would benefit both resources, and support connectivity and genetic exchange between subpopulations of the species. An example of taking measures to preserve these undeveloped areas is the efforts of the Land Trust of Santa Cruz County to identify important areas for multibenefit conservation in its Conservation Blueprint (Land Trust of Santa Cruz County 2013).

***Resources 7, 8 and 9 – California Red-Legged Frog, Foothill Yellow-legged Frog, Western Pond Turtle***

The U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife have regulatory authority over California red-legged frog (CRLF). California Department of Fish and Wildlife has regulatory authority over foothill yellow-legged frog and western pond turtle. Due to the similarities in habitat requirements for these species, recommendations for agencies to mitigate overall cumulative impacts to these species include supporting local efforts to protect CRLF habitat, including habitat restoration and enhancement. An example of local efforts to protect CRLF habitat is the partnership between the non-profit organization Save The Frogs! and the Land Trust of Santa Cruz County to restore habitat for CRLF at Antonelli Pond in the City of Santa Cruz (Save The Frogs! 2018). These organizations are involving the community in efforts to plant native vegetation, and to eradicate invasive weeds, predatory fish and bullfrogs in order to protect habitat for CRLF and provide environmental education to the public.

## **8.2.2 Riparian Forest**

Riparian habitat is associated with a number of resources included in the cumulative impact analysis that utilize this habitat type, including Cooper's hawk, tricolored blackbird, short-eared owl, white-tailed kite, least Bell's vireo, southwestern willow flycatcher, and American badger. Mitigation measures for project impacts to these resources are presented at the beginning of this section, followed by recommendations for agencies with regulatory authority over these resources to mitigate overall cumulative impacts.

### ***Mitigation for Project Impacts – Riparian Forest / Associated Resources***

The following paragraphs provide information regarding mitigation for project impacts that is specific to riparian forest habitat and resources associated with this habitat type.

#### ***Resource 10 – Riparian Forest***

As described in Section 2.1.2, Riparian Forest, of the NES, compensatory mitigation for impacts to riparian forest habitat will be included in the project and will be accomplished with onsite or offsite replacement planting. For impacts to riparian forest resulting from the Tier II build alternative, mitigation will be accomplished with onsite replacement planting. Compensatory mitigation for riparian habitat will address any riparian habitat that may be utilized by nesting migratory bird species.

#### ***Resources 11 through 16 – Cooper's hawk, Tricolored Blackbird, Short-eared Owl, White-tailed Kite, Least Bell's Vireo, and Southwestern Willow Flycatcher***

The project will implement avoidance and minimization measures for the bird species identified above, which apply to all other birds protected by the Migratory Bird Treaty Act and California Fish and Game Code – as discussed in the NES, in Section 4.3.9, Discussion of Cooper's Hawk (*Accipiter cooperii*), Tricolored Blackbird (*Agelaius tricolor*), Short-eared Owl (*Asio flammeus*), White-tailed Kite (*Elanus leucurus*), and Other Nesting Migratory Birds. These measures will include pre-construction surveys, if any construction activities are proposed to occur during the typical nesting season, and the establishment of environmentally-

sensitive areas around active nests to be avoided by the contractor. Due to the fully protected status of white-tailed kite, impact to this species will be avoided.

#### ***Resource 17 – American Badger***

The project will implement an avoidance and minimization measure specific to American badger, to conduct pre-construction surveys for American badger dens in annual grassland habitat. If a den is found, it will be avoided or badgers will be trapped and relocated. Further information is provided in the NES, in Section 4.3.13, Discussion of American Badger.

#### ***Recommendations for Agencies – Riparian Forest / Associated Resources***

Recommendations for agencies to mitigate overall cumulative impacts for resources within this habitat include support local efforts to restore these resources, and identifying opportunities for habitat enhancement. Examples that are specific to certain resources are described individually below.

#### ***Resources 10, 11, 15, and 16 – Riparian Forest, Cooper’s Hawk, Least Bell’s Vireo, and Southwestern Willow Flycatcher***

Agencies with regulatory authority over riparian forest resources associated with the Tier I and Tier II build alternatives are the Army Corps of Engineers, the California Department of Fish and Wildlife, Central Coast Regional Water Quality Control Board, the County of Santa Cruz, City of Santa Cruz and City of Capitola. Within the Coastal Zone, the California Coastal Commission, also has jurisdiction over riparian corridors. Agencies with regulatory authority over Cooper’s hawk, least Bell’s vireo and southwestern willow flycatcher are the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service.

Recommendations for these agencies to mitigate overall cumulative impacts include supporting local efforts to restore riparian forest habitats, which would in turn benefit species that utilize riparian forest habitat, including Cooper’s hawk, least Bell’s vireo and southwestern willow flycatcher. For example, the Santa Cruz County Resource Conservation District’s current Soquel Corridor Restoration Project is focused on restoring 2,500 feet of riparian corridor, reconnecting portions of the historic floodplain to the main channel, and stabilizing a landslide that is discharging significant amounts of fine sediment into Soquel Creek (Santa Cruz County Resource Conservation District 2018).

#### ***Resources 12, 13, and 14 – Tricolored Blackbird, Short-eared Owl, and White-tailed Kite***

The California Department of Fish and Wildlife is the agency with regulatory authority over tricolored blackbird, short-eared owl, and white-tailed kite. As discussed in Section 8.2.2, Riverine/Freshwater Marsh, efforts to restore wetlands and other waters would benefit tricolored blackbird, short-eared owl, and white-tailed kite.

#### ***Resource 17 – American Badger***

The California Department of Fish and Wildlife has regulatory authority over American badger. Recommendations for agencies to mitigate overall cumulative impacts include prioritizing the preservation of areas of undeveloped land that would benefit American badger and supporting connectivity and genetic exchange between subpopulations of the species. For example, the Land Trust of Santa Cruz County has identified important areas for multibenefit conservation, which includes consideration of large mammals, including badgers (Land Trust of Santa Cruz County 2013).

### **8.2.3 Oak Woodland**

For the purposes of the cumulative impact analysis oak woodland habitat is considered to be associated monarch butterfly, because the two resources share the same resource study area. As described in Appendix C, Step 2 Memorandum, the same wooded areas within and surrounding the project corridor that were identified as likely to include areas of oak woodland are also likely to include some groves of Monterey pine, Monterey cypress, and eucalyptus trees, which are used by monarch butterfly. Mitigation measures for project impacts to oak woodland and monarch butterfly are presented at the beginning of this section, followed by recommendations for agencies with regulatory authority over these resources to mitigate overall cumulative impacts.

#### ***Mitigation for Project Impacts – Oak Woodland / Associated Resource***

The following paragraphs provide information regarding mitigation for project impacts specific to oak woodland habitat and monarch butterfly.

##### ***Resource 18 – Oak Woodland***

Compensatory mitigation for impacts to oak woodland habitat will be provided by the project and will be accomplished with onsite replacement planting, as described in Section 4.1.3, Coast Live Oak Woodland, of the NES.

##### ***Resource 19 – Monarch Butterfly***

As described in Section 4.3.1, Discussion of Monarch Butterfly (*Danaus plexippus*), of the NES, the project will implement avoidance and minimization measures specific to monarch butterfly. This will include limiting tree removal operations to months outside of the November 1<sup>st</sup> to March 1<sup>st</sup> window for eucalyptus trees and other suitable habitat for monarch butterfly.

#### ***Recommendations for Agencies – Oak Woodland / Associated Resource***

Recommendations for agencies to mitigate overall cumulative impacts to oak woodland and monarch butterfly are described below. *Resource 18 – Oak Woodland*

The California Department of Fish and Wildlife, County of Santa Cruz, and the cities of Santa Cruz and Capitola have regulatory authority over oak woodland. Recommendations for agencies to mitigate overall cumulative impacts include prioritizing preservation and planting of coast live oaks via building permits, development approvals, and project permitting. In addition, recommendations would also include encouraging sustainable and ecosystem beneficial larger mitigation efforts rather than smaller, piecemeal mitigation efforts by looking at advanced mitigation and establishing mitigation banking opportunities.

##### ***Resource 19 – Monarch Butterfly***

The California Department of Fish and Wildlife has regulatory authority over monarch butterfly. Recommendations for agencies to mitigate overall cumulative impacts include supporting efforts to restore habitat restoration for monarch butterfly. For example, the Environmental Defense Fund is partnering with the Monarch Joint Venture and the Iowa Monarch Conservation Consortium to develop a Monarch Butterfly Habitat Exchange, which would incentivize farmers and ranchers to maintain and increase the availability of milkweed, which is vital to the monarch butterfly life cycle (Environmental Defense Fund 2018).

#### **8.2.4 Coastal Scrub**

Mitigation measures for impacts to the coastal scrub natural community (Resource 20) are presented at the beginning of this section, followed by recommendations for agencies with regulatory authority over this resource to mitigate overall cumulative impacts.

##### ***Mitigation for Project Impacts – Resource 20, Coastal Scrub***

For the coastal scrub natural community, mitigation would be accomplished with replacement planting of any plant materials that are removed. Note that these measures will apply to future Tier II projects that include areas of coastal scrub. No coastal scrub occurs within the Tier II Auxiliary Lane Alternative project area.

##### ***Recommendations for Agencies – Resource 20, Coastal Scrub***

Santa Cruz County, the City of Santa Cruz, and the City of Capitola have regulatory authority over the coastal scrub natural community. Within the Coastal Zone, the California Coastal Commission also has regulatory authority over this resource. The County of Santa Cruz has included coastal scrub in Chapter 16.32, Sensitive Habitat Protection of its Municipal Code, providing some protections of coastal scrub habitat in all areas under the County's jurisdiction. Recommendations for agencies to mitigate overall cumulative impacts include enhancing the existing protections for coastal scrub, including areas of coastal scrub outside the Coastal Zone.

#### **8.2.5 Resources Associated with Developed Areas**

Developed areas are associated with a number of resources included in the cumulative impact analysis, including visual resources, water quality and stormwater, pallid bat, hoary bat, and Townsend's big-eared bat. A key concern for bat species is the removal of existing bridge structures over the highway, which may be utilized by roosting bats. Mitigation measures for project impacts to these resources are presented at the beginning of this section, followed by recommendations for agencies with regulatory authority over the resources to mitigate overall cumulative impacts.

##### ***Mitigation for Project Impacts – Resources Associated with Developed Areas***

The following paragraphs provide information regarding mitigation for project impacts that is specific to resources associated with developed areas.

##### ***Resource 21 – Visual***

As described in the Visual Impact Assessment, mitigation measures include the implementation of replacement plantings and the development of aesthetic treatments as part of the design phase of each Tier II project. The mitigation of visual impacts resulting from all Tier II projects will be guided by Corridor Aesthetic Guidelines, which incorporate community input through a formalized structure.

##### ***Resource 22 – Water Quality and Stormwater***

Mitigation measures include the use of biofiltration devices or infiltration devices, the application of permanent erosion control measures and the implementation of best management practices during construction. Chapter 5, *Avoidance, Minimization, and/or Mitigation Measures* of the Water Quality Study Report discusses these measures in greater detail.

***Resource 23, 24 and 25 – Pallid Bat, Hoary Bat and Townsend’s Big-Eared Bat***

Mitigation measures for impacts to pallid bat, hoary bat, and Townsend’s big-eared bat, and other roosting bats, include pre-construction surveys and avoidance measures. In the event of any permanent affects to a major roost location, the replacement of suitable habitat will be implemented. Suitable habitat includes trees and existing structures, such as bridges over the highway. Section 4.3.12, Discussion of Roosting Bats (Order *Chiroptera*), of the NES provides more detail on measures to address impacts to these bat species.

***Recommendations for Agencies – Developed Areas / Associated Resources***

Recommendations for agencies to mitigate overall cumulative impacts for resources associated with developed areas are described below.

***Resource 21 – Visual***

The County of Santa Cruz, City of Santa Cruz and City of Capitola have regulatory authority over visual resources associated with the project. Recommendations for agencies to mitigate overall cumulative impacts include prioritizing tree preservation and planting and encouraging or requiring screening plantings.

***Resource 2 – Water Quality and Stormwater***

The Central Coastal Regional Water Quality Control Board, County of Santa Cruz, City of Santa Cruz and City of Capitola have regulatory authority over water quality and stormwater resources associated with the project. Recommendations for agencies to mitigate overall cumulative impacts include to consider identifying appropriate opportunities within local watersheds to provide stormwater treatment of existing impervious surfaces as alternative compliance, with potential to result in a net environmental benefit.

***Resources 23, 24, and 25 – Pallid Bat, Hoary Bat, and Townsend’s Big-eared Bat***

The California Department of Fish and Wildlife has regulatory authority over pallid bat, hoary bat, and Townsend’s big-eared bat. Recommendations for agencies to mitigate overall cumulative impacts include supporting efforts to monitor bats in the Central Coast. For example, the Central Coast Bat Survey, the primary research project of the Pacific Coast Conservation Alliance, is seeking to investigate the relationship between Central Coast bats and viticulture and the effects of habitat enhancements on bat populations. The Central Coast Bat Survey is intended to address concerns regarding the economic impact that declines in bat populations could have on agricultural productivity, and the effectiveness of measures to improve bat survivorship, such as the installation of bat boxes, reduction of pesticide application, and creation of bat-friendly habitats (Pacific Coast Conservation Alliance 2018).

Table 8-1 provides a summary overview of mitigation recommendations described above.

**Table 8-1. Overview of Mitigation Recommendations**

Habitat Type	No.	Resource	Agencies with Regulatory Authority over Resource	Recommendations for Agencies with Regulatory Authority over Resource to Mitigate Overall Cumulative Impacts		
				Enhance/Restore	Prioritize Preservation and/ or Planting	Establish Protections
Riverine/ Freshwater Marsh	1	Riverine/ Freshwater Marsh	USACE, CDFW, CCC, Central Coast RWQCB, Santa Cruz County, City of Santa Cruz, City of Capitola	X		
	2	Wetlands and Other Waters	USACE, CDFW, CCC, Central Coast RWQCB, Santa Cruz County, City of Santa Cruz, City of Capitola	X		
	3	Tidewater Goby	CDFW, USFWS	X		
	4	Central California Coastal Steelhead	CDFW, NOAA/National Marine Fisheries Service	X		
	5	California Tiger Salamander	CDFW, USFWS		X	
	6	Santa Cruz Long-toed Salamander	CDFW, USFWS		X	
	7	California Red-legged Frog	CDFW, USFWS	X		
	8	Foothill Yellow-legged Frog	CDFW	X		
	9	Western Pond Turtle	CDFW	X		
Riparian	10	Riparian Forest	USACE, CDFW, CCC, Central Coast RWQCB, Santa Cruz County, City of Santa Cruz, City of Capitola	X		
	11	Coopers Hawk	CDFW, USFWS	X		
	12	Tricolored Blackbird	CDFW, USFWS	X		
	13	Short-eared Owl	CDFW, USFWS	X		



Habitat Type	No.	Resource	Agencies with Regulatory Authority over Resource	Recommendations for Agencies with Regulatory Authority over Resource to Mitigate Overall Cumulative Impacts		
				Enhance/Restore	Prioritize Preservation and/ or Planting	Establish Protections
	14	White-tailed Kite	CDFW, USFWS	X		
	15	Least Bell's Vireo	CDFW, USFWS	X		
	16	Southwestern Willow Flycatcher	CDFW, USFWS	X		
	17	American Badger	CDFW		X	
Oak Woodland	18	Oak Woodland Community	CDFW, Santa Cruz County, City of Santa Cruz, City of Capitola		X	
	19	Monarch Butterfly	CDFW	X		
Coastal Scrub	20	Coastal Scrub Community	CCC, Santa Cruz County, City of Santa Cruz, City of Capitola			X
Developed Areas	21	Visual Resources	Santa Cruz County, City of Santa Cruz, City of Capitola		X	X
	22	Water Quality and Stormwater	Central Coast RWQCB, Santa Cruz County, City of Santa Cruz, City of Capitola	X		
	23	Pallid Bat	CDFW	X		
	24	Hoary Bat	CDFW	X		
	25	Townsend's Big-eared Bat	CDFW	X		

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Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix A

Revised Description of the Tier I Build Alternatives



## **Updated Description of the Tier I Corridor Alternatives**

The following text supersedes the description of the Tier I Corridor HOV Lane Alternative and the Tier I Corridor TSM Alternative, included in the Draft EIR/EA.

### ***Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives***

The Tier I HOV Lane and TSM Alternatives share many features, such as: the addition of auxiliary lanes, new pedestrian/bicycle overcrossings over Route 1, and Transportation Operations System elements. These common design features are described below.

#### ***Auxiliary Lanes***

Auxiliary lanes are designed to reduce conflicts between traffic entering and exiting the highway by connecting the on-ramp of one interchange to the off-ramp of the next; they are not designed to serve through traffic. Auxiliary lanes would be constructed to improve merging operations at the locations listed below:

- Freedom Boulevard and Rio Del Mar Boulevard – northbound and southbound
- Rio Del Mar Boulevard and State Park Drive – northbound and southbound
- State Park Drive and Park Avenue – both directions in the TSM Alternative; southbound only in the HOV Lane Alternative
- Park Avenue and Bay Avenue/Porter Street – northbound and southbound
- 41st Avenue and Soquel Avenue/Drive – northbound and southbound

#### ***New Pedestrian/Bicycle Overcrossings***

Both Tier I alternatives would construct new pedestrian/bicycle overcrossings of Route 1 at the following locations:

- Mar Vista Drive – A crossing of Route 1 is proposed at Mar Vista Drive in the unincorporated community of Aptos. A potential design approach is included in the Draft Environmental Document, in Appendices G, Tier I Corridor HOV Lane Alternative Plan Drawings and H, Tier I Corridor TSM Alternative Plan Drawings, which would include ramps with switchbacks on both sides of Route 1. Multiple configurations are possible, and the final design would be determined as part of the Tier II design/environmental analysis of this facility.
- Chanticleer Avenue – The crossing would start at the Chanticleer Avenue cul-de-sac on the north side of Route 1 and run parallel the highway for approximately 400 feet to the west and then cross Route 1 and Soquel Avenue (frontage road) on a curved alignment, terminating just west of Chanticleer Avenue on the south side of the highway and Soquel Avenue (frontage road).

- Trevethan Avenue – A potential design approach for the crossing at Trevethan Avenue is included in the Draft Environmental Document, in Appendices G, Tier I Corridor HOV Lane Alternative Plan Drawings and H, Tier I Corridor TSM Alternative Plan Drawings, which would cross Route 1 on an angle and continuing along the banks of the western tributary to Arana Gulch to terminate close to Harbor High School. However, multiple configurations are possible, and the final design would be determined as part of the subsequent Tier II design/environmental analysis of this facility.

#### *Other Common Features of the Tier I Corridor Alternatives*

The Tier I Corridor Alternatives would include reconstruction of the Santa Cruz Branch Rail Line bridges over Route 1 and the State Park Drive, Capitola Avenue, 41st Avenue, and Soquel Avenue overcrossings. The Santa Cruz Branch Line railroad underpass structures are proposed to be modified or replaced to accommodate highway widening to match the ultimate six-through-lane concept, including shoulder and sidewalk facilities to accommodate pedestrians and bicycles. These modifications will lower the highway profile to provide standard clearances. In addition the Aptos Creek Bridge would be widened.

Both build alternatives would include Transportation Operations System elements such as changeable message signs, closed-circuit television, microwave detection systems, and vehicle detection systems. In addition, ramp metering and HOV on-ramp bypass lanes with highway patrol enforcement areas would be constructed on the Route 1 ramps within the Tier I project limits; however, only the HOV Lane Alternative would include HOV lanes on the mainline.

Table 1-1 summarizes the major features of the Tier I Corridor Alternatives.

#### **Tier I Corridor HOV Lane Alternative**

The Tier I Corridor HOV Lane Alternative includes the following main components, which are discussed in detail below:

- Highway mainline to include northbound and southbound HOV lanes throughout the project limits;
- Auxiliary lanes;
- Highway interchange reconfigurations and improvements such as ramp metering, on-ramp HOV bypass lanes and California Highway Patrol enforcement areas, and stormwater drainage/treatment facilities;
- Construction of three pedestrian/bicycle overcrossings;
- Reconstruction of two Santa Cruz Branch Rail Line overcrossings in Aptos;
- Widening of the Aptos Creek Bridge;
- Replacement of the Capitola Avenue overcrossing;
- Retaining walls;

- Soundwalls; and
- Traffic signal coordination and other transportation operation system improvements.

**Table 1-1 Major Project Features Tier I Project Alternatives**

<b>Project Features</b>	<b>HOV Lane Alternative</b>	<b>TSM</b>	<b>No Build Alternative</b>
<b>Highway Mainline Changes</b>			
HOV lanes	X		
Lower highway profile at Santa Cruz Branch Line bridge crossings <sup>1</sup>	X	X	
<b>Auxiliary Lane Improvements</b>			
Northbound and southbound between Freedom Boulevard and Rio Del Mar Boulevard	X	X	
Northbound and southbound between Rio Del Mar Boulevard and State Park Drive	X	X	
Northbound between State Park Drive and Park Avenue		X	
Southbound between State Park Drive and Park Avenue	X	X	
Northbound and southbound between Park Avenue and Bay Avenue/Porter Street	X	X	
Northbound and southbound from 41st Avenue to Soquel Avenue/Drive	X	X	
<b>Highway Interchange Improvements</b>			
Reconfigure all nine interchanges within project limits	X		
Reconstruct State Park Drive, 41st Avenue, and Soquel overcrossings		X	
Ramp metering	X	X	
On-ramp HOV bypass lanes <sup>2</sup>	X	X	
On-ramp California Highway Patrol enforcement areas	X	X	
Stormwater drainage and treatment facilities	X	X	
<b>New Pedestrian/Bicycle Overcrossings</b>			
Mar Vista Drive Crossing	X	X	
Chanticleer Avenue Crossing	X	X	
Trevethan Avenue Crossing	X	X	
<b>Santa Cruz Branch Line Bridges Replacement</b>	X	X	
<b>Aptos Creek Bridge Widening</b>	X	X	
<b>Capitola Avenue Overcrossing Replacement</b>	X	X	
<b>Retaining Walls</b>	X	X	
<b>Soundwalls</b>	X	X	
<b>Traffic Signal Coordination</b>	X	X	X
<b>Transportation Operations System</b>	X	X	X
<b>Transit-Supportive Improvements</b>	X		

<sup>1</sup> Existing highway profile does not meet vertical clearance standards for railroad bridge crossings.

<sup>2</sup> At three interchanges (Rio Del Mar Boulevard, Freedom Boulevard and San Andreas Road) on-ramps and associated improvements such as local road improvements and retaining walls, will be included only if the proposed design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during environmental review of future Tier II projects.

The Tier I Corridor HOV Lane Alternative would expand the existing four-lane highway to a six through-lane facility by adding HOV lanes in both the northbound and southbound directions. HOV lanes would be constructed entirely within the existing median where possible. In those areas where the median is not wide enough to accommodate additional lanes, widening would occur outside of the existing freeway footprint. In the southernmost 1.5 miles of the project limits, the HOV lane would be constructed inside the existing median. Extension of the median barrier south of its current terminus at Freedom Boulevard would be designed to provide for passage of Santa Cruz long-toed salamander individuals attempting to cross the highway. From approximately Freedom Boulevard to Soquel Drive, the existing median is not wide enough to accommodate an HOV lane, so the space needed for the additional lanes would be achieved through a combination of median conversion within existing right-of-way and acquisition of property adjacent to the freeway.

A mandatory standard median width (22 feet) set by Caltrans in its Highway Design Manual is proposed through most of the project corridor, north of Freedom Boulevard. The mandatory standard median width comprises two 10-foot-wide inside shoulders and a 2-foot-wide barrier. Where meeting the mandatory median width standard would result in acquiring property on the non-highway side of existing frontage roads, inside shoulder widths of 5 feet are proposed to reduce property requirements and impacts. Five feet is a nonstandard inside shoulder width for a Caltrans facility. This exception to shoulder-width design standards has received conceptual review in meetings between Caltrans and the project sponsor. All projects requiring design exceptions must ultimately be approved by Caltrans.

The Tier I Corridor HOV Lane Alternative would modify or reconstruct all nine interchanges within the project corridor to improve merging operations and ramp geometry by increasing the length of lanes for acceleration and deceleration, adding HOV bypass lanes and mixed-flow lanes to on-ramps, and improving sight distances. The Bay Avenue/Porter Street and 41st Avenue interchanges would be modified to operate as one interchange with frontage roads connecting the two interchanges. Where feasible, design deficiencies on existing ramps would be corrected to meet current design standards. Ramp metering and HOV bypass lanes would generally be provided on all Route 1 on-ramps; however, the design of interchanges at Rio Del Mar Boulevard, Freedom Boulevard, and San Andreas Road may exclude HOV bypass lanes on some on-ramps and associated improvements, such as retaining walls and improvements to local roads, if during environmental review of future Tier II documents, the elimination of these features is necessary to avoid impact to Santa Cruz long-toed salamander (SCLTS) upland habitat. During the environmental review of future Tier II projects, more detailed information would be available to determine whether there may be design approaches that could include the HOV bypass lanes while achieving full avoidance of SCLTS upland habitat.

This alternative would include auxiliary lanes between all interchange ramps (with the exception of a northbound auxiliary lane between State Park Drive and Park Avenue) and Transportation Operations System elements, such as changeable message signs, microwave detection systems, and vehicle



detection systems. Bridge structures and the Capitola Avenue overcrossing would be modified or replaced to accommodate the HOV lanes. New and widened highway crossing structures would include shoulder and sidewalk facilities to accommodate pedestrians and bicycles. The HOV Lane Alternative would include three new pedestrian/bicycle overcrossings of Route 1. The two existing Santa Cruz Branch Line structures over Route 1 in Aptos would be replaced with longer bridges at the same elevation, and the highway profile would be lowered to achieve standard vertical clearance under the bridges to make room for the HOV and auxiliary lanes. In addition, this design configuration would reduce environmental impacts. The existing Route 1 bridge over Aptos Creek would be widened on the outside to accommodate the HOV lanes in each direction. The existing Capitola Avenue overcrossing would be replaced with a longer structure.

Retaining walls would be constructed to minimize property acquisitions and reduce environmental impacts. At locations where frontage roads are adjacent to Route 1, concrete barriers would be constructed to separate the highway and frontage road.

#### *Changes to Highway Mainline with the Tier I Corridor HOV Lane Alternative*

- Route 1 would be expanded to allow for two standard-width (12-foot) mixed-flow lanes, one standard-width (12-foot) HOV lane, and standard-width outside (10-foot) shoulders in each direction.
- The proposed lanes would be constructed within the existing 45-foot median. In locations where the existing median width is less than 45 feet, widening would occur both in the median and at the outside, generally within the existing Route 1 right-of-way.
- Where auxiliary lanes are proposed, widening by approximately 12 feet outside of the existing highway footprint would occur.
- A mandatory standard median width of 22 feet is proposed through most of the corridor.
- The highway centerline would be shifted northward in the vicinity of the Santa Cruz Branch Line crossings in Aptos to reduce impacts to wetlands. The bridge over Aptos Creek would be widened to allow for four new lanes: two HOV, two auxiliary, and pedestrian/bicycle facilities.
- Route 1 would be lowered to obtain vertical clearance at the Santa Cruz Branch Line crossings in Aptos. A mandatory standard median width of 22 feet is proposed to minimize impact to the railroad bridge.
- At three locations, median and inside shoulder widths would be nonstandard to reduce impacts to adjacent streets. The three locations are: McGregor Drive, Cabrillo College Drive, and Kennedy Drive. At these three constrained locations, the inside shoulder in the constrained direction would be a nonstandard 5 feet, and the median would be a nonstandard 17 feet.

#### *Auxiliary Lane Improvements with the Tier I Corridor HOV Lane Alternative*

The auxiliary lane improvements are discussed above in Section 1.5 Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives.

### *Interchange Improvements with the Tier I Corridor HOV Lane Alternative*

All nine interchanges within the project corridor would be modified under the Tier I Corridor HOV Lane Alternative, including overcrossing and undercrossing widening or replacement. These modifications would improve merging operations and ramp geometrics, and accessibility and safety for pedestrians and bicyclists. Major interchange improvements would include the following:

- Reconfiguration of intersections, including replacement or widening of highway overcrossings and undercrossings.
- Intersections of freeway ramps with local roads would be modified to shorten the pedestrian and bike crossing distances. Additionally, free right turns would be eliminated where feasible and traffic signals installed to improve traffic flow and slow vehicle traffic speeds through the bike and pedestrian crossing areas.
- Local roadways would be widened at the interchanges to accommodate the anticipated travel demand.
- Drainage and stormwater runoff treatment facilities would be provided.

Interchange improvements and design reconfigurations proposed for each interchange are listed in Table 1-2.

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

<b>Route 1 Interchange Location</b>	<b>Project Plan Sheet No.</b>	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
San Andreas / Larkin Valley Roads Interchange <sup>2</sup>	HOV-20	<b>The existing northbound cloverleaf off-ramp free right-turn onto Larkin Valley Road would be eliminated in favor of a signalized 90-degree intersection.</b>
		<b>A signalized intersection would be provided at the San Andreas Road ramps and the free right-turns would be eliminated.</b>
		<b>The existing northbound and southbound on-ramps would be widened to accommodate HOV bypass lanes.</b>

<sup>2</sup> HOV bypass lanes at three interchanges (Rio Del Mar Boulevard, Freedom Boulevard and San Andreas Road) and associated improvements, such as retaining walls and improvements to local roads, will be included only if the proposed design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during environmental review of future Tier II projects.

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

Route 1 Interchange Location	Project Plan Sheet No.	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
		<p>The southbound Route 1 bridge over San Andreas/Larkin Valley Road would be widened into the median to accommodate the HOV lanes.</p> <p>San Andreas/Larkin Valley Roads would be widened within the Tier I project limits to add turn lanes (including bridge widening).</p> <p>New sidewalks would be added along San Andreas/Larkin Valley Roads within the Tier I project limits.</p>
Freedom Boulevard Interchange <sup>1</sup>	HOV-18	<p>The existing ramp termini at Freedom Boulevard would be modified to provide less-skewed intersections with Freedom Boulevard. These intersections would be signalized, and free right-turns would be eliminated.</p> <p>The southbound off-ramp would be widened to two exit lanes.</p> <p>The existing northbound on-ramp would be widened to accommodate HOV bypass lanes.</p> <p>The existing southbound on-ramp would be widened to accommodate HOV bypass lanes.</p> <p>Freedom Boulevard would be widened within the Tier I project limits to add turn lanes.</p> <p>The Freedom Boulevard/Bonita Drive intersection would be enlarged to add turn lanes and achieve acceptable level of service.</p> <p>The Freedom Boulevard bridge would be replaced with a wider structure that would accommodate a new turn lane on Freedom Boulevard and the new HOV lanes on Route 1.</p> <p>New sidewalks would be added along Freedom Boulevard within the Tier I project limits.</p>
Rio Del Mar Boulevard Interchange <sup>1</sup>	HOV-16	<p>The northbound on-ramp would be realigned to form the north leg of a four-way intersection with Rio Del Mar Boulevard and the northbound off-ramp. This intersection would be signalized and free right turns would be eliminated</p>

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

Route 1 Interchange Location	Project Plan Sheet No.	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
		The northbound off-ramp would be widened to two exit lanes.
		<b>The southbound on-ramp would be widened to accommodate an HOV bypass lane.</b>
		The southbound off-ramp would be widened, the intersection with Rio Del Mar Boulevard signalized, and free right-turns eliminated.
		The existing northbound on-ramp would be widened to accommodate an HOV bypass lane.
		Soquel Drive would be shifted northward to accommodate the roadway widening along the northbound off-ramp.
		<b>Rio Del Mar Boulevard would be widened within the Tier I project limits to add turn lanes and a through lane in each direction.</b>
		The Rio Del Mar Boulevard bridge over Route 1 would be replaced with a longer, wider bridge to accommodate a new turn lane and a through lane in each direction on Rio Del Mar Boulevard and the new HOV lanes on Route 1.
State Park Drive Interchange	HOV-13	Sidewalk would be added along eastbound Rio Del Mar Boulevard within the Tier I project limits; the sidewalk on westbound Rio Del Mar Boulevard would be retained.
		The existing northbound cloverleaf on-ramp free-right turn would be changed to a signalized right turn.
		The existing northbound off-ramp terminus would be modified to form, together with the realigned northbound on-ramp terminus, the south leg of a signalized intersection with State Park Drive.
		The northbound and southbound off-ramps would be widened to two exit lanes.
		The existing on-ramps would be widened to accommodate HOV bypass lanes.  State Park Drive would be widened within the Tier I project limits to add turn lanes and a through lane in each direction.

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

Route 1 Interchange Location	Project Plan Sheet No.	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
		The State Park Drive bridge over Route 1 would be replaced with a longer, wider bridge to accommodate a new through-lane in each direction on State Park Drive and the new HOV lanes on Route 1.
		Sidewalk would be added along eastbound State Park Drive within the Tier I project limits; the sidewalk along westbound State Park Drive would be retained.
Park Avenue Interchange	HOV-10	The existing diamond interchange ramp design would be retained and ramps would be widened.
		The northbound and southbound off-ramps would be widened to two exit lanes.
		The existing on-ramps would be widened to accommodate HOV bypass lanes.
		Park Avenue would be widened within the Tier I project limits to add turn lanes.
		The two Route 1 bridges over Park Avenue would be replaced with one, wider structure to accommodate the new HOV lanes on Route 1.
		Sidewalk would be added within the Tier I project limits along westbound Park Avenue; the sidewalk along eastbound Park Avenue would be retained.
Bay Avenue/ Porter Street and 41st Avenue Interchanges	HOV-7	Improvements at the Bay Avenue/Porter Street and 41st Avenue interchanges would be designed so that these two interchanges would work as a single interchange connected by a collector/frontage road running between the interchanges.
		The freeway ramps would be reconstructed to form less-skewed intersections with Bay Avenue/Porter Street.
		The existing southbound Route 1 off-ramp to Bay Avenue/Porter Street would be eliminated. Southbound traffic bound for Bay Avenue/Porter Street would exit at the 41st Avenue two-lane off-ramp and continue on a new southbound collector/frontage road to Bay Avenue/Porter Street.

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

Route 1 Interchange Location	Project Plan Sheet No.	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
		The existing two-lane on-ramp from Porter Street to northbound Route 1 would be modified to become a northbound collector/frontage road serving traffic bound for 41st Avenue or northbound Route 1.
		Northbound traffic exiting Route 1 would either bear right to intersect with Porter Street and continue north, or stay left and continue on a new structure over Porter Street, join the northbound collector/frontage road, and end at a new signalized intersection at 41st Avenue.
		At 41st Avenue, southbound on- and off-ramps would be eliminated and replaced with a diagonal off-ramp and a collector/frontage road serving traffic bound for
		Bay Avenue/Porter Street or southbound Route 1. The new ramp and collector/frontage road would form a signalized intersection with 41st Avenue.
		At 41st Avenue, the northbound on-ramps would be realigned.
		New on-ramps would include HOV bypass lanes.
		41st Avenue would be widened within the Tier I project limits to add turn lanes and eastbound through lanes over Route 1.
		Bay Avenue/Porter Street would be widened to add right-turn lanes at the on-ramps.
		A new bridge over Soquel Creek and Soquel Wharf Road would be constructed for the new southbound collector/frontage road from 41st Avenue to Bay Avenue/Porter Street.
Soquel Avenue/ Drive Interchange	HOV-3	The northbound off-ramp would be realigned to a signalized 90-degree intersection with Soquel Drive. The existing access to Commercial Way would be eliminated.
		The westbound Soquel Drive on-ramp to northbound Route 1 would be modified to eliminate the free right-turn access.

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

Route 1 Interchange Location	Project Plan Sheet No.	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
		The existing northbound loop on-ramp from eastbound Soquel Avenue would be realigned and its free-right terminus would become a signalized 90-degree intersection.
		A new, wider southbound diagonal off-ramp that adds turn lanes at its terminus and a new loop on-ramp would form the north leg of a signalized intersection at Soquel Avenue.
		The existing southbound hook on-ramp would be widened to add an HOV bypass lane and realigned to be made standard.
		The northbound and southbound off-ramps would be widened to two exit lanes.
		All new on-ramps would include HOV bypass lanes.
		Soquel Avenue within the Tier I project limits would be widened to add an eastbound through lane and turn lanes.
		Salisbury Lane would be shifted eastward to form an intersection with the realigned northbound off-ramp and loop on-ramp.
		The Soquel Drive bridge over Route 1 would be replaced with a longer, wider bridge to add an eastbound through lane and a turn lane to Soquel Drive and accommodate the new HOV lanes on Route 1.
		The culvert at Arana Gulch would be extended underneath the widened Route 1 and new southbound off-ramp.
		Sidewalk would be added along eastbound Soquel Drive within the Tier I (and Tier) project limits; the sidewalk along westbound Soquel Drive would be retained.
Morrissey Boulevard Interchange	HOV-1	The southbound exit would be realigned to terminate at a new signalized intersection with Morrissey Boulevard.
		The existing southbound on-ramp would be eliminated and replaced with a new, wider diagonal ramp with a signalized terminus.

**Table 1-2: Interchange Improvements and Reconfigurations  
Tier I Corridor HOV Lane Alternative**

Route 1 Interchange Location	Project Plan Sheet No.	<b>Tier I Corridor HOV Lane Alternative Features</b> (Features shown in <b>bold</b> would be included only if the design fully avoids upland habitat for Santa Cruz long-toed salamander, as determined during future Tier II environmental review)
		The existing southbound off- and on-ramp at Elk Street would be eliminated.
		The existing northbound loop on-ramp would be eliminated, as would access to Rooney Street from this northbound loop.
		The northbound off-ramp would be widened to two exit lanes.
		New on-ramps would include HOV bypass lanes.
		Morrissey Boulevard is being replaced with a wider bridge to add an eastbound through lane and turn lanes, and realigned to form a straight line between its intersections with Fairmont Avenue and Rooney Street.
		The Morrissey Boulevard bridge is being replaced with a longer, wider bridge to accommodate a new eastbound through lane and turn lanes on Morrissey Boulevard and new HOV lanes on Route 1.
		Sidewalk would be added along eastbound Morrissey Boulevard within the Tier I project limits; the sidewalk along westbound Morrissey Boulevard would be retained.
Transit- Related Facilities	N.A.	Both on-ramps and both off-ramps at the reconfigured Park Avenue interchange include options for bus pads and bus shelters.
		Ramps and collectors at the Bay Avenue/Porter Street and 41 Avenue interchanges include options for bus pads and shelters.

*Transit Supportive Planning and Design*

The Tier I Corridor HOV Lane Alternative would not preclude the development of the following features from being added in the future to facilitate freeway-oriented transit services and operations:

- The reconfigured Park Avenue and Bay Avenue/Porter Street/41st Avenue interchanges would allow for future bus pads and bus stop shelters to be constructed as part of a separate project.



- Future park-and-ride lots are under consideration by RTC at the Larkin Valley Road/San Andreas Road and 41st Avenue interchanges, to be coordinated with the bus facilities as part of a future project.

The aforementioned features are not part of the proposed project and would be subject to future environmental clearance. The proposed Tier I project is simply taking into consideration potential future transit projects as a collaborative planning effort.

#### *New Pedestrian/Bicycle Overcrossings*

The proposed pedestrian/bicycle overcrossings are discussed above in Section 1.5 Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives.

### **Tier I Corridor TSM Alternative**

The Tier I Corridor TSM Alternative was formulated to provide Route 1 improvements that would partially address the purpose and need, and could be achieved at lower cost and with fewer impacts than the Tier I Corridor HOV Lane Alternative. TSM strategies typically consist of improvements that can benefit the operations of existing facilities without increasing the number of through lanes.

As discussed in Section 1.5 Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives, the Tier I Corridor TSM Alternative proposes to add auxiliary lanes, ramp metering and HOV on-ramp bypass lanes; improve existing nonstandard geometric elements at various ramps; and incorporate other TSM elements, such as changeable message signs, closed circuit television, microwave detection systems, and vehicle detection systems.). In short, the TSM Alternative shares many of the Tier I Corridor HOV Lane Alternative features, except HOV lanes would not be constructed along the mainline and the Soquel Drive interchange would be the only interchange reconfigured.

#### *Auxiliary Lanes*

The majority of auxiliary lane improvements are discussed above under the heading, Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives. In addition, the TSM Alternative would have both a southbound and northbound auxiliary lane between State Park Drive and Park Avenue — improvements that are not included in the HOV Lane Alternative.

#### *Interchange Improvements*

Improvements to interchanges proposed under the Tier I Corridor TSM Alternative include the following:

- The Soquel Avenue northbound off-ramp from Route 1 would be realigned and widened from one to two exit lanes for a distance of approximately 1,300 feet, widening to four lanes at its intersection with Soquel Drive. The northbound off-ramp/Commercial Way connection would be eliminated, and Commercial Way would become a cul-de-sac north of the realigned ramp. The intersection of the northbound off-ramp with Soquel Drive would be enlarged to achieve an acceptable level of service for the anticipated traffic volume.
- Improve existing nonstandard geometric elements at various ramps.

- Provide HOV bypass lanes on ramps other than the northbound Morrissey Boulevard on-ramps; bypass lanes on ramps at the San Andreas/Larkin Boulevard, Freedom Boulevard, and Rio del Mar Boulevard interchanges would not be constructed if Santa Cruz long-toed salamander upland habitat cannot be avoided.
- Add California Highway Patrol enforcement areas at on-ramps with HOV bypass lanes.

#### *New Pedestrian/Bicycle Overcrossings*

The proposed pedestrian/bicycle overcrossings are discussed above in Section 1.5 Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives.

#### *Other Improvements*

The details of the other improvements are included above, under the heading, Common Design Features of the Tier I Corridor HOV Lane and TSM Alternatives.

Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix B

Step 1 Technical Memorandum



## Technical Memorandum

To: Parag Mehta, Kimley Horn

From: Carie Montero, Parsons

CC: Laura Prickett, Horizon Water and Environment

Date: August 12, 2016 (Updated May 15, 2018)

Re: Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis – Step 1

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### Introduction

Parsons Transportation Group (PTG) is conducting an analysis of the cumulative impacts of the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project. A complete description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a).

The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 to 2021 upon approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition.

Cumulative impacts of the proposed improvements are evaluated in the Draft EIR/EA.; however, this current analysis is being conducted as a result of public comments on the Draft EIR/EA, which circulated in November 2015. As requested by Caltrans, PTG is using the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration (Caltrans 2016), to confirm that all cumulative impacts are adequately addressed. This memorandum presents the results of Step 1 of the analysis. The information presented in this memorandum is based primarily on information presented in the Draft EIR/EA and its supporting technical studies (Caltrans 2015b).

## Step 1: Identify Resources to Consider in the Cumulative Impact Analysis

Based on the Caltrans eight-step guidance for cumulative impact analysis, resources areas with no impact do not need to be considered further in this analysis. The Tier I and Tier II projects would have no impact on the following resource areas:

- Agricultural and forest resources
- Mineral resources
- Public services
- Recreation

The cumulative impact analysis must consider impacts of resource areas in which there are significant impacts. The only resource area with significant impacts is visual/aesthetics. Additionally, the cumulative impact analysis must consider impacts to resource areas that at risk or are in poor or declining health, even if the impact is less than significant. Table 1 outlines the resource areas with less than significant impacts and provides a brief assessment of their current health, based primarily on information presented in the Draft EIR/EA – the applicable section of the Draft EIR/EA is referenced for each resource area. Because visual/aesthetics is a significant impact, it is not included in Table 1. Resource areas that were discussed in public comments on the Draft EIR/EA are indicated with an asterisk (\*). Two asterisks (\*\*) indicate that the discussion of the resource in public comments consisted of naming the resource in a list of resources affected by the project.

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.1.1.1	Existing and Future Land Use	Urban residential land uses predominate along most of the Route 1 corridor, with some commercial and industrial property located primarily in the unincorporated areas. These land uses have remained relatively intact due to restrictive land use controls.	N	Good	Stable
2.1.1.2	Consistency with State, Regional, and Local Plans*	Future growth and development within the study area is guided by policies and programs set forth in the general plans. Local and regional goals and policies related to the transportation system include providing the public with choices in transportation modes; increasing transit ridership, carpooling, vanpooling, walking, bicycling; managing congestion; and ensuring road safety for all users. Recent and planned projects (including the Route 1 Tier I and Tier II projects) are designed to support bicycle, pedestrian, rail, transit, and carpooling modes (SCCRTC 2016).	N	Good	Stable
2.1.1.3	Coastal Zone*	Coastal resources in the study area have been well protected from development through restrictive land use controls. Environmentally Sensitive Habitat Areas (ESHAs), as defined by the California Coastal Act and the Santa Cruz County and City of Capitola Local Coastal Programs, and other coastal resources are listed separately and their health is discussed below.	See below	See below	See below

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
	Coastal Scrub Habitat in the Coastal Zone	Coastal scrub communities typically occur in pockets in the outer and inner southern coastal ranges and in scattered areas along the immediate coast. These communities typically integrate with a variety of habitat types including annual grassland, oak woodland, and chaparral communities. Occurrence of coastal scrub within the BSA are limited to the southern portion of the BSA from roughly San Andreas Road to Freedom Boulevard, and a small disturbed area along the north side of Route 1 east of La Fonda Avenue and west of Arana Gulch. Some of these areas are located in the Coastal Zone. As an ESHA, this habitat is well protected from development through restrictive land use controls; however, the history of development activities has reduced the acreages of this natural habitat over time.	Y	Poor	Stable
	Grasslands in the Coastal Zone**	Annual grassland is typically found on ridges, hill slopes, and on valley floors. This community is mainly comprised of various non-native grasses and weedy annual forbs. Occurrence of annual grassland within the BSA is limited to the southern portion of the area near the San Andreas Road interchange. Some of these areas are located in the Coastal Zone. As an ESHA, this habitat is well protected from development through restrictive land use controls, and it is a common plant community in the region.	N	Good	Stable
	Areas in the Coastal Zone Which Provide Habitat for Species of Special Concern	Please refer to the information regarding specific species of Special Concern, under the heading, Animal Species, below. Note that, for each species found to be in poor or declining health, the cumulative evaluation will address the habitat types that are in poor or declining health, not the habitat types found to be in stable condition.	Varies (see below)	See below	See below



**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
	Coastal Zone Wetlands	Due to development activities, acreages of wetlands have decreased over time.	Y	Poor	Stable
	Coastal Zone Lagoons*	There are two lagoons in the project area: Valencia Lagoon and Soquel Lagoon. Valencia Lagoon was constructed by Caltrans in 1978 as mitigation for previous impacts to Santa Cruz Long-Toed Salamander (SCLTS) habitat in the area. Although the construction of the lagoon improved conditions for SCLTS and other species, the nearby presence of development, including Route 1, continue to affect the use of the lagoon by SCLTS. Soquel Lagoon is listed as a Critical Coastal Area because it was identified in 1995 as an impaired water body that flows into an estuary. Water quality impacts upon Soquel Lagoon include land disposal, septage disposal, and unspecified nonpoint source and urban runoff from storm sewers.	Y	Poor	Stable
	Valencia Channel*	Valencia Channel is hydrologically connected to the Valencia Lagoon, and both areas are known to provide habitat for the federal- and state-listed endangered SCLTS. The nearby presence of development, including Route 1, continue to affect the use of the channel by SCLTS.	Y	Poor	Stable
	Coastal Zone Streams*	The following creeks described in the project's Water Quality Assessment Report are included on the 2010 Clean Water Act Section 303(d) List of impaired water bodies: Aptos Creek, Valencia Creek, Soquel Creek, and Rodeo Creek Gulch. More information is provided under the heading Water Quality and Stormwater Runoff, below.	Y	Poor	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
	Riparian Corridors in the Coastal Zone*	The riparian corridors in the BSA generally consist of naturally occurring habitat areas, with development set back from the creek banks. Extensive riparian forest cover occurs within the Valencia, Aptos, and Soquel Creek corridors. Smaller amounts of riparian forest habitat occur along Ord Gulch, Borregas Creek, Pot Belly Creek, Tannery Gulch, Nobel Creek, Soquel Creek, Rodeo Gulch, and Arana Gulch and its tributaries. Development activities have reduced the extent of riparian forest.	Y	Poor	Stable
2.1.2	Growth*	Based on 2014 Association of Monterey Bay Area Governments population, housing, and employment forecasts, Santa Cruz County is expected to experience continued growth over the next 30 years, but at a slower rate than the state and the nation. The region is expected to continue to see population and housing growth associated with job growth outside the region. As a result of this projected growth, Santa Cruz County and its cities will share challenges in providing an adequate supply and range of housing opportunities; developing economic and employment opportunities; locating housing and jobs in proximity to one another; and maintaining the quality of life for residents.	Y	Good	Declining
2.1.3.1	Community Character and Cohesion	Community character is strong in the study area due to the diverse nature of the communities along Route 1. Although Route 1 is an existing barrier between these communities, community cohesion is strong on either side of Route 1.	N	Good	Stable
2.1.3.2	Relocations and Real Property Acquisition*	The neighborhoods and communities along the Route 1 corridor are diverse and intact due to restrictive land use controls.	N	Good	Stable
2.1.3.3	Environmental Justice*	The neighborhoods and communities along the Route 1 corridor are ethnically diverse, with a small low-income population.	N	Good	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.1.4	Utilities and Emergency Services*	There are many utility and emergency service providers in the study area that function efficiently and effectively.	N	Good	Stable
2.1.5	Traffic and Transportation/ Pedestrian and Bicycle Facilities*	Route 1, from Larkin Valley Road to Morrissey Boulevard in Santa Cruz, is a highly traveled, heavily congested traffic corridor. The annual average daily traffic along Route 1 within the project limits on an average day in 2010 was as high as 104,000 vehicles in both directions. Traffic conditions are most congested in the commute directions, northbound in the morning and southbound in the evening. Travel speeds are as low as 26 miles per hour, showing congested, stop-and-go traffic conditions. Within the study area, many bicycle and pedestrian facilities are provided on existing roadways. The Regional Transportation Plan and Sustainable Communities Strategy include various policies and proposed projects to address these conditions. The existing traffic report was based on old population and employment projections; 2014 projections provided by AMBAG are lower. This indicates that the congestion forecasted in the original traffic study may be overestimated. A new traffic report is underway and it is anticipated to show less congestion.	Y	Poor	Declining

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.1.7	Cultural Resources*	Some areas of the Route 1 corridor study area are sensitive for buried archeological deposits based on context and soil type. Of 13 archaeological resources identified within the archaeological Area of Potential Effects, 7 are exempt from evaluation, 2 were previously determined ineligible for the National Register of Historic Places (NRHP). Two of the 3 remaining sites, contain portions that were previously evaluated and found ineligible for NRHP listing. The unevaluated portions of these sites, and a third site that is completely unevaluated, are in the Tier I project corridor and will be evaluated in future Tier II documents, as future Tier II projects are programmed for construction and undergo environmental review. In addition, no historic architectural resources have been identified within the architectural Area of Potential Effects.	N	Good	Stable
2.2.1	Hydrology and Floodplain*	The floodplains located in the study area provide the beneficial uses, including fish, wildlife, plants, open space, natural beauty, natural moderation of floods, water quality maintenance, and groundwater recharge. The project's hydraulic analysis indicated that, under existing conditions, the Route 1 crossing of Arana Gulch would be overtopped in a 100-year storm event. Local history of flooding includes major flooding in Soquel Creek basin in 1955 and 1982, resulting from obstacles and major log jams near the Soquel Avenue bridge downstream of the Route 1 crossing.	N	Moderate	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.2.2	Water Quality and Stormwater Runoff*	The majority of water bodies in the study area are not listed as impaired for any pollutants; however, five of the 18 surface water resources described in the project's Water Quality Assessment Report are included on the 2010 Clean Water Act Section 303(d) List of impaired water bodies. The impaired water bodies are: Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch. The impairing pollutants include sedimentation, turbidity, pathogens, fecal coliform, Enterococcus, and Escherichia coli (E. coli) bacteria. Pollutant sources include: collection system failure, natural sources, septic systems, pasture grazing, urban runoff/storm sewers, disturbed sites (land development), transient encampments, and agriculture. The Regional Water Quality Control Board has adopted Total Maximum Daily Loads for three of these water bodies, including an implementation plan that identifies how the problems related to the applicable pollutant will be solved (CCRWQCB 2016).	Y	Poor	Stable
2.2.3	Geology/ Soils/ Seismic/ Topography	Within the study area, soils are poorly drained to excessively drained, permeability is moderately high to high, and runoff is very low to high. The area is seismically active and at risk for strong ground shaking, and lateral spreading at creek channel crossings during a seismic event, but there is low liquefaction and landslide potential.	N	Good	Stable
2.2.4	Paleontology*	Abundant invertebrate fossils, fossil leaves, and trace fossils were found in Purisima Formation sediments at several localities and were observed in project right-of-way exposures, indicating a high sensitivity to impacts resulting from ground disturbances.	N	Good	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.2.5	Hazardous Waste/ Materials*	There are sources of hazardous materials and wastes within the Route 1 corridor, including creosote, asbestos-containing materials, lead-based paint, and aerially deposited lead.	N	Moderate	Stable
2.2.6	Air Quality*	Local monitoring has shown that the study area has not recently exceeded ambient air quality standards. However, the study area is in nonattainment for state standards for ozone and state standards for PM <sub>10</sub> .	Y	Poor	Stable
2.2.7	Noise*	The existing noise level is generally below the FHWA's established noise abatement criteria (NAC) for the specified use of the land. However, there are locations where the existing noise level approaches or exceeds the NAC during peak traffic periods <sup>1</sup> . There are no locations in the corridor at which the noise level reaches 75 dbA during peak periods. 75 dbA is identified in the Santa Cruz County Noise Ordinance as the level at which a noise is automatically considered offensive if it occurs between the hours of 8:00 a.m. and 10:00 p.m., and as described in the County's Noise Ordinance.	N	Moderate	Stable
2.2.8	Energy*	Recurrent congestion contributes to inefficient energy consumption as vehicles use extra fuel while idling and accelerating in stop-and-go traffic or moving at slow speeds. The Regional Transportation Plan and Sustainable Communities Strategy include various policies and proposed projects to address these conditions.	N	Moderate	Stable
2.3.1	Natural Communities**	The health of each natural community type is assessed in the following rows of the table.	See below	See below	See below

<sup>1</sup> Although there are some locations at which the NAC are exceeded under existing conditions, the FHWA noise protocol uses the NAC to determine the potential need for noise abatement, such as soundwalls, based on future noise levels with the project.

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.1	Riverine/ Freshwater** Marsh	Large, well-developed riverine habitats are present in the biological study area (BSA), specifically in Valencia, Aptos, and Soquel Creeks. Freshwater marsh communities within the BSA are dominated by emergent plant species. These areas were mapped together in the NES. Four creeks and one lagoon provide areas of riverine habitat and are included on the 2010 Clean Water Act Section 303(d) List of impaired water bodies (as described under the heading Water Quality and Stormwater Runoff, above). Due to development activities, acreages of wetlands, such as freshwater marsh, have decreased over time.	Y	Poor	Stable
	Riparian Forest*	A discussion of the riparian forest natural community is provided above in 2.1.1.3, under the heading Riparian Corridors in the Coastal Zone.	Y	Poor	Stable
	Coast Live Oak Woodland**	Coast live oak woodland is present along upper creek bank areas and along roadsides throughout large areas of the BSA. Due to development activities, this habitat area has reduced over time.	Y	Poor	Stable
	Mixed Conifer Woodland**	Mixed conifer woodland habitat present within and adjacent to the BSA consists primarily of planted or ornamental stands, rather than naturally occurring stands. In most areas of the BSA, conifer woodlands have been introduced as windrows along roadways and landscaping in overpass/interchange areas. Introduced conifer stands are in stable condition.	N	Good	Stable
	Eucalyptus Woodland**	Eucalyptus woodlands are the result of escaped and naturalized eucalyptus trees (typically blue gum eucalyptus), or abandoned eucalyptus plantations. Large areas of eucalyptus woodland occur in various portions of the BSA. Although eucalyptus generally has low habitat value, this natural community is in stable condition.	N	Good	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.1	Coastal Scrub	A discussion of the coastal scrub natural community is provided above in 2.1.1.3, under the heading, Coastal Scrub Habitat in the Coastal Zone.	Y	Poor	Stable
	Annual Grasslands**	A discussion of the annual grassland natural community is provided above in 2.1.1.3, under the heading, Grasslands in the Coastal Zone.	N	Good	Stable
	Ruderal/ Disturbed Areas**	Ruderal/disturbed vegetation occurs in areas that have been altered by construction, landscaping, or other land-clearing types of activities and is dominated by non-native plant species. The areas of ruderal/disturbed are in stable condition.	N	Good	Stable
	Landscaped/ Developed Areas	Landscaped/Developed habitat is the dominant vegetation throughout the BSA. This habitat type consists of ornamental plantings in association with residential and commercial developments, and roadside landscape efforts. The landscaped/developed areas within the BSA are in stable condition.	N	Good	Stable
	Anthropogenic Habitats	Anthropogenic habitats include the several bridges and overpasses that could be affected by the project. These are otherwise unvegetated areas that may be used by nesting birds such as swallows and roosting bats. The anthropogenic habitats in the BSA are in stable condition.	N	Good	Stable
2.3.2	Wetlands and Other Waters*	The health of wetlands and other waters is assessed separately in the following rows of the table.	See below	See below	See below
	Wetlands*	Due to development activities, acreages of wetlands have decreased over time.	Y	Poor	Stable
	Other Waters*	As described under the heading of Water Quality and Stormwater Runoff, above in 2.2.2, there are five impaired surface water bodies in the project area: Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch.	Y	Poor	Stable



**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.3	Plant Species*	Due to development activities, special-status plant species have decreased over time. The Draft EIR/EA identified 25 special-status plant species as having potential to occur in the biological study area, although they were not known to occur there. Floristic surveys have been surveys and concluded that 24 of these species do not occur in the BSA. A discussion of the remaining species, Santa Cruz tarplant, is provided below.	See below	Poor	Declining
	Santa Cruz tarplant*	Although this species has declined in population, there are several documented occurrences within 1.5 miles of the BSA. The biological study area is located 0.25 mile north of critical habitat for the species. <sup>2</sup>	N	Not affected by the project	
2.3.4	Animal Species*	Development activities have reduced the amount of suitable habitat for animal species in the study area. A discussion of species that could be affected by the project is provided below. Please note that federal and state endangered or threatened species are discussed in Section 2.3.5.	See below	See below	See below
	Monarch Butterfly**	Monarch butterfly winter roosting habitat is considered rare under CEQA Guidelines Section 15380 because of declining availability. Overwintering sites occur in dense, wind-protected tree groves, such as eucalyptus, Monterey pine, and Monterey cypress, near the coast from northern Mendocino to Baja California. The eucalyptus and mixed conifer habitats in the BSA are in stable condition.	N	Good	Stable

Floristic were conducted during the current bloom period (July 2016) to determine the presence/ absence of Santa Cruz tarplant in the BSA. The Santa Cruz tarplant was absent from the study area, and therefore no impact to the species would result from the project. No further analysis of Santa Cruz tarplant in the subsequent steps of the eight-step cumulative impact analysis is needed.

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.4	Foothill Yellow legged Frog (FYLF)*	The FYLF has historically ranged from Oregon south to the San Gabriel Mountains and Sierra Nevada of California. It has been found as far south as Baja California, but not since 1965. The species is apparently extinct from the southern border of Monterey County throughout southern California. This species is found in aquatic habitats, which, as noted above, are in poor or declining health in the BSA.	Y	Poor	Stable
	Western Pond Turtle (WPT)*	The WPT historically has been present in most Pacific slope drainages between the Oregon and Mexican borders. This species is found in aquatic habitats, which, as noted above, are in poor or declining health in the BSA.	Y	Poor	Stable
	Cooper's Hawk**	Although Cooper's hawk ranges throughout the United States and is widely distributed throughout California, its numbers are declining. It is typically found in riparian forest, which, as noted above, is in poor or declining health in the BSA.	Y	Poor	Stable
	Short-Eared Owl**	The short-eared owl is a widespread winter migrant, found primarily in the Central Valley, in the western Sierra Nevada foothills, and along the coast. It is usually found in open areas with few trees, such as annual grasslands, irrigated lands, and emergent wetlands. Some open habitat types, such as irrigated lands and annual grasslands are in stable condition in the BSA, while others, such as emergent wetlands, are in poor or declining health.	Y	Poor	Stable
	Burrowing Owl**	Burrowing owls inhabit a wide range of habitat types, including dry grasslands, agricultural areas, rangelands, desert habitats, and some stages of pinyon and ponderosa pine habitats. The grasslands and mixed conifer woodlands within the BSA are in stable condition.	N	Good	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.4	Pallid Bat**	Pallid bat inhabits deserts, grasslands, shrublands, woodlands, and forests. Some of these habitat types, such as grasslands and eucalyptus woodland are in stable condition in the BSA, while others, such as riparian forest and oak woodland, are in poor or declining health.	Y	Poor	Stable
	Hoary Bat**	Hoary bat prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Some open habitat types, such as irrigated lands and annual grasslands are in stable condition in the BSA, while others, such as emergent wetlands, are in poor or declining health.	Y	Poor	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
	Townsend's Big-Eared Bat**	This species is found in all but subalpine and alpine habitats, and may be found at any season throughout its range. Once considered common, by 2000, Townsend's big-eared bat was considered uncommon in California (CDFW 2000). A 1988 study investigating the status of Townsend's big-eared bat in coastal California suggested marked population declines in the previous 40 years. The data indicated that the species is roost limited, and the primary cause for the observed declines was human disturbance of roosting sites CDFG 1988). On August 25, 2016, the California Department of Fish and Wildlife (CDFW) found that a petitioned action to add the Townsend's big-eared bat to the list of threatened or endangered species under the California Endangered Species Act was not warranted. This finding was based on scientific information indicating that the species is not currently in serious danger of becoming extinct in California within the next few decades, nor in the foreseeable future in the absence of special protection and management under CESA. The finding by CDFW noted that, at specific areas throughout the state, local populations of Townsend's big-eared bat have remained stable or even increased in size, although disturbance, degradation, and loss of suitable roost sites are recognized threats to populations of this species (CDFW 2016). The current level of resource health is considered poor, but the trend is stable.	Y	Poor	Stable
	Roosting Bats**	Several species of bats may potentially roost within trees or anthropogenic habitats, such as bridges. Anthropogenic habitat areas are not in decline within the study area.	N	Good	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
	American Badger**	American badger is found throughout most of California, particularly in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. While some herbaceous and forest habitats, such as annual grassland and eucalyptus forest, are in stable condition in the BSA, some forested habitats, such as oak woodland and riparian forest, are in poor or declining health.	Y	Poor	Stable
2.3.5	Threatened and Endangered Species*	Development activities have reduced the amount of suitable habitat for threatened and endangered species in the study area. A discussion of each threatened and endangered species that may be affected by the project is provided below.	See below	See below	See below
	Tidewater Goby*	Tidewater goby historically occurred in at least 87 California coastal lagoons from San Diego County to Humboldt County, but has disappeared from most of these sites. There have been documented occurrences for the species in Soquel Creek at Route 1, and in Aptos Creek at Route 1, as well as locations within 0.6 to 1.8 miles of the proposed project. The proposed project is located in the Aptos Creek (SC-7) Critical Habitat Unit for tidewater goby.	Y	Poor	Stable
2.3.5	Steelhead – Central California Coast Distinct Population Segments (DPS)*	Steelhead habitat in the region appears to suffer from a variety of habitat factors, including urbanization and poor land management practices in both forestry and agriculture.	Y	Poor	Declining
	California Tiger Salamander (Central California DPS)*	This species is found in aquatic habitats, which, as noted above, are in poor or declining health in the BSA.	Y	Poor	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.5	Santa Cruz Long-Toed Salamander*	The SCLTS was originally discovered in 1954 at Valencia Lagoon. In 1955, this breeding pond was reduced in size by roadway construction along Route 1. When Caltrans converted Route 1 to a freeway in 1969, the project eliminated the breeding site; and there have been mitigation efforts to attempt to offset these impacts. Another mitigation pond was constructed along Bonita Road in the same drainage and has demonstrated some breeding success.	Y	Poor	Stable
	California Red-legged Frog*	California red-legged frog (CRLF) historically ranged from Marin County to northern Baja California. At present, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining populations within California. The CRLF is found in aquatic habitats, which, as noted above, are in poor or declining health in the BSA.	Y	Poor	Stable
	Tricolored Blackbird**	Tri-colored blackbird is common locally throughout California, particularly the Central Valley, breeding near fresh water, preferably in emergent wetlands. It forages in grasslands and croplands. Some of these habitat types, such as grasslands, are in stable condition in the BSA, while others, such as wetlands are in poor or declining health.	Y	Poor	Stable
	White-Tailed Kite**	White-tailed kite is generally found in open cultivated and marshy bottomlands with scattered trees, savannahs, agricultural areas with windbreaks, orchards, and roadsides. Nesting and roosting occurs in dense, broadleaved deciduous groves of trees. Some of these habitat types, such as grasslands and roadsides, are in stable condition in the BSA, while others, such as wetlands, are in poor or declining health.	Y	Poor	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
	Least Bell's Vireo	The least Bell's vireo is currently listed as endangered under both the federal Endangered Species Act and California Endangered Species Act. It is a southwestern subspecies of Bell's vireo and a migratory songbird that inhabits riparian woodlands in southern California and northern Baja California. Since its state and federal listing as an endangered species, the numbers of this species have increased, and the species is expanding into its historic range (Kus 2002; USFWS 2006). Sightings of least Bell's vireo have been reported as far north as Gilroy, in Santa Clara County (Roberson et al. 1997, cited in Kus 2002). The current health of this species is considered poor due to its listing as an endangered species, however the population has been increasing and that is expected to continue.	Y	Poor	Stable
	Southwestern Willow Flycatcher	Southwestern willow flycatcher requires microclimatic conditions dictated by local surroundings such as saturated soils, standing water, or nearby stream, pools, etc. Riparian habitat that is suitable for least Bell's vireo would be expected to also be suitable for southwestern willow flycatcher. This species has been documented migrating through San Luis Obispo County; therefore, the presence of infrequent foraging individuals in the RSA for SWWF cannot be dismissed. (Caltrans 2018). The flycatcher's current range is similar to its historic range, but its population has declined because of a decrease in habitat caused by surface water diversion, groundwater pumping, changes in flood and fire regimens, and spread of non-native and invasive plants (Natural Resources Conservation Service 2017). Due to the loss of habitat, the species is considered to be in poor condition. The recovery efforts focused on this species suggest that it may be in a stable condition of poor health.	Y	Poor	Stable

**Table 1: Less Than Significant Impacts and Current Health Assessment**

DEIR/EA Section	Resource Area	Current Health of Resource Area	Is Cumulative Impact Study Needed?	Current Level of Resource Health	Status of Health
2.3.6	Nesting Birds*	Numerous species of migratory birds have the potential to nest in artificial structures, riparian trees, landscaped trees, freshwater marsh, and other vegetation within the BSA. There is an abundance of artificial structures, landscaped trees and other vegetation in stable condition in the BSA that is available for nesting birds.	N	Good	Stable
2.3.7	Invasive Species	Nine exotic, invasive plant species identified by the California Invasive Plant Council were observed within the study area. In response to state and local directives, Santa Cruz County has adopted policies to address invasive species. The policies are implemented through various means, including the County of Santa Cruz Department of Public Works' Integrated Vegetation Management Plan for Roads Near Perennial Waters (CSCDPW 2008).	N	Moderate	Stable
3.2.5	Greenhouse Gases*	Global greenhouse gas levels have increased due to human activity, including motor vehicle transportation.	Y	Poor	Declining
<p>Notes:</p> <p>* Indicates that the resource area was discussed in public comments on the Draft EIR/EA</p> <p>** Indicates that discussion of the resource in public comments consisted of naming the resource in a list of resources affected by the project.</p>					



Based on the significant impacts to aesthetics and the less than significant impacts and current health assessment outlined in Table 1, the following resource areas will be considered in the cumulative impact analysis:

- ESHAs/Coastal Resources
  - Coastal Scrub Habitat
  - Habitat for Species of Special Concern (specific habitats in poor or declining health for species that are in poor or declining health)
  - Wetlands
  - Valencia Lagoon and Soquel Lagoon
  - Valencia Channel
  - Coastal streams: (specific impaired streams: Aptos Creek, Valencia Creek, Soquel Creek and Rodeo Creek Gulch)
  - Riparian Corridors
- Growth
- Traffic and Transportation
- Visual Resources
- Water Quality
  - Specific impaired water bodies: Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch
- Air Quality
- Biological Resources
  - Natural Communities of Riverine/Freshwater Marsh, Riparian Forest, Coast Live Oak Woodland, and Coastal Scrub
  - Wetlands
  - Other Waters (specific impaired water bodies: Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch)
  - Animal Species: Foothill yellow legged frog, western pond turtle, Cooper's hawk, short-eared owl, pallid bat, hoary bat, and American badger
  - Threatened and Endangered Species: tidewater goby, California coast steelhead California red-legged frog, and Santa Cruz long-toed salamander
- Greenhouse Gases

The cumulative impacts that may affect resource areas of growth, traffic operations, air quality, and greenhouse gases will be addressed in their respective analyses using modeling projections. Therefore, discussion of these resources is not included in Steps 2 through 6. The Santa Cruz tarplant will not require further consideration in the cumulative analysis based on the absence of the species within the project footprint.

Subsequent to the approval of the Step 1 Memo, the resources included in the cumulative impact analysis were organized according to the sequence shown in Table 2, below, and each resource was assigned a resource number. The Cumulative Impact Analysis Technical Report, and the technical memoranda included as appendices to the report, use the resource numbers presented in Table 2.

**Table 2. Resource Numbers for Resources Considered in the Cumulative Impact Analysis**

<b>Resource No.</b>	<b>Resource Name</b>
1	Riverine/Freshwater Marsh
2	Wetlands and Other Waters
3	Tidewater Goby
4	Central California Coastal Steelhead
5	California Tiger Salamander
6	Santa Cruz Long-toed Salamander
7	California Red-legged Frog
8	Foothill Yellow-legged Frog
9	Western Pond Turtle
10	Riparian Forest
11	Cooper's Hawk
12	Tricolored Blackbird
13	Short-eared Owl
14	White-tailed Kite
15	Least Bell's Vireo
16	Southwestern Willow Flycatcher
17	American Badger
18	Oak Woodland
19	Monarch Butterfly
20	Coastal Scrub
21	Visual Resources
22	Water Quality and Stormwater
23	Pallid Bat
24	Hoary Bat
25	Townsend's Big-eared Bat

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Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix C

Step 2 Technical Memorandum



# Technical Memorandum

To: Parag Mehta, Kimley Horn

From: Laura Prickett, AICP, and Michael Lee

Date: January 5, 2017 (Updated June 27, 2018)

Re: Santa Cruz Route 1 HOV/TSM Tier I and Tier II Project  
Cumulative Impact Analysis – Step 2

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## 1.0 Purpose and Organization of this Memorandum

This memorandum documents the findings of Step 2 of Caltrans' eight-step cumulative impact analysis methodology for the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project (Tier I and Tier II projects).

Step 2 of Caltrans' cumulative impact analysis methodology defines the resource study area (RSA) for each resource addressed by the analysis. This memorandum provides an introduction to the project and requirement for this analysis, a description of the methodology used to define the RSAs, and a description of the RSAs that have been identified for each resource topic area, including the considerations in defining the RSAs.

## 2.0 Introduction

The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 to 2021 upon approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition. A complete description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a).

Cumulative impacts of the proposed improvements are evaluated in the Draft EIR/EA; however, this current analysis is being conducted as a result of public comments on the Draft EIR/EA, which circulated in November 2015. As requested by Caltrans, this analysis uses the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration (Caltrans 2016), to demonstrate that all cumulative impacts are adequately addressed. This memorandum presents the results of Step 2 of the analysis. The information presented in this memorandum is based primarily on information presented in the Draft EIR/EA and its supporting technical studies (Caltrans 2015c).

### 3.0 Methodology for Defining Resource Study Areas

Horizon reviewed the documentation of the work that has been accomplished on the project, focusing on the Draft EIR/EA and technical studies. The review of technical studies considered the study area boundaries that were used to evaluate impacts specific to the Tier I and Tier II projects, recognizing that the RSA needs to also consider contributions from other projects that may affect each resource. Horizon then consulted, when possible, with resource specialists who prepared the technical studies to develop an understanding of the rationale for the original delineation of the study areas. The data collected in the above manner was used to expand on the project-specific study area boundaries and to ensure that the RSA boundaries would encompass projects that have potential to affect the same resources that will be affected by the Tier I and Tier II projects. As defined in the Step 1 technical memorandum, the resources evaluated in the cumulative impact analysis are listed in Table 1, which indicates the resources that are identified as, or encompass, Environmentally Sensitive Habitat Areas (ESHAs), as defined by the California Coastal Act and the Santa Cruz County and City of Capitola Local Coastal Programs<sup>1</sup>.

**Table 1. Resources Considered in the Cumulative Impact Analysis**

Resource No.	Resource Name	Resources Identified as or Encompassing ESHAs
1	Riverine/freshwater marsh	✓
2	Wetlands and other waters	✓
3	Tidewater goby	
4	Central California coastal steelhead	
5	California tiger salamander	
6	Santa Cruz long-toed salamander	
7	California red-legged frog	
8	Foothill yellow-legged frog	✓
9	Western pond turtle	✓
10	Riparian forest	✓
11	Cooper's hawk	✓
12	Tricolored blackbird	
13	Short-eared owl	✓
14	White-tailed kite	
15	Least Bell's vireo	
16	Southwestern willow flycatcher	
17	American badger	✓

<sup>1</sup> As indicated in the Cumulative Impact Analysis Step 1 Memorandum, the following resource areas included in the cumulative impact analysis have been identified as ESHAs: coastal scrub habitat, habitat for Species of Special Concern, wetlands, Valencia Lagoon, Soquel Lagoon, Valencia Channel, Aptos Creek, Valencia Creek, Soquel Creek, Rodeo Creek Gulch, and riparian corridors.



Resource No.	Resource Name	Resources Identified as or Encompassing ESHAs
18	Oak woodland	
19	Monarch butterfly	
20	Coastal scrub	✓
21	Visual resources	
22	Water quality and stormwater	✓
23	Pallid bat	✓
24	Hoary bat	✓
25	Townsend's big-eared bat	✓

#### 4.0 Step 2: Define Resource Study Areas

The definition of Resource Study Areas (RSAs), including the considerations in establishing the definition, is presented in Table 2, organized by resource topic areas. The RSAs were defined in consultation with authors of the applicable technical studies, and using source documents listed in Section 5.0, References. Maps of the RSAs are included in Attachment A.

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
1	Riverine/ Freshwater** Marsh	<p>Fresh emergent wetland habitats may occur in association with terrestrial habitats or aquatic habitats including Riverine, Lacustrine, and Wet Meadows. The upland limit of fresh emergent wetlands is the boundary between land with predominantly hydrophytic cover and land with primarily mesophytic or xerophytic cover or the boundary between hydric and non-hydric soils (Cowardin et al. 1979 - cited in Mayer and Laudenslayer 1988). The boundary between fresh emergent wetlands and deep water habitats (e.g., lacustrine or riverine) is the deep water edge of the emergent vegetation (Cowardin et al. 1979, Zoltai et al. 1975 - cited in Mayer and Laudenslayer 1988).</p> <p>Large, well-developed riverine habitats are present in the biological study area (BSA), specifically in Valencia, Aptos, and Soquel Creeks. Freshwater marsh communities within the BSA are dominated by emergent plant species. These areas were mapped together in the NES for the Tier I and Tier II projects (Caltrans 2015b).</p>	There is one RSA for riverine/freshwater marsh, wetlands, waters of the US, water quality and stormwater. This RSA encompasses the areas of freshwater marsh/ riverine habitat within the BSA, and extends beyond the BSA to include the watersheds of the following resources: Soquel Creek, Nobel Creek, Tannery Gulch, Borregas Creek, Valencia Channel, Aptos Creek, Valencia Creek, Ord Gulch, Pot Belly Creek, Rodeo Creek Gulch, Soquel Lagoon, Valencia Lagoon, and Valencia Channel.	1
2	Wetlands*	Areas with all three of the following parameters are under the jurisdiction of the Army Corps of Engineers: wetland hydrology, hydric soils, and hydrophytic vegetation. Areas that have any one of these parameters, and are located in the Coastal Zone, are under the jurisdiction of the Coastal Commission. The condition of the wetlands may be affected by activities within their respective watersheds.	There is one RSA for riverine/freshwater marsh, wetlands, waters of the US, water quality and stormwater, as described under Resource 1, Riverine/Freshwater Marsh, above.	1

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
2	Other Waters*	The following water bodies are listed as impaired on the Section 303(d) list of impaired water bodies: Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch (Caltrans 2015b).	There is one RSA for riverine/freshwater marsh, wetlands, waters of the US, water quality and stormwater, as described under Resource 1, Riverine/Freshwater Marsh, above. This RSA encompasses Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch, and their respective watersheds.	1
3	Tidewater Goby*	The current final rule for tidewater goby critical habitat designates eight Critical Habitat Units in Santa Cruz County. The proposed project is located in the Aptos Creek (SC-7) Critical Habitat Unit. There have been documented occurrences for the species in Soquel Creek at Route 1, and in Aptos Creek at Route 1, There is potential for tidewater goby to occur in Arana Gulch or its tributaries, Soquel Creek, Aptos Creek, or Rodeo Gulch (Caltrans 2015b).	The RSA for tidewater goby encompasses the entirety of Critical Habitat Unit SC-7 (Aptos Creek) and includes Soquel Creek, Arana Gulch, Rodeo Gulch and their tributaries, as well as a 500-foot buffer around these resources.	2
4	Steelhead – Central California Coast Distinct Population Segments (DPS)*	The project occurs within the central California coast steelhead Critical Habitat Unit defined as Big Basin Hydrologic Unit 3304 – (ii) San Lorenzo Hydrologic Sub-area 330412 (including Arana Gulch) and (iii) Aptos-Soquel Hydrologic Sub-area 330413 (including Aptos and Soquel Creeks and tributaries) (Caltrans 2015b).	The RSA for steelhead (Central California Coast DPS) encompasses the entirety of Hydrologic Sub-areas 330412 (San Lorenzo) and 330413 (Aptos-Soquel). These hydrologic subareas include Soquel Creek and Arana Gulch and their tributaries.	3

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
5	California Tiger Salamander*	There is potential for this species to occur in Valencia Lagoon and adjacent uplands. In a 5-year study, the majority of California tiger salamanders were found to migrate at least 0.5 mile (mi) (0.8 kilometer (km)) from the breeding site. A smaller number of salamanders appeared to migrate even farther, traveling 0.75 mi (1.2 km) to almost 1.3 mi (2.2 km) to and from the breeding ponds and upland habitat on adjacent property. One possible explanation for this long migration distance is that salamanders must travel farther to locate suitable upland habitat when there is a scarcity of ground squirrel burrows and other refugia in proximity to the ponds (Orloff 2007 - cited in USFWS 2009).	There is one RSA for California tiger salamander and the Santa Cruz long-toed salamander (SCLTS) habitats. This RSA encompasses the water bodies identified in the mapping of SCLTS habitat and a 1.3-mile radius of these water bodies.	4
6	Santa Cruz Long-toed Salamander (SCLTS)	Mapping prepared for the NES Addendum of the Tier I and Tier II projects identified water bodies and upland habitat that may be inhabited by Santa Cruz Long-Toed Salamander (SCLTS). This salamander may use upland habitats as far as 1.6 kilometers (1.0 mile) or more from the ponds it inhabits (Ruth and Tollestrup 1973, cited in USFWS 2004). During studies at Valencia Lagoon and the Ellicott site, up to 90 percent of the adults were captured within 125 meters (400 feet) of the breeding pond and subsequently not caught in more distant trap lines (Reed 1979, 1980, 1981; cited in USFWS 2004). A study at the Seascapes Pond found that 22 percent of adult salamanders were migrating more than 250 meters (800 feet) through grasslands to reach suitable sheltering habitat in oak woodlands (Ruth 1988, cited in USFWS 2004). A study at Willow Canyon indicated that SCLTS may migrate up to 800 meters (2640 feet) between breeding ponds and upland habitats (Ruth 1994, cited in USFWS 2004).	There is one RSA for California tiger salamander and the Santa Cruz long-toed salamander (SCLTS) habitats. This RSA is described under Resource 5, California Tiger Salamander, above.	4

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
7	California Red-legged Frog*	At present, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining populations within California. The CRLF is found in aquatic and upland dispersal habitats. A study in Marin County found that the greatest straight-line distance traveled by CRLF was 1.4 km (08. mile), although the presumed distance traveled by that frog was 2.8 km (1.7 miles) (Fellers 2007). Evidence from marked and radio-tagged frogs on the San Luis Obispo County coast suggests that frog movements, via upland habitats, of about 1.6 kilometers (1 mile) are possible over the course of a wet season (Scott and Rathbun 1998, cited in USFWS 2002a). Dispersing frogs in northern Santa Cruz County traveled distances from 0.40 kilometer (0.25 mile) to more than 3 kilometers (1.8 miles) without apparent regard to topography, vegetation type, or riparian corridors (Bulger 1998 - cited in USFWS 2002a).	There is one RSA for California red-legged frog and white-tailed kite. This RSA encompasses the areas of freshwater marsh and riparian forest habitat mapped within the BSA, and extends beyond these areas to include the entirety of Valencia Lagoon, Valencia Channel, and Soquel Lagoon, as well as the length of the streams the project corridor crosses (and upstream to the ridgeline above Route 1, and downstream to the Pacific coast), encompassing a 3-mile buffer.	5
8	Foothill Yellow-legged Frog (FYLF)*	Foothill yellow-legged frog (FYLF) is a California Species of Special Concern (SSC) species frequently found in shallow, flowing water, in small to moderate-sized streams with at least some cobble-sized substrate. The species is rarely observed far from permanent water. An occurrence of FYLF was documented on Soquel Creek, approximately 0.16 mile from the Porter Street/Route 1 intersection (Caltrans 2015b). The RSA took into consideration the dispersal range of FYLF. During the non-breeding season, home ranges appeared to be quite small in adult foothill yellow-legged frogs. An average movement distance of 8 meters (26 feet) has been documented, and it has been suggested that home ranges are probably less than 10 meters (33 feet). During the breeding season, the average distance moved by adults has been documented as 54 meters (177 feet), with a maximum distance traveled of 413 meters (1,355 feet) by females and 408 meters (1,338 feet) by males (Gonsolin 2010).	There is one RSA for FYLF and western pond turtle (WPT). This RSA encompasses the areas of freshwater marsh and riparian forest habitat mapped within the BSA, and extends beyond these areas to include the entirety of Valencia Lagoon, Valencia Channel, and Soquel Lagoon, as well as the length of streams (extending upstream to the first ridgeline and downstream to the Pacific coast), encompassing a 1,400-foot buffer.	6

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
9	Western Pond Turtle (WPT)*	Western pond turtle (WPT) is considered a SSC by the CDFW. Pond turtles live where water persists year-round in ponds along foothill streams or in broad washes near the coast. It is mostly aquatic, leaving its aquatic site to reproduce, estivate, and over-winter. Pond turtles may overwinter on land or in water, but may remain active in water during the winter season. An occurrence of western pond turtle was recorded 5.8 miles east of the BSA for the proposed project. In some environments, the turtles leave the watercourse in the fall to over-winter burrowed in duff or soil. An average distance of over-wintering sites from the watercourse has been identified as 167 meters (548 feet) (Reese 1996 - cited in NASA 2004). During the nesting and mating seasons, gravid females usually leave the water to nest on land in the late afternoon, returning to the water by the following morning. Nest sites have been found as far as 400 meters (1,312 feet) from the water (Reese 1996 - cited in NASA 2004).	There is one RSA for FYLF and WPT. It is described under Resource 8, Foothill Yellow-Legged Frog, above.	6

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
10	Riparian Forest*	<p>Extensive riparian forest cover occurs within the Valencia, Aptos, and Soquel Creek corridors. Smaller amounts of riparian forest habitat occur along Ord Gulch, Borregas Creek, Pot Belly Creek, Tannery Gulch, Nobel Creek, Soquel Creek, Rodeo Gulch, and Arana Gulch and its tributaries (Caltrans 2015b). The Santa Cruz County Local Coastal Program provides the following designation/ definition of riparian corridors:</p> <ul style="list-style-type: none"> <li>a. 50 feet from the top of a distinct channel or physical evidence of a high water mark of a perennial stream</li> <li>b. 30 feet from the top of a distinct channel or physical evidence of a high water mark of an intermittent stream as designated on the General Plan maps and through field inspection of undesignated intermittent and ephemeral streams</li> <li>c. 100 feet of the high water mark of a lake, wetland, estuary, lagoon, or natural body of standing water</li> <li>d. The landward limit of a riparian woodland plant community</li> <li>e. Wooded arroyos within urban areas.</li> </ul>	<p>This RSA includes the riparian forest natural community within the BSA, and it includes the length of each stream that crosses Route 1 within the BSA downstream from Route 1 to the Pacific Coast, and upstream either to the point at which the stream passes between two ridgelines (if applicable) or to its source (if the source is below the ridgeline). The riparian forest RSA encompasses a 500-foot buffer of each stream. This RSA also encompasses Valencia Lagoon and Soquel Lagoons and a buffer of 500 feet around these resources.</p>	7

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
11	Cooper's Hawk**	Cooper's hawk is considered a SSC by CDFW. Cooper's hawk occupies forests and woodlands, especially near edges. It is rarely found in areas without dense tree stands or patchy woodland habitat. This species nests and forages in and near deciduous riparian areas. An occurrence of Cooper's hawk was documented at approximately 0.75 mile east of Henry Cowell Redwoods State Park (Caltrans 2015b). While Cooper's hawk has been increasing in population overall, trends show decline in California and California foothills (Chiang et al. 2012). A study conducted in northern Florida found that radio-tagged Cooper's hawks attending nestlings captured prey between 150 m (492 feet) and 4.8 km (2.9 miles) from nests (Millsap et al. 2013).	The RSA for Cooper's hawk includes the oak woodland and riparian forest habitat mapped within the BSA and extends along each stream crossed by the Tier I or Tier II projects, downstream to the Pacific coast, and upstream to ridgelines above the urbanized areas (thereby encompassing foothill areas). A 3-mile buffer is included along each stream, except in stream segments, such as in foothill areas and at the southern end of the proposed project, where undeveloped land extends beyond 3 miles; in such areas the RSA includes all undeveloped or largely undeveloped land, extending as far inland as the ridgeline above Route 1, and extending 3 miles south of the southern terminus of the proposed project. The RSA also includes areas of open land immediately surrounding New Brighton State Park; aerial imagery was used to identify areas of open land.	8



**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
12	Tricolored Blackbird**	<p>Tri-colored blackbird is common locally throughout California, particularly the Central Valley, breeding near fresh water, preferably in emergent wetlands. It forages in grasslands and croplands. Tri-colored blackbird's basic requirements for selecting breeding sites are open accessible water; a protected nesting substrate, including either flooded or thorny or spiny vegetation; and a suitable foraging space providing adequate insect prey within a few kilometers of the nesting colony (Beedy and Hamilton 1999 - cited in Shuford, and Gardali 2008). Proximity to suitable foraging habitat appears to be extremely important for the establishment of colony sites, as tricolored blackbirds usually forage, at least initially, in the field containing the colony site (Cook 1996 - cited in Shuford, and Gardali 2008). Most tricolored blackbirds forage within 5 km (3 miles) of their colony sites and rarely up to 13 km (7.8 miles) (Orians 1961, Beedy and Hamilton 1997 – cited in Shuford, and Gardali 2008). Strips of emergent vegetation along canals are avoided as nest sites unless they are about 10 meters (32.8 feet) wide, or wider (Hamilton 2004). Ideal foraging conditions for this species are created when shallow flood-irrigation, mowing, or grazing keeps the vegetation at less than 15 cm (5.9 inches). Preferred foraging habitats include crops such as rice, alfalfa, irrigated pastures, and ripening or cut grain fields (e.g., oats, wheat, silage), as well as annual grasslands, cattle feedlots, and dairies (Beedy and Hamilton 1999 - cited in Shuford, and Gardali 2008).</p>	<p>The RSA for tricolored blackbird encompasses areas of grasslands and freshwater marsh included in the BSA and includes areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1. The RSA also includes a 3-mile buffer around these areas, stopping at the first ridgeline above Route 1.</p>	9

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

<b>Resource No.</b>	<b>Resource Topic</b>	<b>Considerations in Defining the RSA</b>	<b>RSA Definition</b>	<b>Figure No.</b>
13	Habitat for Species of Special Concern: Short-Eared Owl**	Short-eared owl is considered a SSC by CDFW. The species is usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands and freshwater marsh habitat. An occurrence of short-eared owl was documented 10.75 miles south of the San Andreas Rd/Route 1 intersection (Caltrans 2015b). Short-eared owls require broad expanses of open land with low vegetation, such as grasslands or low-structured open shrublands, for hunting and for nesting (Holt and Leasure 1993 - cited in USFWS 2001). Short-eared owls have generally been found to avoid developed areas, although there are converse examples; average distance of nests from the nearest buildings, on Nantucket Island (Massachusetts), was over 789 m (0.49 mile) (Combs-Beattie 1993 - cited in USFWS 2001). Short-eared owl often persists near farmland borders where agriculture is not intensive. Decline of short-eared owl populations has been found to occur as a result of intensive agriculture or conversion of meadows, wetlands, or other short-eared owl habitat to cropland (USFS 2016).	The RSA for short-eared owl encompasses areas of grasslands and freshwater marsh included in the BSA and includes areas of open land immediately surrounding New Brighton State Park. The RSA also includes open land from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1. Aerial imagery was used to identify and map areas of open land.	10

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
14	White-Tailed Kite**	<p>White-tailed kite is generally found in open cultivated and marshy bottomlands with scattered trees, savannahs, agricultural areas with windbreaks, orchards, and roadsides. Nesting and roosting occurs in dense, broad-leaved deciduous groves of trees. Some of these habitat types, such as grasslands and roadsides, are in stable condition in the BSA, while others, such as wetlands, are in poor or declining health (Caltrans 2015b). Riparian corridors are a preferred habitat (Moore 2000). A study in the Sacramento Valley found that there were no differences in land use within a 1.6 km (0.96 mile) radius surrounding successful vs. unsuccessful nests, however there were differences within 0.8 km (0.48 mile). In this study, male kites frequently fed less than 0.5 km (0.3 mile) and out to 1.6 km (0.96 mile) from the nest (Erichsen 1995 - cited in Moore 2000). Erichsen (1996 - cited in Dudek/ICF 2012) observed that successful nests are less than 1,500 meters (4,921 feet) from fresh water, more than 100 meters (328 feet) from roads, and within 800 meters (2,625 feet) of natural, fallow, or riparian vegetation. Waian (1973 - cited in Niemala 2007) observed a breeding male foraging regularly at a grassland patch 2 km (1.2 miles) from the nest. Similarly, Henry (1983 - cited in Niemala 2007) observed a breeding male foraging regularly at a grassland patch 1.9 km (1.1 miles) from the nest.</p>	<p>There is one RSA for California red-legged frog and white-tailed kite. This RSA is described under Resource 7, California Red-Legged Frog.</p>	5

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
15	Least Bell's Vireo	Least Bell's vireo (LBV) is a federal and state endangered species. It is one of four recognized subspecies of Bell's vireo and is the western-most subspecies, breeding entirely within California and northern Baja California. Historically, the LBV was a common to locally abundant species in lowland riparian habitat, ranging from coastal southern California through the Sacramento and San Joaquin Valleys as far north as Tehama County (Kus 2002 - cited in Caltrans 2015b). It has also occurred in foothill streams of the Sierra Nevada and Coast Ranges, and in Owens Valley, Death Valley, and scattered locations in the Mojave Desert. Grinnell and Miller (1944 - cited in Caltrans 2015b) reported elevation ranges extremes of - 175 feet in Death Valley to 4,100 feet at Bishop, Inyo County. Critical habitat has been designated for LBV; however, there are no areas of critical habitat for this species in Santa Cruz County (USFWS 1994). As early as 1984, LBV was documented as using non-riparian foraging sites (Gray and Greaves 1984 - cited in Kus and Miner 1989), and subsequent observations suggested that the availability of non-riparian foraging areas may be important to nesting vireos (Kus and Miner 1989). A study conducted by Kus and Miner (1989) found that the distance between the riparian edge and the outermost border of the non-riparian component of vireo home ranges ranged from 7.6 meters (25 feet) to 61.0 meters (200 feet).	There is one RSA for least Bell's vireo and southwestern willow flycatcher, which encompasses the RSA for riparian forest habitat, plus a 200-foot buffer around those areas.	11

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

<b>Resource No.</b>	<b>Resource Topic</b>	<b>Considerations in Defining the RSA</b>	<b>RSA Definition</b>	<b>Figure No.</b>
16	Southwestern Willow Flycatcher	The southwestern willow flycatcher is a widespread species whose breeding range includes southern California, Arizona, New Mexico, southwestern Colorado, and extreme southern portions of Nevada and Utah. Breeding habitat for this species is riparian, with nesting typically occurring in dense vegetation where surface water is present or soil moisture is high enough to maintain the appropriate vegetation characteristics (Sogge and Marshall 2000; USFWS 2002b). The greatest historical factor in the decline of the SWWF is the extensive loss, fragmentation, and modification of riparian breeding habitat (U.S. Fish and Wildlife Service 2002). Hydrological changes, natural or man-made, can greatly reduce the quality and extent of flycatcher habitat. The vegetation and flycatcher occupancy of a habitat patch or river drainage are often dynamic; few if any sites remain static over time. This species can respond quickly to habitat changes, colonizing new sites if available and abandoning others. In addition, SWWF's that survive from one year to the next will return to the same river drainage, often in proximity to the same breeding site (USFWS 2002b; McLeod and others 2007; Paxton and others 2007).	There is one RSA for least Bell's vireo and southwestern willow flycatcher, which is described above under Resource 15, Least Bell's Vireo.	11

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
17	American Badger**	American badger is considered a SSC by CDFW. The species is found throughout most of California, particularly in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. In Idaho, the home range of American badger was found to average 2.4 square miles and 1.6 square miles, for males and females, respectively. Another study showed that a radio-collared female had a home range of 850 hectares (2,091 acres) (Williams 1986). An investigation of the sites of historic burrows located in public access parks, limited access land trust holdings, or ranchlands in the San Francisco Bay Area found that 50 percent were occupied. A majority of absent sites were located near urbanized areas and the study suggested that habitat fragmentation contributed to absence of the species (Lay 2008). During the summer American badgers usually use a new den each day; in the fall American badgers tend to reuse dens, sometimes for a few days at a time (USFS 2016). Research in Ontario, Canada, found that most of the year, the distance traveled each night ranges from 1 to 5 kilometers (3,280 feet to 3 miles); longer distances are traveled during breeding season (Ontario Badgers 2016).	There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat, and American Badger. This RSA encompasses the areas of grassland, riparian forest, and oak woodland habitat mapped within the BSA, and extends downstream to the Pacific Coast and upstream to ridgelines above the urbanized areas encompassing a 3-mile buffer of the streams that the Tier I or Tier II projects cross. The RSA includes areas of open land immediately surrounding New Brighton State Park, as well as open land from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1, and extending 3 miles south of the southern terminus of the proposed project.	12

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
18	Coast Live Oak Woodland**	<p>Coastal oak woodlands are common to mesic coastal foothills of California. The woodlands do not form a continuous belt, but occur in a mosaic closely associated with mixed chaparral, coastal scrub, and annual grassland habitat (Mayer and Laudenslayer 1988). Coast live oak woodland is present along upper creek bank areas and within undeveloped areas such as along roadsides within the BSA of the Tier I and Tier II projects (Caltrans 2015b). Within the BSA, areas of coast live oak woodland that occur within the jurisdiction of the California Department of Fish and Wildlife (CDFW) have been mapped as riparian forest. Outside of the BSA for the Tier I and Tier II projects, aerial imagery was reviewed to identify areas in which coast live oak woodland is likely to occur. Although it was not possible to positively identify specific species of trees using aerial imagery, woodland areas were identified as occurring along riparian corridors, as well as areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road. Monarch butterflies are not known to use coast live oak trees for overwintering habitat; however, these same wooded areas likely include some groves of Monterey pine, Monterey cypress, and eucalyptus trees, which are used by monarch butterfly. For this reason, these areas were identified as the RSA for both coast live oak woodland and monarch butterfly.</p>	<p>There is one RSA for coast live oak woodland and monarch butterfly. It encompasses the riparian forest RSA (described above), the oak woodland, mixed conifer woodland, and eucalyptus woodland habitats mapped within the BSA, and areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shore to the ridgeline above Route 1.</p>	13

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
19	Monarch butterfly	<p>Monarch butterfly is identified as a Special Animal in the California Natural Diversity Database (CNDDDB). Monarch butterflies from west of the Rocky Mountains spend the winter along the California coast. Overwintering sites occur in dense, wind-protected tree groves (e.g., eucalyptus [Eucalyptus spp.], Monterey pine, and Monterey cypress) near the coast from northern Mendocino to Baja California (Sakai 2007 and CNDDDB 2012 - cited in Caltrans 2015b). Monarch butterflies are typically attracted to groves along coastal areas of California that feature high moisture content, filtered sunlight, and protection from freezing temperatures and gusty winds. Within the BSA for the Tier I and Tier II projects, monarch butterflies may potentially roost in areas identified as eucalyptus woodland, mixed conifer woodland, and riparian forest. Within the BSA, areas of eucalyptus woodland or mixed conifer woodland that occur within the jurisdiction of CDFW have been mapped as riparian forest. Outside of the BSA for the Tier I and Tier II projects, aerial imagery was reviewed to identify areas in which eucalyptus, Monterey pine, and Monterey cypress groves are likely to occur. Although it was not possible to positively identify specific species of trees using aerial imagery, woodland areas were identified as occurring along riparian corridors, as well as in areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road. Monarch butterflies are not known to use coast live oak trees for overwintering habitat; however, these same wooded areas likely include some areas of coast live oak woodland, and, for this reason, these areas were identified as the RSA for both monarch butterfly and coast live oak woodland.</p>	<p>There is one RSA for coast live oak woodland and monarch butterfly. It is described above, under Resource 18, Coast Live Oak Woodland.</p>	13



**Table 2: Resource Study Area Considerations, Definitions, and Map References**

<b>Resource No.</b>	<b>Resource Topic</b>	<b>Considerations in Defining the RSA</b>	<b>RSA Definition</b>	<b>Figure No.</b>
20	Coastal Scrub	Coastal scrub communities typically occur in pockets in the outer and inner southern coastal ranges and in scattered areas along the immediate coast. There are patches of coastal scrub habitat along much of the Route 1 corridor from roughly San Andreas Road to Freedom Boulevard, interspersed with a variety of other habitat types (Caltrans 2015b). Development is relatively sparse in this area, and there are relatively large areas between local roads. Impacts to a small disturbed area of coastal scrub along the north side of Route 1 east of La Fonda Avenue and west of Arana Gulch occurred as part of the Morrissey Avenue to Soquel Avenue Auxiliary Lane project. Northern coastal scrub occurs from northern Santa Barbara County to the Oregon border, and is mostly found at elevations below 500 meters (1,640 feet) (Ford and Hayes 2007).	The RSA for the coastal scrub natural community encompasses the areas of coastal scrub habitat that are mapped within the Tier I and Tier II projects' BSA and extends beyond these areas to include the open land immediately surrounding New Brighton State Park. It also includes open land from Freedom Boulevard to San Andreas Road, extending landward from the Pacific shore to an elevation of 1,640 feet above sea level, or the first ridgeline, whichever is lower in elevation. Because of the tendency for coastal scrub to occur in pockets and intersperse among other habitat types, this RSA also encompasses the riparian forest/riparian corridor RSA, so that it also includes those areas of undeveloped land. In cases where there is open land adjacent to the riparian corridor, the coastal scrub RSA also encompasses those areas, as identified through aerial imagery.	14

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

Resource No.	Resource Topic	Considerations in Defining the RSA	RSA Definition	Figure No.
21	Visual/Aesthetics	The RSA was developed to include the viewshed from the highway, and the viewshed of the highway. On the inland, mountainous side of the highway, the viewsheds of the highway and from the highway terminate at the first ridgeline above Route 1. On the seaward side of the highway, the topography is relatively flat in the north and central portions of the project corridor, with more varied topography in the vicinity of New Brighton State Beach and south of Aptos. Route 1 is generally at-grade, although some segments of the highway are on structure at the crossings of some surface roads, such as Bay Avenue/Porter Road, Park Avenue, Spreckels Road, and San Andreas Road/Larkin Valley Road. Other local roads are on structured overcrossings above Route 1. Due to topography, existing development and vegetation, and street curvature, structured segments of highway are not visible from the seaward side of Route 1 at distances greater than approximately 2,000 feet. North of the north project terminus, the project area is visible from the North Branciforte Avenue overcrossing above Route 1. South of the project terminus, the project area is visible to drivers on the Mar Monte Avenue overcrossing above Route 1.	The visual resource study area encompasses the North Branciforte Avenue overcrossing above Route 1 on the north, and the Mar Monte Avenue overcrossing above Route 1 on the south. On the inland side of Route 1, it extends to the first ridgeline above the highway, tapering down to encompass only properties adjacent to the highway south of the southern project terminus. On the seaward side of Route 1, the visual RSA extends approximately 0.5 miles from Route 1, except in locations where there are visual obstructions due to topography, development, and vegetation. In those locations the visual RSA extends only to properties adjacent to the highway.	15
22	Water Quality and Stormwater Runoff*	As described above under Resource 2, Other Waters, there are five impaired surface water bodies in the project area: Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch.	There is one RSA for riverine/freshwater marsh, wetlands, waters of the US, water quality and stormwater, as described under Resource 1, Riverine/Freshwater Marsh, above. This RSA encompasses Aptos Creek, Valencia Creek, Soquel Creek, Soquel Lagoon, and Rodeo Creek Gulch, and their respective watersheds.	1

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

<b>Resource No.</b>	<b>Resource Topic</b>	<b>Considerations in Defining the RSA</b>	<b>RSA Definition</b>	<b>Figure No.</b>
23	Pallid Bat**	Pallid bat is considered a SSC by CDFW. The species inhabits deserts, grasslands, shrublands, woodlands, and forests. The CNDDDB indicates an occurrence of pallid bat at Soquel Creek within the BSA of the proposed project (Caltrans 2015b). Although most foraging probably occurs in close proximity of night roosts, in coniferous forest in Northern California, radiotracking documented that most foraging occurred in close proximity to day roosts, but foraging bouts more than 2 kilometers (1.2 miles) from the day roost were common. The longest distance moved during that study was 4.7 kilometers (2.9 miles) by a pregnant female (Baker et al. 2008 - cited in Dudek/ICF 2012).	There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat, and American Badger, described above under Resource 17, American Badger.	12
24	Hoary Bat**	Hoary bat is considered a SSC by CDFW. The species prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. An occurrence of hoary bat was documented from Soquel Creek, within the BSA of the proposed project. There are relatively few data for foraging distances from roost sites, and actual distances are likely to vary locally in relation to prey availability (Dudek/ICF 2012).	There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat, and American Badger, described above under Resource 17, American Badger.	12

**Table 2: Resource Study Area Considerations, Definitions, and Map References**

<b>Resource No.</b>	<b>Resource Topic</b>	<b>Considerations in Defining the RSA</b>	<b>RSA Definition</b>	<b>Figure No.</b>
25	Townsend's Big-Eared Bat	Townsend's big-eared bat has a broad range in western North America, from southern Canada to southern Mexico. They have significant populations in California as well as a number of other states. Most western populations of this species live in montane forest, which is thick with pine, fir and aspen trees and is bounded by shrub and grasslands. Individuals choose roosting sites most commonly in caves, cliffs, and rock ledges but have been found in abandoned mines and other man-made structures. These sites are preferred during the winter, while abandoned buildings are a favorite location usually only during the summer. As such, Townsend's big-eared bats typically prefer habitats that are almost completely dark. They are also extremely sensitive to human disturbance, which nearly always results in colony relocation (Adams 2003; Barbour and Davis 1969; Chapman 2007; Choate, et al. 1994; Kunz and Martin 1982; Terwilliger and Tate 1995 – cited in Sullivan 2009).	There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat, and American Badger, described above under Resource 17, American Badger.	12
<p>Notes:</p> <p>* Indicates that the resource area was discussed in public comments on the Draft EIR/EA</p> <p>** Indicates that discussion of the resource in public comments consisted of naming the resource in a list of resources affected by the project.</p>				

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Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project

Cumulative Impact Analysis – Step 2 Memo

Attachment A: Resource Study Area Maps







**Figure 1: Watersheds: RSA for Riverine/Freshwater Marsh, Wetlands and Other Waters, Water Quality and Storm Runoff**

## Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis

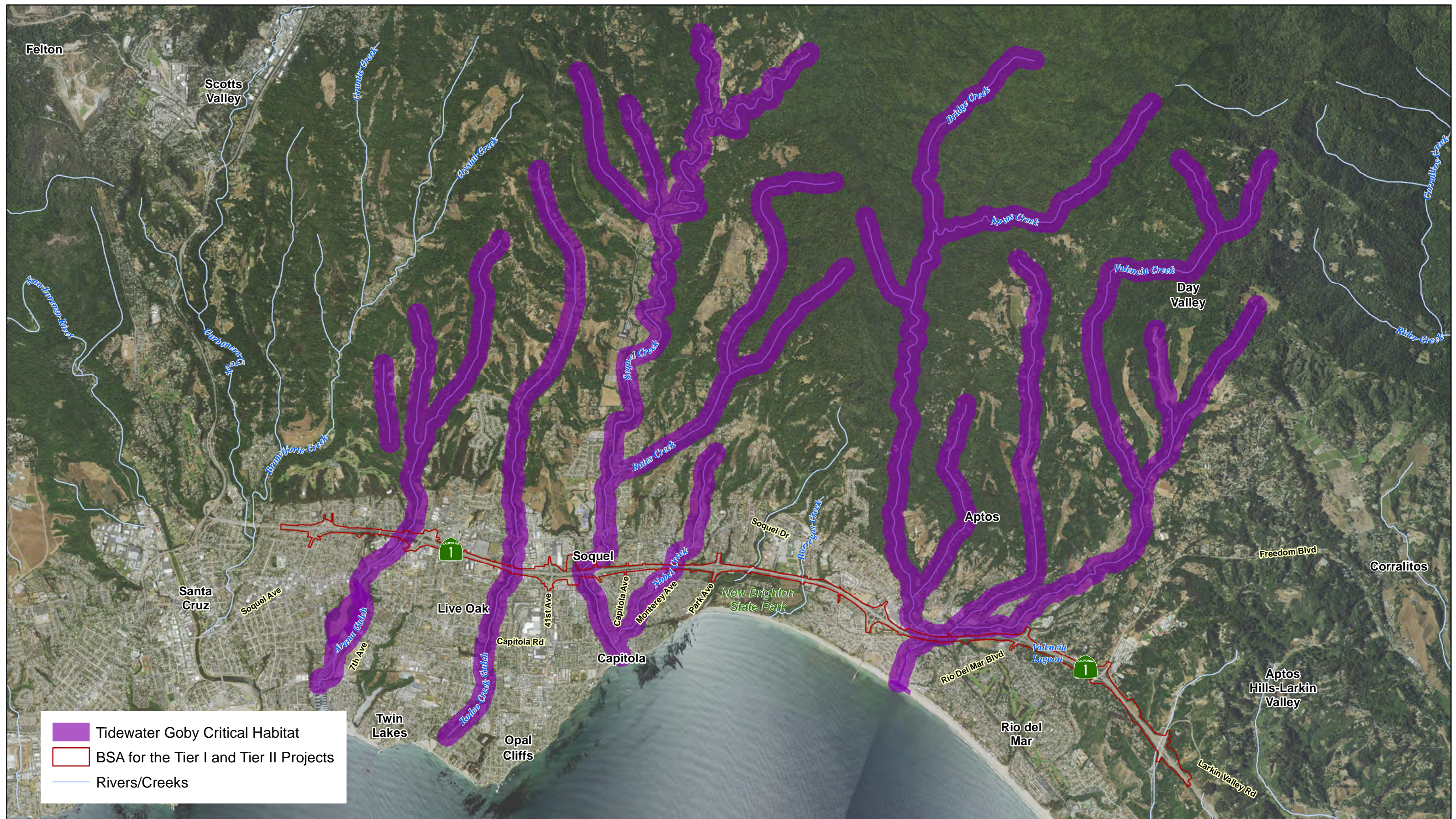
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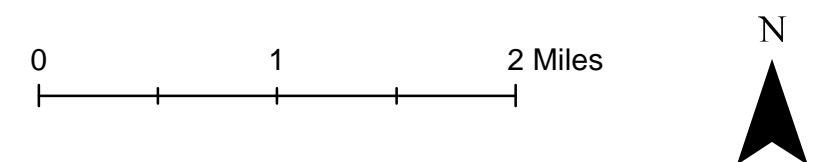


October 2016





**Figure 2: RSA for the Tidewater Goby  
Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**





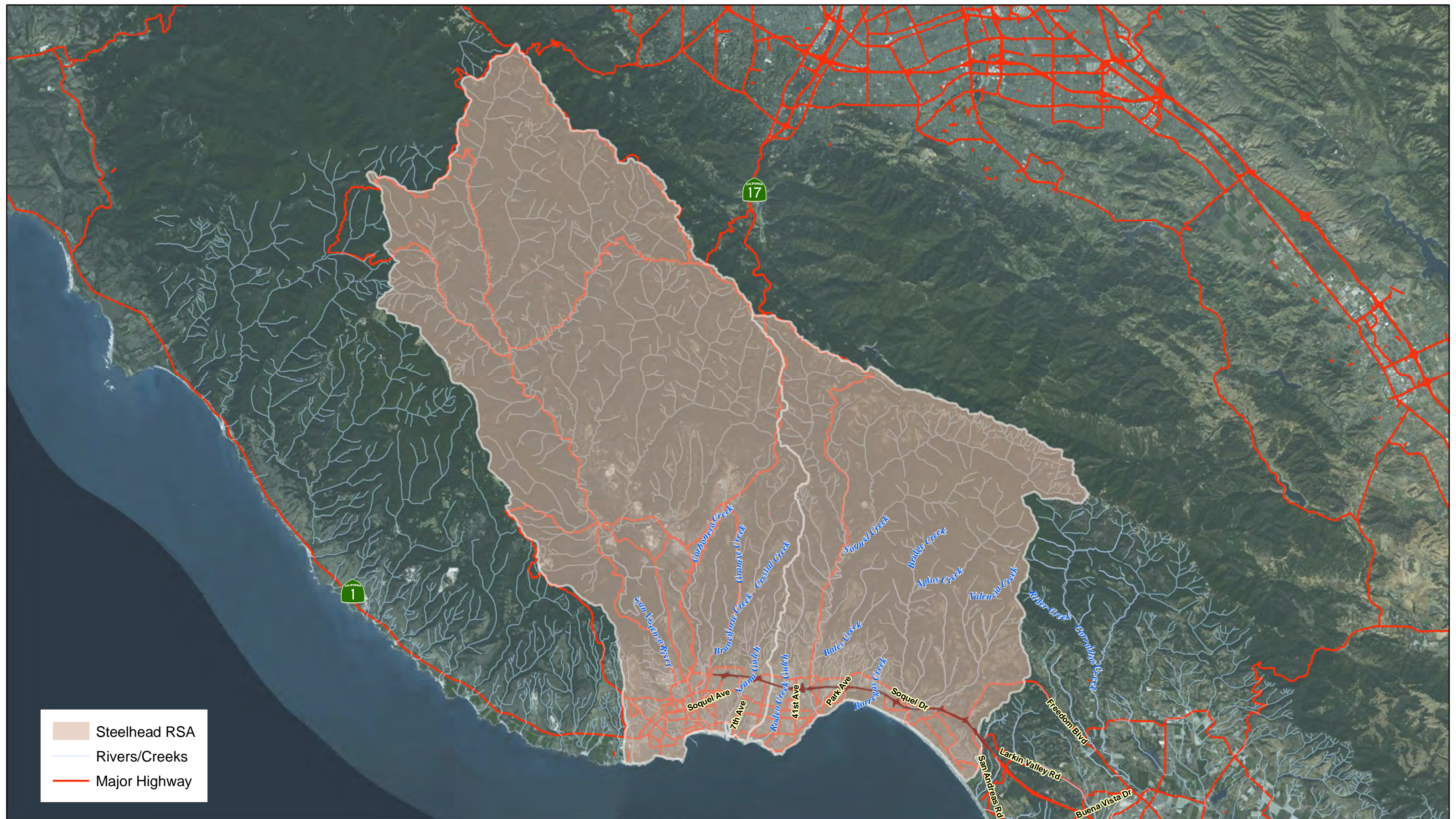
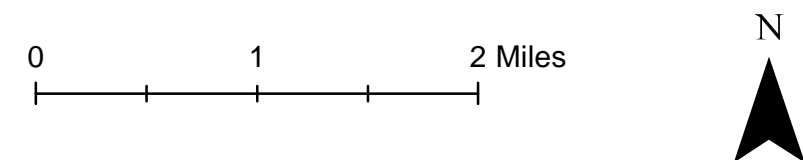


Figure 3: RSA for Steelhead - Central California Coast Distinct Population Segments  
 Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis









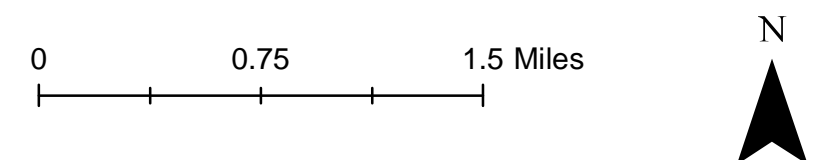
October 2016



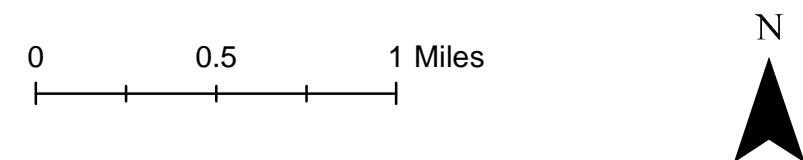


**Figure 6: Resource Study Area (RSA) for Foothill Yellow-Legged Frog and Western Pond Turtle**

## Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis







October 2016





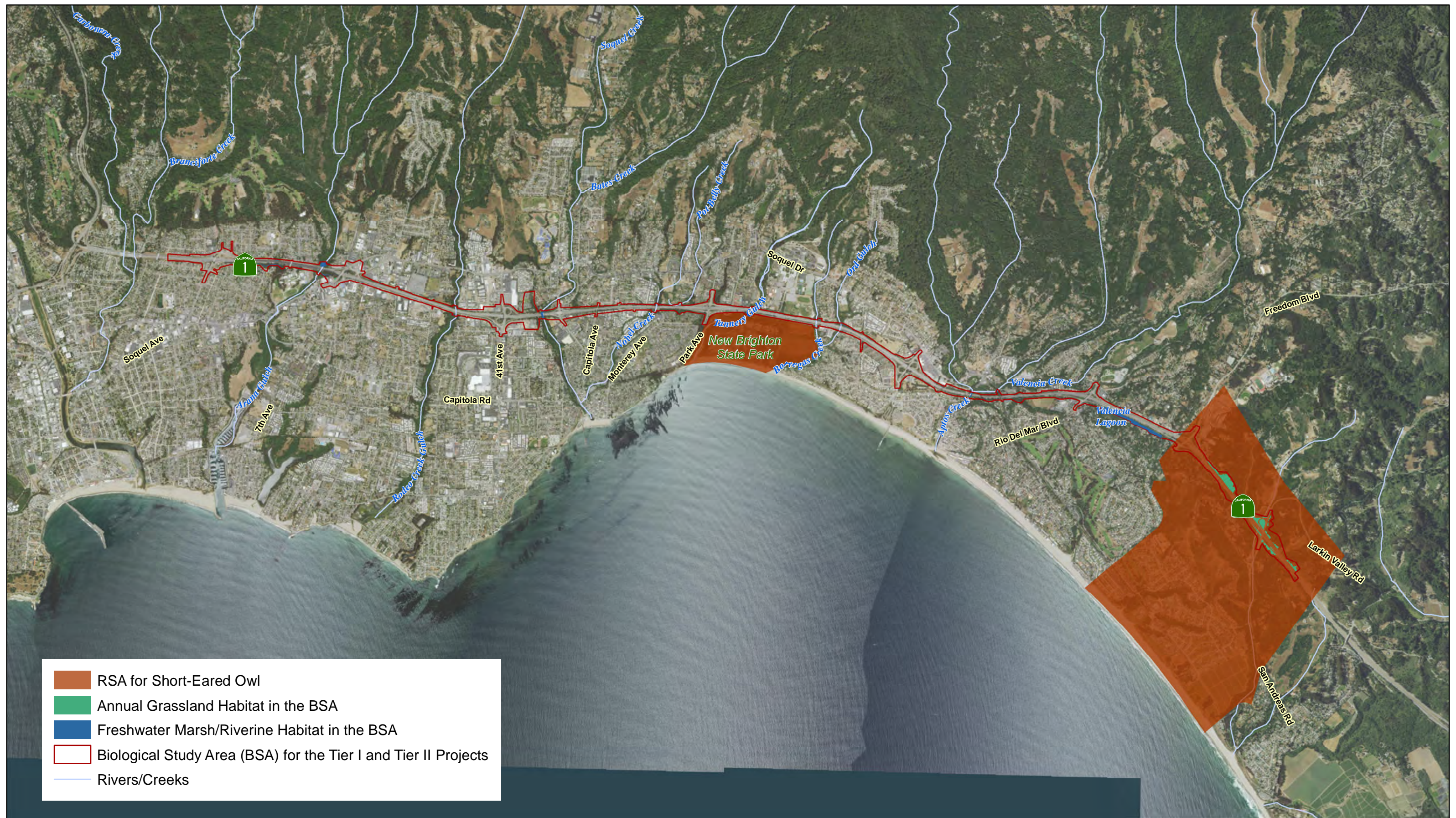
**Figure 8: Resource Study Area (RSA) for Cooper's Hawk Habitat  
Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**



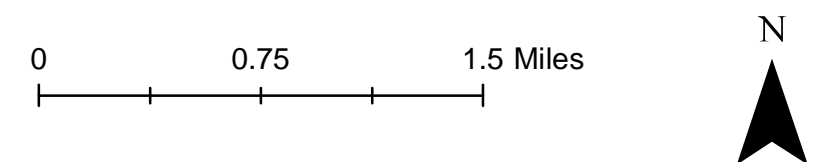


Figure 9: RSA for Tri-Colored Blackbird  
 Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis





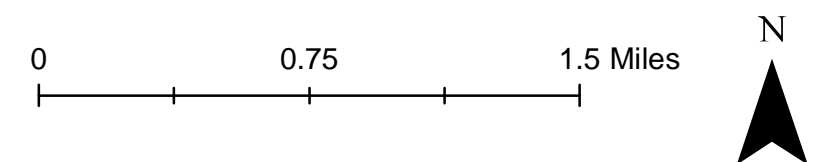
**Figure 10: Resource Study Area (RSA) for Short-Eared Owl**  
**Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**







**Figure 11: Least Bell's Vireo and Southwestern Willow Flycatcher (SWWF)  
Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**

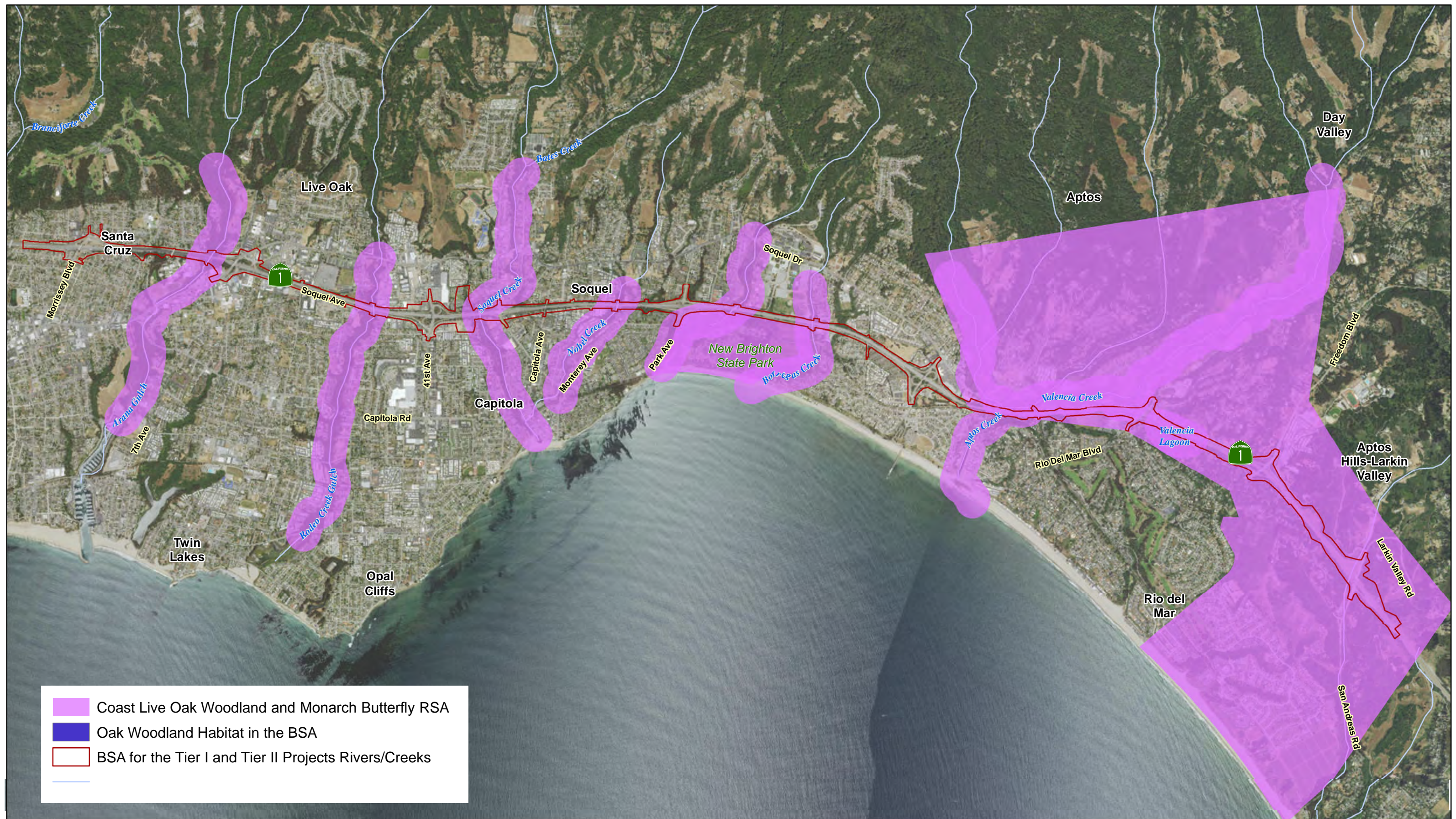






**Figure 12: RSA for Pallid Bat, Hoary Bat, Townsend's Big-Eared Bat (TBEB) & American (Am.) Badger  
Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**





**Figure 13: RSA for Coast Live Oak Woodland and Monarch Butterfly**  
**Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**

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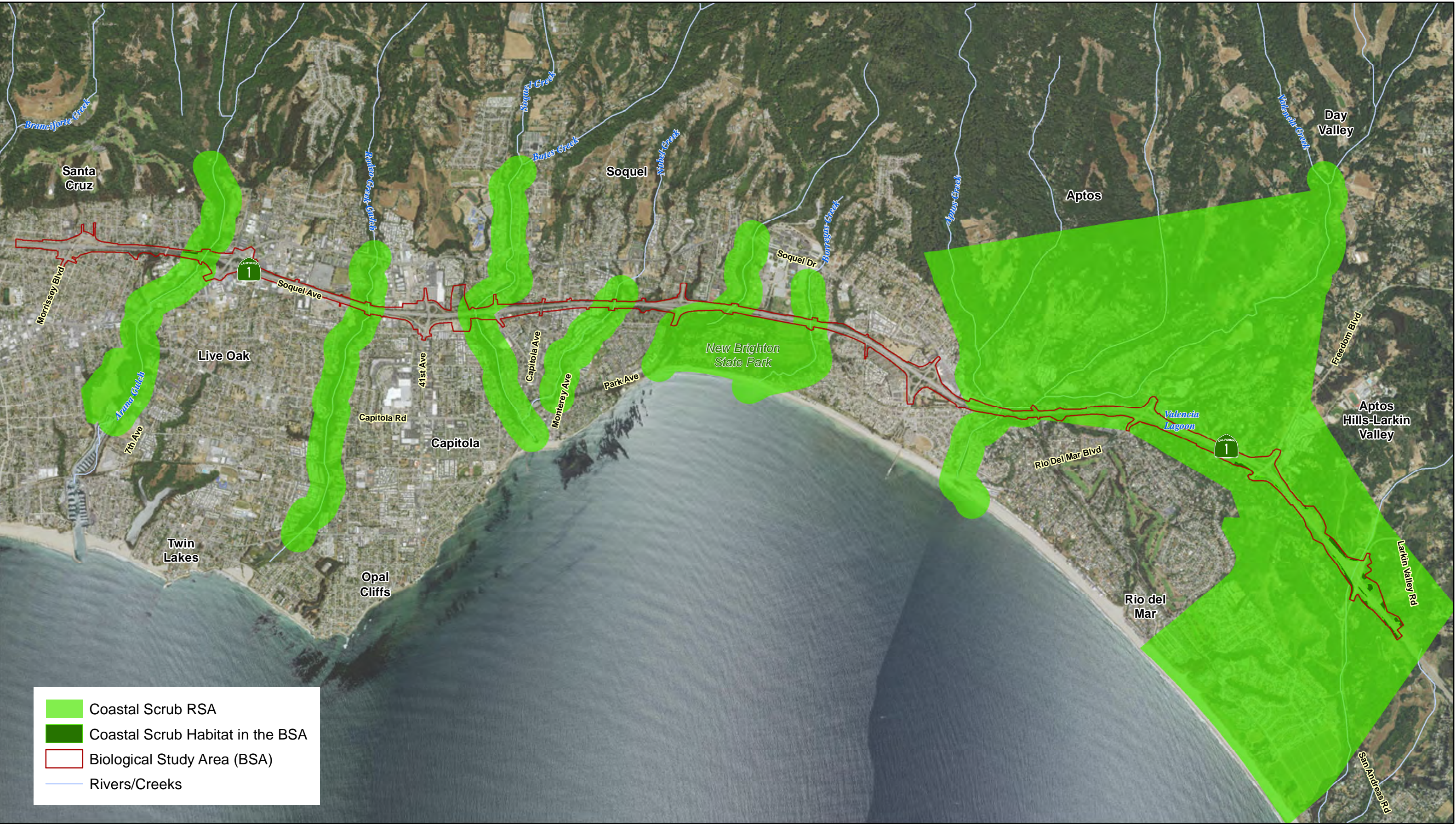
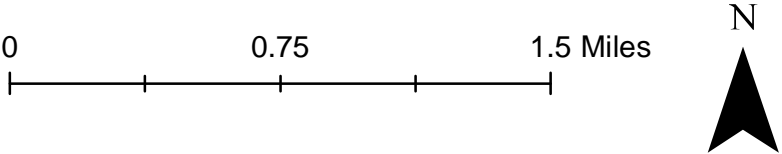
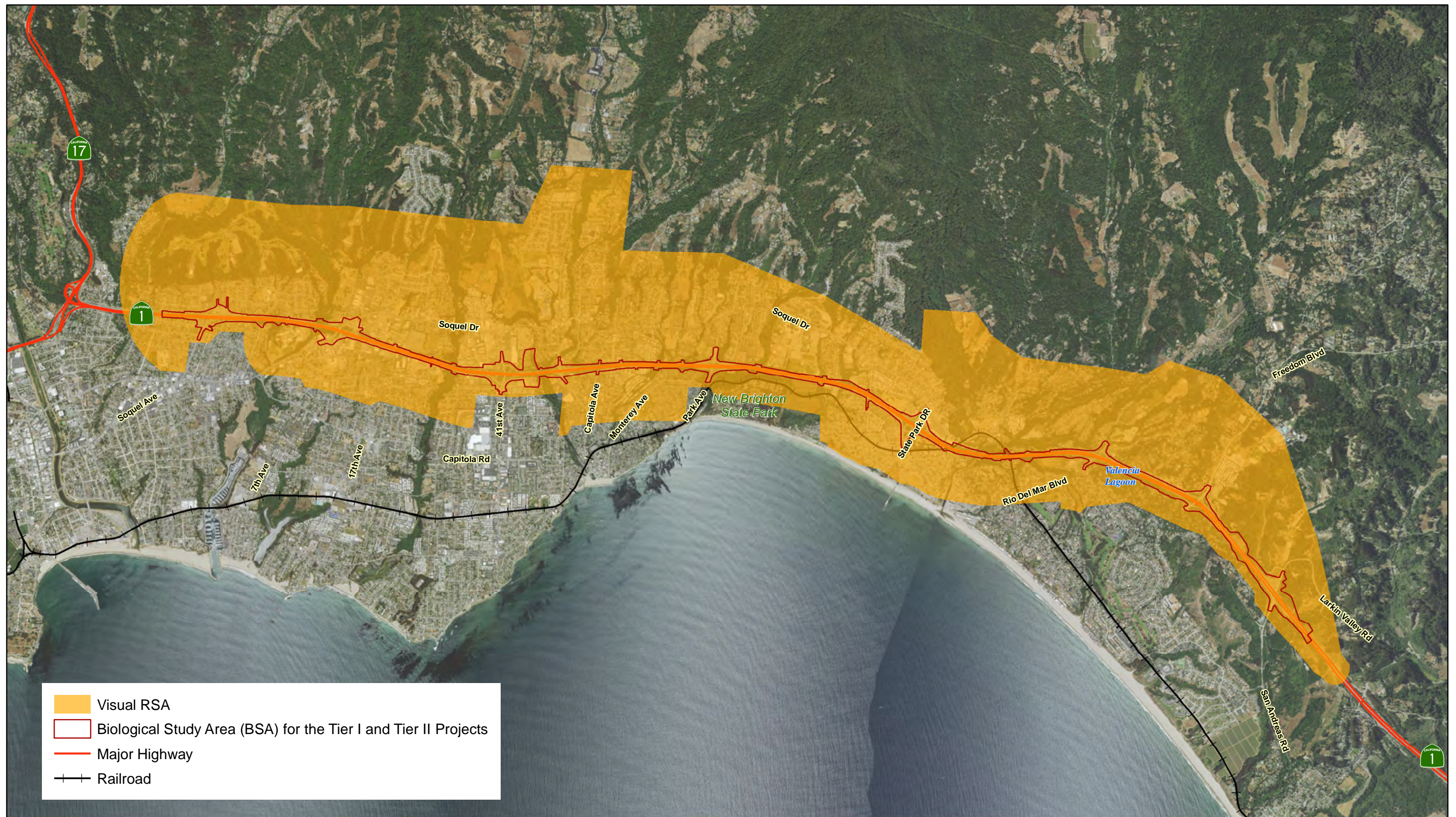


Figure 14: Resource Study Area (RSA) for Coastal Scrub Habitat  
Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis







**Figure 15: Visual RSA**  
**Route 1 Tier I and Tier II Projects - Cumulative Impact Analysis**





Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix D

Step 3 Technical Memorandum



## Technical Memorandum

To: Parag Mehta, Kimley Horn

From: Laura Prickett and Johnnie Chamberlin

Date: September 28, 2017 (Updated June 28, 2018)

Re: Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis – Step 3

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### 1.0 Purpose and Organization of this Memorandum

This memorandum documents the findings of Step 3 of Caltrans' eight-step cumulative impact analysis methodology for the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project (Tier I/Tier II Project).

The intent of Step 3 of the cumulative impact analysis is to describe the current health and historical context for each resource included in the analysis. Section 2 of this memorandum provides an introduction to the project and requirement for this analysis, followed by a description of the methodology in Step 3. Section 4 of this memo describes the current health and historical context for each resource, organized according to the 25 resource topic areas included in the cumulative impact analysis. For each resource topic area, there is a brief description of the resource study area (RSA), followed by a description of the historical context for understanding how the resource got to its current state, and concluding with a discussion of the current health of the resource within the RSA.

### 2.0 Introduction

The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 to 2021 upon approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition. A complete description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a).

Cumulative impacts of the proposed improvements are evaluated in the Draft EIR/EA; however, this current analysis is being conducted as a result of public comments on the Draft EIR/EA, which circulated in November 2015. As requested by Caltrans, this analysis uses the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration (Caltrans 2016), to confirm that all cumulative impacts are adequately addressed. This memorandum presents the results of Step 3 of the analysis. The information presented in this memorandum is based primarily on information presented in the Draft EIR/EA and its supporting technical studies (Caltrans 2015c).

### 3.0 Methodology

To assess the current health and historical context of resources, Horizon reviewed the Tier I/Tier II Project's Draft EIR/EA and technical studies, as well as the Santa Cruz County General Plan/Local Coastal Program, the General Plan/LCP's EIR, and other data sources included in Section 5, References. The review of these documents focused initially on considering the current health of the resources, using the RSA for each resource as the geographic boundary for considerations of resource health. The term "health" is used broadly to refer to the overall condition, stability, or vitality of a resource, as described in the Caltrans cumulative impact analysis guidance. The review of the source documents subsequently focused on the historical context, identifying key factors in the past that have affected the resource, leading to its current condition. Horizon also consulted with resource specialists that prepared the Tier I/Tier II Project's technical studies, to refine our understanding of resource health and historical context. Given the nature (life-cycle, range, etc.) of the species that were studied, the extent of the habitat types that were studied beyond Santa Cruz County, and the limitations of biological studies, the current health and trend analyses often address larger geographical areas beyond the bounds the subject RSA.

### 4.0 Descriptions of the Current Health and Historical Context of Resources

The current health and historical context of each resource included in the cumulative impact analysis is discussed below.

#### 4.1 Riverine/Freshwater Marsh Natural Communities

**RSA.** There is one RSA for riverine/freshwater marsh habitat, wetlands and waters of the US, water quality and stormwater. This RSA encompasses the areas of freshwater marsh/ riverine habitat within the biological study area (BSA) of the Tier I and Tier II projects, and extends beyond the BSA to include the watersheds of the following resources: Rodeo Creek Gulch, Soquel Creek, Pot Belly Creek, Nobel Creek, Tannery Gulch, Borregas Creek, Valencia Channel, Aptos Creek, Valencia Creek, Ord Gulch, Soquel Lagoon, Valencia Lagoon, and Valencia Channel.

**Historical Context.** Historical accounts of conditions in areas that are now part of the City of Santa Cruz show that, prior to the 1850s, marshland once stretched across the lowland areas near the bay, with wooded streamsides and redwood-dominated hillsides. Large areas of wetlands were converted to agricultural land, and, as the population grew, urban land uses became dominant. However, the low-lying areas of Santa Cruz remained vulnerable to flooding, as evidenced in the historic flood of 1995, after which a system of levees was established along the San Lorenzo River (City of Santa Cruz 1998).

**Current Health.** Areas of freshwater marsh occur along various streams and lagoons within the City of Santa Cruz and include species such as California bulrush (*Scirpus californicus*), small-fruited bulrush (*S. microcarpus*), Olney's bulrush (*S. olneyi*), and cattail (*Typha latifolia*). Invasive, non-native plants also occur in the freshwater marshes in the City (City of Santa Cruz 2008b). Throughout Santa Cruz County, freshwater marsh may occur at seasonally or permanently flooded areas along streams, lakes, ponds. These areas may include bulrushes, sedges, cattails, and rushes. At the mouths of some local creeks, marshes occur that are brackish at the lower end and consist of freshwater marsh at the upper end (CNPS 2016). While there remain areas of riverine and freshwater marsh natural communities along existing water bodies in the RSA, these remaining resources are far reduced from the pre-development condition of the coastal plain, described above. This indicates that the resource is in poor health. Regulations protecting wetlands and other coastal resources have contributed positively to the health of water resources, compared with impacts that occurred prior to the California Coastal Act (Warner and Hendrix 1984). While a trend of improvement has not been specifically documented, it appears that regulations have helped to stabilize the existing condition of poor health.

#### 4.2 Wetlands and Other Waters

**RSA.** There is one RSA for riverine/freshwater marsh habitat, wetlands and waters of the US, water quality and stormwater. This RSA is described in Section 4.1, Riverine/Freshwater Marsh Natural Communities.

##### **Wetlands**

**Historical Context.** The California Coastal Commission (CCC) found that the amount of wetland acreage in the Monterey Bay region has greatly decreased since the 1890s, and wetlands have become more fragmented, due primarily to human impacts, though wetland acreage may have been stable since the late 1970's. Additionally, there has been a reduction of undeveloped upland areas adjacent to wetlands that historically have buffered wetlands from human development and activities. This has led to a loss of transitional habitat immediately adjacent to wetlands, and a hardening of wetland edges (CCC 1995).

**Current Health.** The wetland assessment for the Tier I and Tier II projects identified a range of resources that are considered wetlands under either the Section 404 of the Clean Water Act or the California Coastal Act. These resources include coastal streams and roadside ditches. The wetlands were found to have high ratings for the following functions and values: water quality, discharge, and biological support. They were found to have moderate ratings for storage and recharge (Caltrans 2015b). The RSA encompasses the watersheds of the creeks that cross the Tier I and Tier II projects. In the Arana Creek-Rodeo Creek Gulch watershed, high sediment loads threaten the quality of habitat for the steelhead and other aquatic species. In the Soquel Creek watershed, sedimentation and impairment of important fish habitat have been identified as concerns. In the Aptos Creek-Valencia Creek watershed, excessive sedimentation, low stream flow resulting from over-pumping of groundwater, fish barriers, loss of channel complexity, and poor water quality in the coastal lagoon are resource concerns (County of Santa Cruz 2016). The degradation and loss of large areas of wetlands in the RSA indicates that this resource is in poor health. Federal, state, and local laws and regulations along with studies done nearby indicate that the health of this resource will remain poor but stable. Current and future restoration activities may eventually lead to a gradual improvement in the health of this resource.

## **Other Waters**

**Historical Context.** Over the past 200 years, waters (creeks, lagoons, etc.) in the area have been impacted by land use changes, channel alteration, levee and dam construction, flood control structures, roadway crossings, and water diversions (City of Santa Cruz 2008, City of Santa Cruz 1998). As mentioned in Section 4.22, Water Quality and Stormwater, the use and depletion of groundwater in the RSA has adversely affected some stream flows during the dry season (County of Santa Cruz 2016). More recently, starting in the 1960s and 1970s, federal, state, and local laws and regulations including the Clean Water Act were passed to protect water resources and habitats.

**Current Health.** Given the historical impacts to other waters in the RSA, the current health of this resource is poor. The Health Services Agency of Santa Cruz County's 2016 Water Resources Management Status Report (Santa Cruz County Health Services Agency 2016) stated that the County continues to face "major water resource challenges," including streamflow and available water supplies that were "greatly diminished" by the four-year drought (2012-15), evidence that most the County's groundwater basins had been pumped in excess of sustainable yield, a finding that historic salmon and steelhead populations were "greatly diminished" by reductions in streamflow, increased erosion and sedimentation, barriers to migration, and removal of large woody material from streams. The report also documented a wide range of efforts by the County and its partner agencies continue to address these and other water resource challenges. The efforts at multiple levels of government to protect this resource indicate that the current condition of poor health is stabilizing.

### **4.3 Tidewater Goby**

**RSA.** The RSA for tidewater goby encompasses the entirety of Critical Habitat Unit SC-7 (Aptos Creek) and includes Soquel Creek, Arana Gulch, Rodeo Gulch and their tributaries, as well as a 500-foot buffer around these resources.

**Historical Context.** The tidewater goby (*Eucyclogobius newberryi*) is listed as an endangered species under the federal Endangered Species Act, and is a California Species of Special Concern. It occurs in brackish water in coastal lagoons created by inflowing streams, and are usually found at the upstream portions of larger coastal lagoons (Moyle 2002, cited in County of Santa Cruz 2008). The tidewater goby is known to have formerly inhabited at least 135 localities (USFWS 2007). Of these 135 localities, 29 (21 percent) are believed to be extinct (Smith, in litt. 2007, cited in USFWS 2007). The northern limit of the species' range, Tillas Slough, at the mouth of the Smith River in Del Norte County, has not changed. However, the current southern limit, Cocklebur Canyon in San Diego County, is now 9.2 miles farther north from its historically known southern location, Agua Hedionda Lagoon in San Diego County (Swift et al. 1989, cited in USFWS 2007). Factors that have contributed to the absence of tidewater goby in localities where it formerly occurred include habitat loss due to development, the drying up of some small streams during prolonged droughts, water diversions, and estuarine habitat modifications (USFWS 2007).

**Current Health.** Tidewater gobies are found from Del Norte County, south to northern San Diego County (USFWS 2007), in an estimated 106 localities (Smith, in litt. 2007, cited in USFWS 2007). While individual populations may be periodically extirpated under natural conditions, a metapopulation (group of distinct populations that are genetically interconnected through occasional exchange of animals) is likely to persist through colonization or recolonization events that establish new populations (USFWS 2007). As the number of extirpations increases and the likelihood of recolonization decreases, additional loss of habitat would increase the chance of extinction for an entire metapopulation. There may be two



metapopulations remaining in Santa Cruz County (Smith, in litt. 2007 – cited in USFWS 2007). Threats to tidewater goby include modification and loss of habitat as a result of coastal development, channelization of habitat, diversions of water flows, groundwater overdrafts, and alteration of water flows. Potential threats include discharge of agricultural and sewage effluents, increased sedimentation due to cattle grazing and feral pig activity, summer breaching of lagoons, upstream alteration of sediment flows into the lagoon areas, introduction of exotic gobies (e.g., yellowfin and Shimofuri gobies) and rainwater killifish (*Lucina parva*), habitat damage, and contamination due to vehicular activity near lagoons (USFWS 2005). Occurrences of tidewater goby have been documented in Soquel Creek at Route 1, in Aptos Creek at Route 1, in Rodeo Gulch approximately 0.6 mile south of Route 1, and in Woods Lagoon approximately 0.7 mile downstream of Route 1 (Caltrans 2015b). Data on population dynamics for this species are limited and short-term variability in local populations is common and natural (USFWS 2007). Though populations have historically declined and threats from climate change, drought, predation, and habitat loss remain, the population is thought to be relatively stable but is considered to be in poor health.

#### 4.4 Central California Coast Steelhead Distinct Population Segment (DPS)

**RSA.** The RSA for steelhead (Central California Coast DPS) encompasses the entirety of Hydrologic Sub-areas 330412 (San Lorenzo) and 330413 (Aptos-Soquel). These hydrologic subareas include Soquel Creek and Arana Gulch and their tributaries.

**Historical Context.** Steelhead (*Oncorhynchus mykiss*) are rainbow trout with an anadromous life history. Many West Coast steelhead stocks have declined substantially from their historic numbers and now are at a fraction of their historical abundance. Destruction, modification and curtailment of the Central California Coast steelhead DPS habitat and range is the result of forestry, agriculture, mining and, most importantly, urbanization. Water storage, withdrawal, conveyance, and diversions for agriculture, flood control, domestic, and hydropower purposes have greatly reduced or eliminated historically accessible habitat. Blockages have been reported in 12 of 46 tributaries within the CCC steelhead DPS (Titus et al. 2002, cited in NOAA 2011). Modification of natural flow regimes has had significant negative impacts on Central California Coast steelhead directly and indirectly (e.g., mortality of adults/juveniles, alterations of fish communities and impacts to migration, spawning, rearing, and refuge). Land use activities associated with logging, road construction, urban development, mining, agriculture, ranching, and recreation have resulted in the loss, degradation, simplification, and fragmentation of the Central California Coast steelhead habitat. These changes result in significant alteration in streambank and channel morphology, stream temperature, water quality, access, sediment/large wood recruitment and depletion which significantly affect all life stages of the Central California Coast steelhead. In most Western States, 80 to 90 percent of historical riparian habitat has been eliminated and in California riparian wetland habitat has been reduced by over 90 percent (Dahl 1990; Jensen et al. 1990; NMFS 1996a – as cited in NOAA 2011). Historical damage to habitats remains to be addressed and restoration activities will require decades of work, as certain land use practices continue to pose risks to the survival of steelhead.

**Current Health.** Steelhead occurring in streams within the RSA are in the Santa Cruz Mountains stratum of the Central California Coast Distinct Population Segment (DPS) (NOAA 2011). The Central California Coast DPS steelhead is listed as threatened under the federal Endangered Species Act, and is a California Special Concern Species. Generally, steelhead remain in freshwater creeks for one to four years before they out-migrate into the open ocean (Goals Project 2000, cited in County of Santa Cruz 2008) and require year-round, adequate creek flows, suitable water temperatures, and an abundant food supply. Potential spawning areas require gravels bottoms and specific water conditions. Spawning habitat

condition is strongly affected by water flow and quality, especially temperature, dissolved oxygen, and silt load, all of which can greatly affect the survival of eggs and larvae (USFWS 2004, cited in Santa Cruz County 2008). The Central California Coast DPS was historically comprised of 37 independent populations and possibly 30 or more dependent populations of winter-run steelhead. These populations were aggregated into five geographically based diversity strata: North Coastal, Interior, Santa Cruz Mountains, Coastal San Francisco Bay and Interior San Francisco Bay (Bjorkstedt et al. 2005, cited in NOAA 2011). Recent surveys of juvenile steelhead in the Santa Cruz Mountains stratum indicate they are present in all major watersheds from San Gregorio Creek south to Aptos Creek; however, the Scott Creek population has been classified as at moderate risk for extinction (NOAA 2011). Time series data in Scott Creek show that steelhead spawners of natural origin have experienced a significant downward decline over time (Williams et al. 2011, cited in NOAA 2011). Occurrences of steelhead have been documented in Arana Gulch at Route 1, Aptos Creek and tributaries, and Soquel Creek and tributaries. Steelhead were observed in Aptos Creek, Valencia Creek, and Soquel Creek during California red-legged frog surveys for the Tier I and Tier II projects (Caltrans 2015b). Given historic population declines and loss of habitat, this species is considered to be in poor health. Conservation efforts and restoration activities in the area may stabilize Steelhead populations; however, based on the documentation to date, the trend of decline appears to be continuing.

#### 4.5 California Tiger Salamander

**RSA.** There is one RSA for California tiger salamander and the Santa Cruz long-toed salamander (SCLTS) habitats. This RSA encompasses the water bodies identified in the mapping of SCLTS habitat and a 1.3-mile radius of these water bodies.

**Historic Context.** Although there is limited information about the historic range of the California tiger salamander (CTS – *Ambystoma californiense*), current locality and genetic information imply that the species was previously distributed continuously in the vernal pool/grassland habitat that formerly dominated much of the Central Valley (Shaffer and Trenham 2005, cited in CDFG 2010). *Ambystomatid* salamanders, such as the CTS, are one of four amphibian families containing significantly more rapidly declining species than the average for all amphibians (Stuart et al. 2004, cited in CDFG 2010). Declines of CTS populations are strongly associated with surrounding urban and agricultural habitat use (Davidson et al. 2002, cited in CDFG 2010).

**Current Health.** The California tiger salamander is listed as threatened under both the federal Endangered Species Act and California Endangered Species Act. It is a large terrestrial salamander that ranges from Sonoma County, south to northwest Tulare County, and in the Coast Range south to Buellton and Lompoc in the Santa Ynez drainage. In the Central Valley and surrounding Sierra Nevada foothills and Coast Range, the species occurs from northern Yolo County southward to northwestern Kern County and northern Tulare and Kings Counties (Caltrans 2015b). Shaffer et al. (2004, cited in CDFG 2010) found six genetically and geographically coherent sets of CTS populations. CTS populations in Sonoma and Santa Barbara counties are geographically isolated and genetically distinct; the remaining four populations in central California share geographic boundaries and show limited genetic intermixing at these boundaries (Shaffer et al. 2004, cited in CDFG 2010). CTS breed in vernal pools and other wetlands; after metamorphosing, juvenile CTS leave the pond and occupy burrows created by small mammals, where they estivate until they reach maturation and then emerge from their burrows and disperse up to 1.3 miles to breed (USFWS 2016b). Human activities that reduce the probability of larvae metamorphosing (e.g., draining ponds, fish introductions) and disrupt the natural dispersal process (e.g.,

habitat fragmentation, roads) will increase the probability of local declines and extinctions (Semlitsch 2002, cited in CDFG 2010). Given the high levels of migration between local breeding sites, roads and other infrastructure associated with suburban-type development constitute an important threat to CTS (CDFG 2010). An occurrence of CTS was documented at Ellicott Pond, approximately 3.5 miles southeast of the BSA for the Tier I and Tier II projects (Caltrans 2015b). Given its listing as a threatened species and ongoing threats to reproduction and dispersal, the species is considered to be in poor health with a declining trend in population (IUCN 2017a).

#### 4.6 Santa Cruz Long-Toed Salamander

**RSA.** There is one RSA for California tiger salamander and the Santa Cruz long-toed salamander (SCLTS) habitats. This RSA is described above under California Tiger Salamander.

**Historical Context.** Prior to European settlement of Santa Cruz and Monterey Counties, freshwater marshes, vernal pools, and upland habitats were more contiguous and in greater abundance, in comparison to present-day habitat characteristics (Rainey 1985a; E. Van Dyke, pers. comm., 2004, cited in USFWS 2004). As a result of urbanization and cultivation that have occurred since the mid-19th Century, areas of upland and aquatic habitats suitable for Santa Cruz long-toed salamanders (*Ambystoma macrodactylum croceum*) have been removed and altered, and barriers to dispersal have been created, resulting in subpopulations which are isolated from each other (USFWS 2004). The SCLTS was originally discovered in 1954 at Valencia Lagoon. In 1955, this breeding pond was reduced in size by roadway construction along Route 1. When Caltrans converted Route 1 to a freeway in 1969, the project eliminated the breeding site. In 1970 Caltrans constructed a temporary lagoon as a mitigation measure for impacts to SCLTS. A second temporary pond was built in 1972, then both temporary features were replaced in 1978 by a larger constructed lagoon (USFWS 1999).

**Current Health.** The SCLTS is listed as endangered under both the federal Endangered Species Act and California Endangered Species Act. It is also a State of California Fully Protected species. While genetic research on the SLTS is preliminary, it provides strong evidence that each of the known metapopulations is isolated, and therefore unable to exchange migrants, resulting in population genetic isolation and reductions in gene flow. These conditions place any one breeding deme at an increased risk of local extirpation resulting from the inability to adapt to new threats such as climate change, disease, or various unpredictable events. The likelihood of recolonization from other sites if a local extinction occurs is low because of habitat fragmentation. Degradation and fragmentation of habitat due to urbanization and agriculture continue to constrain the subspecies, with limited upland habitat for dispersal and little connectivity between breeding locations. Other factors affecting the Santa Cruz long-toed salamander include the effects of drought, mortality on roads, and contaminants. As urban areas continue to expand, roads continue to fragment remaining habitat and increase the threat of pollution from run-off into known or potential breeding sites. Mortality on roads is a threat faced by nearly all Santa Cruz long-toed salamander subpopulations, and has been widely documented as contributing to the increasing decline of amphibians worldwide, particularly in populated areas. Efforts to reduce road mortality of dispersing Santa Cruz long-toed salamanders at the Seascape Ponds has met with disappointing results, indicating that more research is necessary to identify appropriate tunnel design and efficiency (USFWS 2009). Occurrences of SCLTS have been documented at Valencia Lagoon adjacent to Route 1, between Del Mar and Freedom Boulevard; and at three locations near the Tier I Project BSA, which are, respectively 0.8 mile east, 0.5 mile southwest, and 1.2 miles northeast of the San Andreas Road/Route 1 intersection (Caltrans 2015b). Given this endangered status of this species, it is considered to be in poor health. The

threats of habitat fragmentation, drought, and pollution are likely to continue, therefore this species' population is likely to trend downwards.

#### 4.7 California Red-Legged Frog

**RSA.** There is one RSA for California red-legged frog and white-tailed kite. This RSA encompasses the areas of freshwater marsh and riparian forest habitat mapped within the BSA, and extends beyond these areas to include the entirety of Valencia Lagoon, Valencia Channel, and Soquel Lagoon, as well as the length of the streams the project corridor crosses (and upstream to the ridgeline above Route 1, and downstream to the Pacific coast), encompassing a 3-mile buffer.

**Historical Context.** The California red-legged frog (CRLF -- *Rana aurora draytonii*) was once widespread. It is believed that before the arrival of Europeans on the west coast of North America, the California red-legged frog was common in coastal habitats from the vicinity of Point Reyes National Seashore, Marin County, California, and inland from the vicinity of Redding, Shasta County, California, southward to northwestern Baja California, Mexico (Jennings and Hayes 1985, Hayes and Krempels 1986 – cited in USFWS 2002a). Historically, the California red-legged frog was known to inhabit 46 counties, including 24 counties from which the taxon is now extirpated (U.S. Fish and Wildlife Service 1996a, cited in USFWS 2002a). The species has been extirpated from 70 percent of its former range (USFWS 2002a). Following the 1849 gold rush, California red-legged frogs were exploited for food (Jennings and Hayes 1984, 1985 – cited in USFWS 2002a). Overharvest led to a sharp reduction in frog harvest size in the late 1880s, and there was an attempt to compensate for depleted wild stocks of California red-legged frog, by introducing bullfrogs (Jennings and Hayes 1984, 1985 – cited in USFWS 2002a). This past exploitation is not a factor that is causing current declines (USFWS 2002a).

**Current Health.** The California red-legged frog is listed as threatened under the federal Endangered Species Act, and is a California Special Concern Species. It is endemic to California and Baja California, Mexico, and its known elevational range extends from near sea level to elevations of about 1,500 meters (5,200 feet). Currently, the species is found primarily in coastal drainages of central California, from Marin County, California, south to northern Baja California, Mexico, and in isolated drainages in the Sierra Nevada, northern Coast, and northern Transverse Ranges (U.S. Fish and Wildlife Service 1996a, cited in USFWS 2002a). Populations remain in approximately 256 streams or drainages in 28 counties, including 17 streams in Santa Cruz County (USFWS 2002a). At present, Monterey, San Luis Obispo, and Santa Barbara counties support the largest remaining populations within California (Caltrans 2015b). Current threats to the California red-legged frog include urban encroachment, construction of reservoirs and water diversions, contaminants, agriculture, livestock grazing, and the introduction of non-native predators (such as bullfrogs) and competitors (such as mosquitofish). California red-legged frog has been identified as having a high degree of threat and low recovery potential, however, a recovery plan for the species was developed and initiated in 2002 (USFWS 2002a). An occurrence of CRLF was documented approximately 2 miles southeast of the San Andreas Road/Route 1 intersection (Caltrans 2015b). Given this species' threatened status and likelihood of continued threats in the form of habitat loss, predation, and competition the CRLF is considered to be in poor health with a declining population trend (IUCN 2017b).

#### 4.8 Foothill Yellow Legged Frog

**RSA.** There is one RSA for the foothill yellow legged frog (FYLF) and western pond turtle (WPT). This RSA encompasses the areas of freshwater marsh and riparian forest habitat mapped within the BSA, and extends beyond these areas to include the entirety of Valencia Lagoon, Valencia Channel, and Soquel Lagoon, as well as the length of streams (extending upstream to the first ridgeline and downstream to the Pacific coast), encompassing a 1,400-foot buffer.

**Historical Context.** Foothill yellow-legged frog (FYLF, *Rana boylei*) originally ranged from northern Oregon west of the Cascades south along the coast ranges to the San Gabriel Mountains, and south along the foothills of the western side of the Sierra Nevada Mountains to the edge of the Tehachapi Mountains, with an isolated population (now possibly extinct) in the San Pedro Martir Mountains of Baja California (Jennings and Hayes 1994). At present, large populations of FYLF appear only in the North Coast ranges from Oregon to Sonoma County, California. Scattered remnant populations remain elsewhere within its historic distribution, but this species is no longer present in two thirds of its historic range in the Sierra Nevada and 45 percent of its historic range in California (Jennings and Hayes 1988, cited in Gonsolin 2010). FYLF appears to have been extirpated from areas in the southern end of its historic range, including areas such as the North Fork San Gabriel River, South Fork San Gabriel River, southwest of Crystal Lake Park, Mount Wilson, Monrovia, and Claremont (CaliforniaHerps.com 2016). High water conditions, estimated as 500-year flood conditions, which occurred in much of southern California in Spring 1969, may be largely responsible for the apparent extirpation of FYLF in that region (Jennings and Hayes 1994).

**Current Health.** Foothill yellow-legged frog (FYLF, *Rana boylei*) is a California Species of Special Concern. An occurrence of FYLF was documented on Soquel Creek, approximately 0.16 mile from the Porter Street/Route 1 intersection (Caltrans 2015b). FYLF is known to occur at many localities in coastal drainages north of the Salinas River system in California; however, in these areas, the frog is considered at risk due to exotic predatory aquatic fauna, poorly timed water releases from upstream reservoirs that scour egg masses from their oviposition substrates, and decreased waterflows that can force adult frogs to move into permanent pools where they may be more susceptible to predation. It has been hypothesized that forceful storms arriving late in the wet season in many years since 1987 may have resulted in the scouring of FYLF egg masses (Jennings and Hayes 1994). Due to historic population declines and continued threats from exotic species and changes in climate, the health of this resource is considered to be poor with a declining trend going forward.

#### 4.9 Western Pond Turtle

**RSA.** There is one RSA for both the FYLF and WPT. It is described above, under Foothill Yellow-Legged Frog.

**Historical Context.** Historically, western pond turtle occurred in most Pacific slope drainages from Klickitat County, Washington along the Columbia River to Arroyo Santo Domingo, in northern Baja California, Mexico. Western pond turtles were heavily exploited for food in the Central Valley, and overall numbers of this species represent a fraction of their historic levels. Declines in the population of western pond turtle in many of the coastal drainages along California's central coast have been associated with historic exploitation of this species for food, as well as changes in land and water use, and abusive grazing practices. A potential contributing factor to population decline is the introduction of exotic aquatic

predators or competitors, such as bullfrogs, bass (*Micropterus spp.*), and sunfishes (*Lepomis spp.*). Another potential factor is the increased presence of predators, such as raccoons that may occur as a result of local human disturbances or translocations by animal control agencies, introduced red foxes (*Vulpes vulpes spp.*), and translocated black bear (*Ursus americanus*) populations (Jennings and Hayes 1994).

**Current Health.** Western pond turtle (*Actinemys marmorata*) is a California Species of Special Concern. It is widely distributed along western North America and is capable of exploiting a wide range of freshwater habitats including reservoirs, water treatment ponds, agricultural ponds, rivers, and seasonal creeks (Pilliod et al. 2013). Fieldwork has indicated that only 6-8 viable populations of western pond turtle remain south of the Santa Clara River system in California (Holland, 1991a, cited in Jennings and Hayes 1994). Adverse conditions for western pond turtle that affect a number of coastal drainages between San Francisco Bay and the Santa Clara River, as well as most of the Santa Joaquin Valley, Salinas and Pajaro drainages, include the effects of drought, habitat alteration, changes in land and water use, and abusive grazing practices (Holland 1991a, cited in Jennings and Hayes 1994). The age (size) structure of most turtle populations examined in this region appears to be increasingly biased toward adults, indicating little or no recruitment is taking place. In many locations, the nesting habitat appears to be impacted or altered during the incubation interval on an annual basis by some type of agriculture or the activity of livestock (Jennings and Hayes 1994). An occurrence of western pond turtle was recorded 5.8 miles east of the BSA of the proposed project (Caltrans 2015b). Given historic and recent population declines and existing threats and age trends, the health of this resource is considered to be poor and likely to continue to decline.

#### 4.10 Riparian Forest Natural Community and Riparian Corridors

**RSA.** There is one RSA for riparian corridors and riparian forest habitat. This RSA includes the riparian forest natural community within the biological study area (BSA) for the Tier I and Tier II projects, and it includes the length of each stream that crosses Route 1 within the BSA downstream from Route 1 to the Pacific Coast, and upstream either to the point at which the stream passes between two ridgelines (if applicable) or to its source (if the source is below the ridgeline). The riparian forest RSA encompasses a 500-foot buffer of each stream. This RSA also encompasses Valencia Lagoon and Soquel Lagoons and a buffer of 500 feet around these resources.

**Historical Context.** The extent of riparian habitats has been significantly decreased within the Santa Cruz region, and the State as a whole, over the past 200 years, due to the encroachment of agriculture, domestic animal grazing, urban development, roadway crossings, water diversions and channelization for drainage and flood control (City of Santa Cruz 2008). Within the Central Coast Region, the large-scale use of river-valley floodplains for agriculture has resulted in a loss of riparian forest in these areas (CDFW 2015). Throughout the Central California coast, most old growth redwood has been harvested and is no longer available to provide large woody material for in-channel habitat (Coastal Watershed Council 2003). By 1978, despite the efforts of many federal, state, and local agencies, private organizations, and concerned citizens, it was observed that riparian vegetation was continuing to “disappear at an alarming rate in California” (Beer 1978, cited in Warner and Hendrix 1984). The Coastal Act, which was adopted in 1976, includes protections of riparian corridors; however, efforts to include the protection of the entire watersheds of coastal streams in the Coastal Act were unsuccessful, and the Act’s protection of riparian corridors encompasses only the portion of the riparian corridor that is located in the Coastal Zone (Warner and Hendrix 1984).

**Current Health.** Most local streams in Santa Cruz County have been degraded by human impacts to some degree (County of Santa Cruz 2013). Where urbanization has occurred, riparian corridors are often narrow, and may lack vegetation in some areas, due to the presence of development. Other factors that affect the value of riparian corridors include traffic, bank stabilization projects, pollution, human activities, domestic pets and the presence of invasive, nonnative plants. Although, populations of some species of riparian birds may continue to be present in urban riparian habitat, many species of amphibians, reptiles and mammals that commonly occur in riparian habitats in undeveloped areas are often missing in urban riparian settings, due to urban impacts, lack of adjacent natural upland habitats, and an inability to co-exist with humans (City of Santa Cruz 2008). Riparian forest habitat is present in many of the creeks and drainages within the RSA, and is extensive within the Valencia, Aptos, and Soquel Creek corridors. Riparian forest habitat also occurs along Ord Gulch, Borregas Creek, Pot Belly Creek, Tannery Gulch, Nobel Creek, Soquel Creek, Rodeo Gulch, and Arana Gulch and its tributaries (Caltrans 2015b).

The Soquel Creek Watershed Assessment and Enhancement Plan (SCCHSA 2003) assessed the condition of riparian vegetation along Soquel Creek and found a full array of size classes of the major riparian tree species. Small trees were found to be numerous and recruitment active. From the ocean to Soquel Village, the riparian forest seldom extends beyond the top of the bank. Upstream from the village, there are scattered portions of relatively intact riparian vegetation. Invasive exotic plants were found in all reaches of Soquel Creek (SCCHSA 2003). The Aptos Creek Watershed Assessment and Enhancement Plan (Coastal Watershed Council 2003) found that, although very little old growth remains, upper Aptos Creek and Valencia Creek support mature coniferous trees that have a high likelihood of contributing large woody material to the creek channels, which would provide beneficial effects, including the creation of fish habitat such as pools, providing refuge areas during storm events, and temporary storage of sediment. Numerous species of invasive plants were found to occur along Aptos and Valencia creeks (Coastal Watershed Council 2003). Given the significant loss of riparian forest that has occurred, this resource appears to be in poor health. Despite the small remaining amount of old growth forest, the presence of mature trees in upper watersheds of Aptos and Valencia creeks, and the full array of tree size classes and active recruitment along Soquel Creek suggest that conditions are remaining stable, with a potential for improvement.

#### 4.11 Cooper's Hawk

**RSA.** The RSA for Cooper's hawk includes the oak woodland and riparian forest habitat mapped within the BSA and extends along each stream crossed by the Tier I or Tier II projects, downstream to the Pacific coast, and upstream to ridgelines above the urbanized areas (thereby encompassing foothill areas). A 3-mile buffer is included along each stream, except in stream segments, such as in foothill areas and at the southern end of the proposed project, where undeveloped land extends beyond 3 miles; in such areas the RSA includes all undeveloped or largely undeveloped land, extending as far inland as the ridgeline above Route 1, and extending 3 miles south of the southern terminus of the proposed project. The RSA also includes areas of open land immediately surrounding New Brighton State Park; aerial imagery was used to identify areas of open land.

**Historical Context.** As of 1981 it was suggested that a significant decline in breeding pairs of Cooper's hawk had occurred throughout southern California, due to the destruction of their principal nest habitat, extensive riparian areas. Nevertheless, there has been no evidence of a decline in migratory populations of Cooper's Hawks in the western United States (Grinrod and Walton 2016).

**Current Health.** Cooper's hawk (*Accipiter cooperii*) is on the CDFW Watch List (CDFW 2017b). This species breeds throughout the contiguous 48 United States, southern Canada, and northern Mexico. In California the species is a widespread breeder but is not considered common in any particular area. The gradual loss of habitat (logging in forested areas as well as development) has been identified as a current threat for the Cooper's hawk population in California. The current population is considered to be at or near carrying capacity in available nesting territories (Grinnell and Walton 2016). In recent years, Cooper's hawk populations have increased and range expansions have been observed, especially the colonizing of urban and suburban areas by breeding pairs (Curtis and Rosenfield 2006, cited in Chiang et al. 2012). An occurrence of Cooper's hawk is documented approximately 0.75 mile east of Henry Cowell Redwoods State Park (Caltrans 2015b). Given recent population trends, the health of this resource is considered to be good and is expected to be either stable or improving.

#### 4.12 Tri-Colored Blackbird

**RSA.** The RSA for tricolored blackbird (*Agelaius tricolor*) encompasses areas of grasslands and freshwater marsh included in the BSA and includes areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1. The RSA also includes a 3-mile buffer around these areas, stopping at the first ridgeline above Route 1.

**Historical Context.** The Tricolored Blackbird's known historic breeding range in California included the Sacramento and San Joaquin valleys, the foothills of the Sierra Nevada south to Kern County, the coastal slope from Sonoma County south to the Mexican border, and, sporadically, the Modoc Plateau (Dawson 1923, Neff 1937, Grinnell and Miller 1944, cited in Shuford and Gardali 2008). Historical surveys, however, did not include large areas of the species' currently known breeding range and therefore the full extent of this species' range was not documented at the time (Shuford and Gardali 2008). Nineteenth-century accounts of tri-colored blackbirds describe a wintering flock in Solano County "numbering so many thousands as to darken the sky for some distance by their masses" (Heermann 1859, cited in Shuford and Gardali 2008), an "immense" colony in San Joaquin County (Belding 1890, cited in Shuford and Gardali 2008), and identify the tricolored blackbird as "the most abundant species near San Diego and Los Angeles..." (Baird 1870, cited in Shuford and Gardali). One of the first systematic surveys of the species' population status and distribution, in 1934, observed 736,500 adults in just eight Central Valley counties (Neff 1937, cited in Shuford and Gardali 2008). Statewide censuses have shown declines in Tricolored Blackbird numbers. Statewide censuses in four late-April surveys from 1994 to 2000 resulted in the following total numbers of adults: 369,359 in 1994, 237,928 in 1997, 104,786 in 1999, and 162,508 in 2000 (Hamilton 2000, cited in Shuford and Gardali 2008).

**Current Health.** Tricolored blackbird is listed as a candidate endangered species under the California Endangered Species Act (CDFW 2017b). With the loss of a natural flooding cycle and most native wetland and upland habitats in the Central Valley, the primary foraging habitat for tricolored blackbirds is now artificial habitats, particularly croplands in which shallow flood irrigation, mowing, or grazing keeps the vegetation at a height less than approximately 6 inches. Tricolored blackbirds also forage in remnant native habitats, including wet and dry vernal pools and other seasonal wetlands, riparian scrub habitats, and open marsh borders (Shuford and Gardali 2008). The results of the 2014 Tricolored Blackbird Statewide Survey (Meese 2014) found that the rate of decline in the number of tricolored blackbirds appears to be increasing. From 2008 to 2011 the number of individuals in this species dropped by 34%, from 395,000 to 258,000 birds statewide (Kyle and Kelsey 2011, cited in Meese 2014). However, from



2011 until 2014, the number dropped by 44%, from 258,000 to 145,000 birds. Regionally, the number of birds seen in counties along the Central Coast was less than 10% of the number seen in 2008. In Santa Cruz County the number of tricolored blackbirds seen dropped from 220 in 2008 to zero in 2011. Again in 2014, there were no tricolored blackbirds seen in Santa Cruz County (Meese 2014); however, Neary's Lagoon in Santa Cruz has been identified as a known nesting site (Caltrans 2015b). The greatest threats to this species are the direct loss and degradation of habitat from human activities (Beedy and Hamilton 1999, cited in Shuford and Gardali 2008). This species is considered to be in poor health with a declining trend in population.

#### 4.13 Short-Eared Owl

**RSA.** The RSA for short-eared owl encompasses areas of grasslands and freshwater marsh included in the BSA and includes areas of open land immediately surrounding New Brighton State Park, which has been mapped using aerial imagery to identify areas of open land. It also includes open land from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1.

**Historical Context.** As early as 1944, short-eared owls were described as breeding across the entire length of California west of the southern deserts "in very small numbers." At that time, the primary threats to short-eared owls were identified as shooting, and habitat loss and degradation. A small population of short-eared owls in the Salinas River-Elkhorn Slough area was previously recorded, with summer occurrences documented as early as 1959, and with one or two pairs nesting there most years from 1974 to 1981. This population was apparently extirpated by non-native red foxes in the 1980s, and short-eared owls were not observed in this area again until the 1990s, following the 1990 initiation of predator control for snowy plover and other species (Roberson 2008).

**Current Health.** Short-eared owl (*Asio flammeus*) is a California Species of Special Concern that is known to breed in much of northern North America, with additional populations occurring in Eurasia and South America. Many northern populations are migratory, and North American breeders migrate to northern Mexico and Florida for the winter. Productive habitat for resident owls in California is now almost entirely limited to wildlife refuges and management areas. Primary threats to short-eared owl are currently identified as habitat loss and degradation, aggravated by livestock grazing, invasive exotic weeds, water management, and disease (Roberson 2008). An occurrence of short-eared owl is documented 10.75 miles south of the San Andreas Rd/Route 1 intersection (Caltrans 2015b). While this species appears to be in good health globally, it is difficult to make a statement about the current health and trend of the species in the RSA or California as a whole, given the cyclical boom-and-bust nature of the species' population and its dependence on prey population and climate cycles (Roberson 2008); however given the observations of short-eared owl to Elkhorn Slough after the initiation of predator control, there appears to be possibility for some stability for the local population.

#### 4.14 White-Tailed Kite

**RSA.** There is one RSA for California red-legged frog and white-tailed kite. This RSA is described above, under California Red-Legged Frog.

**Historical Context.** At the turn of the 20<sup>th</sup> Century, the white-tailed kite (*Elanus leucurus*) may have been widespread throughout the lowlands of California, but there was a severe decline in its population in the

early 1900s, likely due to habitat loss, shooting, and possible egg collecting (Pickwell 1930, Waian and Stendell 1970 – cited in Moore 2000). During the 1930s, extinction was predicted for this species in California (Pickwell 1930, cited in Moore 2000); however populations and distribution increased from the 1940s to the 1970s (Fry 1966, Waian and Stendall 1970, Eisenmann 1971 – cited in Moore 2000). The rebounding of the population in that era has been attributed to protections from shooting and an increase in agricultural development, which may have increased rodent habitat (Eisenmann 1971, Small 1994 – cited in Moore 2000). Since the 1980s, white-tailed kite populations have been decreasing in some areas, including the Central Valley, Southern California grasslands and southern Pacific rainforests, although overall numbers in California have continued to increase. These location-specific declines may be due to conversion of agricultural lands to urban areas and clean farming techniques that reduce prey populations, increased nest site competition, and human disturbance at nests (Dunk 1995 - cited in Moore 2000).

**Current Health.** The white-tailed kite is a State of California Fully Protected species that is generally found in open cultivated and marshy bottomlands with scattered trees, savannahs, agricultural areas with windbreaks, orchards, and roadsides. Nesting and roosting occurs in dense, broad-leaved deciduous groves of trees, with nests located near open foraging areas (Caltrans 2015b). Primary concerns include the response of white-tailed kites to reduced foraging and nesting opportunities as prey habitats are urbanized (e.g. conversion of agricultural lands), and as nest site competition increases with the loss of nesting habitats (e.g. riparian corridors and wooded grasslands). Riparian corridors represent a preferred landscape characteristic for kites in both the breeding and nonbreeding season (Erichsen 1995, cited in Moore 2000); however, California has lost over 90% of its original riparian and wetland habitat (Dahl 1990; Jensen et al. 1990; NMFS 1996a – cited in NOAA 2011). At present, kites primarily inhabit highly managed landscapes (e.g. agriculture and pastureland). Management practices that support abundant prey populations may benefit kites, while practices that reduce prey populations may represent habitat loss to kites. Land use practices that remove nest trees may adversely affect kite reproduction. The effect of pesticide use in areas inhabited by white-tailed kite is unknown (Moore 2000). A nesting occurrence of white-tailed kite was documented approximately 3 miles northwest of the Morrissey Boulevard/Route 1 intersection (Caltrans 2015b). This species is considered to be in fair health and have a stable or increasing population trend.

#### 4.15 Least Bell's Vireo

**RSA.** The RSA for least Bell's vireo (*Vireo bellii pusillus*) encompasses the RSA for riparian corridors and riparian forest habitat, plus a 200-foot buffer around those areas.

**Historical Context.** Once widespread and abundant (Cooper 1861; Anthony 1893, 1895; Fisher 1893; Grinnell and Swarth 1913; Grinnell and Storer 1924; Grinnell and Miller 1944 – cited in Kus and Miner 1989), the species underwent a dramatic decline in the post-World War II era (USFWS 1988, cited Kus and Miner 1989). It has been designated as endangered under the federal Endangered Species Act since 1986. The vireo's decline in numbers has been attributed to the loss and degradation of riparian habitat throughout the species' range, as well as to the expansion in range of the brown-headed cowbird (*Molothrus ater*), a nest parasite (USFWS 1988 - cited in Kus and Miner 1989).

**Current Health.** The least Bell's vireo is currently listed as endangered under both the federal Endangered Species Act and California Endangered Species Act. It is a southwestern subspecies of Bell's vireo and a migratory songbird that inhabits riparian woodlands in southern California and northern Baja California. Since its state and federal listing as an endangered species, the numbers of this species

have increased, and the species is expanding into its historic range (Kus 2002; USFWS 2006). Sightings of least Bell's vireo have been reported as far north as Gilroy, in Santa Clara County (Roberson et al. 1997 - cited in Kus 2002). The current health of this species is considered poor due to its listing as an endangered species, however the population has been increasing and that is expected to continue.

#### 4.16 Southwestern Willow Flycatcher

**RSA.** The RSA for southwestern willow flycatcher (*Empidonax traillii extimus*) encompasses the RSA for riparian corridors and riparian forest habitat, plus a 200-foot buffer around those areas.

**Historical Context.** Southwestern willow flycatcher (SWWF) is considered a federal and state endangered species. Similar to least Bell's vireo (described below), the SWWF requires dense riparian habitat (Caltrans 2018). This species lives in riparian areas and wetlands in the arid Southwest, including along the southern portions of the California coast. Historically, the SWWF was common in all lower elevation riparian areas of the southern third of California (Wheelock 1912, Willett 1912 and 1933, Grinnell and Miller 1944 – cited in USFWS 2002b). Additionally, historical accounts suggest that willow flycatchers were once abundant in the inland valleys and coastal regions of central and northern California (Bombay et al. 2000, cited in California Coastal Conservancy 2007).

**Current Health.** Southwestern willow flycatcher requires microclimatic conditions dictated by local surroundings such as saturated soils, standing water, or nearby stream, pools, etc. Riparian habitat that is suitable for least Bell's vireo would be expected to also be suitable for southwestern willow flycatcher. This species has been documented migrating through San Luis Obispo County; therefore, the presence of infrequent foraging individuals in the RSA for SWWF cannot be dismissed. (Caltrans 2018). The flycatcher's current range is similar to its historic range, but its population has declined because of a decrease in habitat caused by surface water diversion, groundwater pumping, changes in flood and fire regimens, and spread of non-native and invasive plants (Natural Resources Conservation Service 2016). Due to the loss of habitat, the species is considered to be in poor condition. The recovery efforts focused on this species suggest that it may be in a stable condition of poor health.

#### 4.17 American Badger

**RSA.** There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat and American badger. The definition is provided above, under Pallid Bat.

**Historical Context.** American badger (*Taxidea taxus*) is a California Species of Special Concern that occurs as far north as Alberta, Canada, and as far south as central Mexico. The species' range extends from the Pacific Ocean on the west through Ohio on the east, although American badger is absent from humid coastal forests and other regions with dense forests, including humid forests of the northwestern part of California (in Del Norte and northwest Humboldt counties). The species once ranged throughout the rest of California but now survive in low numbers and have been extirpated from many areas of Southern California. By 1937 American badger populations had been reduced throughout California, although they remained numerous in the Central Valley. By 1986 they were found to survive only in low numbers in peripheral parts of the Central Valley and adjacent lowlands in eastern Monterey, San Benito, and San Luis Obispo counties. Agricultural and urban development have been the primary causes of decline and extirpation within California. Other factors include deliberate killing (due to the perception of badgers as a nuisance or due to trapping for their fur), direct or secondary poisoning (i.e. poisoning

badgers directly or the poisoning of badgers that results when their prey are poisoned), and elimination of the food on which badgers are dependent (Williams 1986).

**Current Health.** Along the coast, from Mendocino County south, American badger has been substantially reduced in numbers (Williams 1986). The species is somewhat tolerant of human activities, however predator control using indiscriminate trapping and persistent poisons causes extensive losses (Zeiner et al. 1990). An occurrence of American badger was documented approximately 2.5 miles west of the Morrissey Boulevard/Route 1 intersection at UC Santa Cruz (Caltrans 2015b). Given historic population declines and continuing threats, the health of this resource is considered to be poor. Given continued threats from habitat loss and human activities the population may continue to decline.

#### 4.18 Coast Live Oak Woodland Habitat

**RSA.** There is one RSA for coast live oak woodland and monarch butterfly. It encompasses the riparian forest RSA (described above), the oak woodland habitat mapped within the BSA, and areas of open land immediately surrounding New Brighton State Park and from Freedom Boulevard to San Andreas Road, extending from the Pacific shore to the ridgeline above Route 1. Although monarch butterflies are not known to use coast live oak trees for overwintering habitat, the RSA encompasses wooded areas, which are likely to include some areas of coast live oak woodland, as well as eucalyptus woodland and mixed conifer woodland which do provide overwintering habitat for monarch butterfly. For this reason, these areas were identified as the RSA for both monarch butterfly and coast live oak woodland.

**Historical Context.** The introduction of domestic grazing animals and accompanying land management practices since the Mission Period (1769 - 1824) brought changes to the herbaceous understory of coast live oak woodlands from perennial species to aggressive, introduced annuals, which may out-compete young oaks for limited supplies of nutrients and moisture. As a result, over time, well-developed oak woodlands have regressed to open woodlands or savannas and eventually to disturbed grasslands. Woodcutting has also resulted in a loss of habitat, because oaks have not successfully reinvaded after removal. Land clearing and urban expansion have also destroyed extensive stands of coastal oak woodland (Holland 1988).

**Current Health.** Coast live oak woodland is present in the project corridor along upper creek bank areas and within undeveloped areas such as along roadsides (Caltrans 2015b). Coastal oak woodlands occur through the coastal regions of the northern and southern coast range. The woodlands do not form a continuous belt, but occur in a mosaic closely associated with habitats such as coastal scrub and annual grasslands (AMBAG 2014). Near the immediate coast they occur at elevations just above sea level (Holland 1988). Because development, land management practices, and competition from invasive species have reduced the area of Coast Live Oak Woodland in the RSA, this resource appears to be in poor health. Though local laws and regulations may decrease the future impact of development, the health of this resource may continue to decline given the remaining threat of invasive species.

#### 4.19 Monarch Butterfly

**RSA.** There is one RSA for coast live oak woodland and monarch butterfly. It is described in Section 4.18, Coast Live Oak Woodland.

**Historical Context.** Historically, western populations of monarch butterfly overwintered in Monterey pine forests; however, urbanization, aging of the trees, and environmental stresses have caused a decline of

this habitat. The initial introduction of Australian eucalyptus trees in California in the 1850s affected traditional overwintering patterns by providing a tree that is not only well-suited to sheltering Monarch clusters, but also provides the butterflies with a convenient nectar source since it blooms in winter (City of Pacific Grove 2016). The numbers of monarchs recorded at the overwintering sites in California have declined since the 1990s (Monarch Watch 2016).

**Current Health.** Monarch butterfly (*Danaus plexippus*) is identified as a Special Animal in the California Natural Diversity Database (CNDDB). In October 2015, the passage of California Assembly Bill (AB) 559 resulted in the amendment of the California Fish and Game Code to allow CDFW to "...take feasible actions to conserve monarch butterflies and the unique habitats they depend upon for successful migration." Toward this end, CDFW "shall use the best available science" to restore or revegetate milkweed habitat, nectar plants, and wintering habitats. Under AB 559, CDFW is also responsible for increasing the number of partnerships involving both public and private entities to promote monarch conservation (Yakich 2016). Monarch butterflies from west of the Rocky Mountains spend the winter along the California coast. Overwintering sites occur in dense, wind-protected tree groves (e.g., eucalyptus [*Eucalyptus spp.*], Monterey pine, and Monterey cypress) near the coast from northern Mendocino to Baja California (Sakai 2007, CNDDB 2012 – cited in Caltrans 2015b). Monarchs face many threats that are resulting in declining populations in both the eastern and western parts of their North American range. The largest impacts come from the loss of habitat for breeding, migrating, and overwintering. In addition, pesticides that are used to control insects and weeds have harmful unintended consequences for monarchs, a changing climate may be reducing the suitability of some habitat and forcing changes in migratory patterns, and monarchs face natural threats such as predators, parasitoids, and diseases. The loss of milkweed in agricultural fields is a major cause of decline in monarchs. Other factors contributing to a decline in milkweed availability include herbicide application and increased mowing in roadside ditches and agricultural margins. Urban sprawl and continuing industrial development are also major factors influencing the decline in quality monarch habitat. Other anthropogenic factors, such as ozone pollution or increased carbon dioxide levels, can affect the health and distribution of milkweed plants (USFWS 2016a).

Given historic habitat loss and recent population declines, the current health of this resource is poor. Monarch populations are impacted by habitat loss and land use practices in the RSA and elsewhere (including other states and countries) due to their migration patterns. Efforts to monitor, protect and improve habitat for this species are underway though threats remain, therefore the health of this resource is expected to remain poor but stabilize.

#### 4.20 Coastal Scrub Natural Community

**RSA.** The RSA for the coastal scrub natural community encompasses the areas of coastal scrub that are mapped within the Tier I and Tier II projects' BSA and extends beyond these areas to include the open land immediately surrounding New Brighton State Park. It also includes open land from Freedom Boulevard to San Andreas Road, extending landward from the Pacific shore to an elevation of 1,640 feet above sea level, or the first ridgeline, whichever is lower in elevation. Because of the tendency for coastal scrub to occur in pockets and intersperse among other habitat types, this RSA also encompasses the riparian forest/riparian corridor RSA, so that it also includes those areas of undeveloped land. In cases where there is open land adjacent to the riparian corridor, the coastal scrub RSA also encompasses those areas, as identified through aerial imagery. The RSA for coastal scrub is located within the Central

Coast Bioregion identified by the California Biodiversity Council. Coastal areas within this bioregion have a mild, seasonally moist climate suitable for agriculture as well as dense areas of coastal scrub.

**Historical Context.** The majority of California's population lives in the coastal region, where coastal scrub and other coastal habitat types are a dominant feature of the natural landscape. On a statewide level, urban development in coastal areas has resulted in large-scale conversion of coastal scrub and other shrubland habitats, which are characterized by low rates of photosynthesis in the summer and production of nutrient-rich foliage in the winter and early spring, which coincides with the bird breeding season in these areas. (California Partners in Flight 2004). European settlement in the 1800s resulted in the conversion of coastal scrub to pasture for domesticated livestock and other agricultural use. Historic aerial photos show that by the early 20<sup>th</sup> Century, agriculture had become dominant throughout much of the coastal plain, interspersed with remnant areas of coastal scrub. Further loss of coastal scrub is visible in more recent aerial photographs as urban development has occurred on former agricultural land as well as former areas of coastal scrub (Caltrans 2013a).

**Current Health.** The Coastal Scrub natural community currently occurs discontinuously in a narrow strip throughout the length of California, usually occurring within about 20 miles of the ocean, at elevations ranging from sea level to about 3,000 feet. Coastal scrub communities typically occur in pockets in the outer and inner southern coastal ranges and in scattered areas along the immediate coast (De Becker 1988). Threats to the coastal scrub natural community include increasing sprawl from the San Francisco Bay area and growing urbanization from the Monterey Bay area, as well as fire, invasion by exotic plants, air pollution, fragmentation and inappropriate grazing (California Partners in Flight 2004). Because development and agriculture in coastal areas has decreased the area of coastal scrub in the RSA, this resource appears to be in poor health. Local laws and regulations relating to development suggest the health of this resource will be stable, but remain poor.

#### 4.21 Visual Resources

**RSA.** The visual resource study area encompasses the North Branciforte Avenue overcrossing of Route 1 on the north, and the Mar Monte Avenue overcrossing of Route 1 on the south. On the inland side of Route 1, the study area extends to the first ridgeline above the highway, tapering down to encompass only properties adjacent to the highway south of the southern project terminus. On the seaward side of Route 1, the visual RSA extends approximately 0.5 miles from Route 1, except in locations where there are visual obstructions due to topography, development, and vegetation. In those locations the visual RSA extends only to properties adjacent to the highway.

**Historical Context.** The visual RSA is located on a coastal plain where the San Lorenzo River flows into the northern end of Monterey Bay and on a series of terraces that rise from the Pacific Ocean. The incorporated City of Capitola is located east of the City of Santa Cruz, south of State Route 1, and borders on the Pacific Ocean. State Route 1 separates the city from its unincorporated neighbor to the north, Soquel. Soquel Creek runs south and empties into Monterey Bay, providing a forested riparian corridor that bisects Capitola and Soquel villages which historically consisted of small village centers connected by two-lane rural roads that traversed agricultural fields. The unincorporated community of Aptos is located east of Soquel and Capitola, was slower to experience development than its neighbors to the west. Aptos also has a narrower area of coastal plain, with mountainous terrain extending closer to Monterey Bay. State Route 1 bisects Aptos, with the original village located north of the freeway off Soquel Drive. Aerial photographs from 1931 and 1948 show that the Route 1 corridor was mainly agricultural, with scattered residential development occurring throughout the predominant agricultural use

(Caltrans 2013a). Historically, the RSA was rural in appearance, with agricultural fields interspersed with coastal plains and riparian forest. Development in the area expanded as the City of Santa Cruz grew from a population of 950 in 1860, to roughly 14,000 in 1930, and to over 60,000 in recent years. Santa Cruz County residents' desire to protect agricultural and environmental resources was a contributing factor in the initiation of the County's growth management policies in 1978 (County of Santa Cruz 1994).

**Current Health.** The RSA for visual resources is characterized by urban and suburban development, landscape trees and forested land, with rugged coastal mountains inland. The extensive forest cover of the Santa Cruz Mountains, including stands of coast redwoods, provides a distinct visual feature within Santa Cruz County. The Santa Cruz Mountains are the southern edge of coast redwood habitat in California. The mid-County coastal terraces are urbanized and contain a large portion of the County's population, while the alluvial south County is mainly in agricultural use. Along the coastal terraces from the City of Santa Cruz to Aptos, the aesthetic character of urban areas is influenced by coastal vistas and stream valleys running southward from the Santa Cruz Mountains. The City of Santa Cruz includes a mix of small-scale residential neighborhoods, a more intensively developed downtown, and automobile-oriented commercial corridors (AMBAG 2014). The health of the visual environment has been adversely affected by urban and suburban development that has reduced the rural and scenic character that has historically attracted, and continues to attract tourists to coastal Santa Cruz County. Compared with the visual environment of the 1950s, the RSA is vastly altered with extensive areas of urban and suburban development filling in areas of former farmland. Since the 1970s, growth controls have been implemented, and some areas of natural habitat and agricultural uses have been preserved. Development projects continue to remove trees, and intensify the urban and suburban character that typifies much of the visual RSA; however, land use policy is now prioritizing infill development, and tree ordinances require replacement of trees that are removed. The sweeping changes that have affected the visual environment indicate that this resource is in poor health. The public will to protect the visual environment and strengthened policies, even as development continues, suggests that the trend is for conditions to remain in a stable condition of poor health.

#### 4.22 Water Quality and Stormwater

**RSA.** There is one RSA for water quality and stormwater, riverine/freshwater marsh habitat, wetlands, and waters of the US. This RSA is described in Section 4.1, Riverine/Freshwater Marsh.

**Historical Context.** Historical aerial photos of the creeks and lagoons in the RSA show that at least through 1964 development along many of these resources was interspersed with agricultural and undeveloped land. By 1977, much of these developed areas had filled in and much of the watersheds were heavily urbanized, similar to current conditions (Caltrans 2013a). Development introduced extensive areas of impervious surfaces, which increased the rate and volume of runoff entering the creeks causing creeks to experience erosion and channel incision as they adapted to greater volumes of water and higher intensity flows during the wet season. In some areas, the use of groundwater adversely affected stream flow during the dry season (County of Santa Cruz 2016). Water quality was degraded by polluted runoff from roads and parking lots, and, in some areas, from leaking sanitary sewers and poorly maintained septic systems, and pet and livestock waste (CCRWQCB 2009a, 2009b).

**Current Health.** A number of water bodies in the RSA are impaired for various pollutants. Rodeo Creek Gulch and Soquel Creek are identified as impaired for turbidity. Rodeo Creek Gulch is impaired for pH, Soquel Lagoon, Soquel Creek, Noble Gulch, Aptos Creek, Valencia Creek, and Trout Gulch are listed as impaired for pathogens. Aptos Creek, Soquel Lagoon, and Valencia Creek are identified as impaired for

sedimentation/siltation (Caltrans 2013b). Water quality impacts on various water resources in the RSA include land disposal, septage disposal, unspecified nonpoint source, storm drain discharges, sanitary sewer collection system spills and leaks, private sewer laterals, domesticated animal waste discharges (including pets and livestock), and homeless person/encampment discharges (Caltrans 2013b, CCRWQCB 2009a). Additional challenges for local water bodies include excessive sedimentation, low stream flow resulting from over-pumping of groundwater in the region, and loss of channel complexity (County of Santa Cruz 2016). Throughout much of the RSA the extensive impacts to water quality indicate that this resource is in poor health. Various water bodies in the RSA are not listed as impaired, including Valencia Lagoon, Tannery Gulch, Borregas Creek, and Ord Gulch. The City of Capitola's Local Coastal Program (LCP) observes that, despite a history of adverse impacts, the riparian corridors in the City still provide valuable cover for birds and mammals, including raccoon and deer (City of Capitola 2005). Despite these positive observations, and despite the Regional Water Quality Control Board's adoption of Total Maximum Daily Loads for various impaired water bodies, given the extent of impacts that have occurred and the large number of water bodies that remain impaired, the trend appears to be remaining in a stable condition of poor health.

#### 4.23 Pallid Bat

**RSA.** There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat and American badger. This RSA encompasses the areas of grassland, riparian forest, and oak woodland habitat mapped within the BSA, and extends downstream to the Pacific Coast and upstream to ridgelines above the urbanized areas encompassing a 3-mile buffer of the streams that the Tier I or Tier II projects cross. The RSA includes areas of open land immediately surrounding New Brighton State Park, as well as open land from Freedom Boulevard to San Andreas Road, extending from the Pacific shoreline to the ridgeline above Route 1, and extending 3 miles south of the southern terminus of the proposed project.

**Historical Context.** A serious decline in pallid bat populations has been documented in California's South Coast. Patterns observed in the decline led researchers to conclude that the species appears to be intolerant of urban development (Miner and Stokes 2005). Threats to this species have been identified as including disturbances of roost sites, recreational activities such as rock climbing, reduction in food availability due to pesticides or habitat modification or degradation, and secondary poisoning as a result of eating contaminated prey (CEC 2012).

**Current Health.** Pallid bat (*Antrozous pallidus*) is a California Species of Special Concern that is known to be widespread throughout the western United States; southern British Columbia, Canada; and mainland and Baja California, Mexico. Within the United States, it ranges east into southern Nebraska, western Oklahoma, and western Texas. The pallid bat occurs throughout California, except at the highest elevations of the Sierra Nevada range (California Energy Commission [CEC] 2012). An occurrence of pallid bat was documented at Soquel Creek within the biological study area (BSA) of the Tier I and Tier II project (Caltrans 2015b). While global populations are believed to be stable, populations in California are thought to have declined in recent decades may face further declines due to continued threats from development, climate change, and disease (CEC 2012). Research findings regarding the natural history of bat species found along the California Central Coast, presented at the 2014 Carrizo Colloquium in San Luis Obispo, California, included the reporting of declining population trends in 10 colonies of pallid bat in Santa Clara County, California (Johnston 2014). It has been noted that loss or modification of foraging habitat due to prescribed fire, urban development, agricultural expansion, and/or pesticide use pose potential threats to pallid bat in locations such as coastal California, where urbanization has reduced



roosting and foraging habitat (Sherwin and Rambaldini 2005). Visual and acoustical surveys conducted for bats prior to the demolition of a barn structure at 3800 Portola Drive in Santa Cruz did not result in the identification of any sign of pallid bats (Central Coast Bat Research Group 2015).

#### 4.24 Hoary Bat

**RSA.** There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat and American badger, described above under Pallid Bat.

**Historical Context.** The hoary bat is the most widespread of all North American bat species. Hoary bat does not have state or federal sensitive status. Although it is not a California Department of Fish and Wildlife (CDFW)-designated special status species, it is tracked in the California Natural Diversity Database (CNDDDB), and various agencies and groups, such as the Western Bat Working Group, have established status designations providing guidelines for the protection of bat species without actually providing any extra-legal protection (Caltrans 2015b). The CNDDDB's one recorded occurrence of hoary bat in Santa Cruz County dates back to 1940. This occurrence was along Soquel Creek, in the vicinity of Neary Lagoon (CDFW 2017a). Little is known about hoary bat, and, unlike other bat species that frequently roost in buildings, hoary bats do not roost in buildings and structures and are seldom found in urban settings (Bat Conservation International 1995). Therefore, the urbanization of the RSA may have been a factor in the lack of recorded occurrences of this species since 1940. Factors that may contribute to the rarity of hoary bat occurrences in urbanized settings have been hypothesized. In suburban settings, this species may be subject to predation by jay birds, which thrive in association with humans (Western Bat Working Group 2017). Acoustical monitoring of bats at a large-scale solar panel installation in Southern California has suggested that the presence of buildings might increase hoary bat's collision rate (Johnston 2014).

**Current Health.** The hoary bat (*Lasiurus cinereus*) occurs throughout the United States (except for the southern tip of Florida), throughout central and eastern of Canada, and in Central Mexico. It generally roosts in the foliage of medium to large trees and loss of roosting habitat due to timber harvest is likely a main threat to this species. Pesticide use on public forest lands may be a potential source of mortality to roosting bats and their insect prey. They have also been found impaled on barbed wire fences and are subject to disturbances of their day roosts in trees (CEC 2012). In addition to the occurrence of hoary bat was at Soquel Creek, described above, multiple CNDDDB occurrences for this species are documented for Monterey County (CDFW 2017a). Visual and acoustical surveys conducted for bats prior to the demolition of a barn structure at 3800 Portola Drive in Santa Cruz did not result in the identification of any sign of hoary bats (Central Coast Bat Research Group 2015). The species is migratory and therefore any bats residing in the RSA would also be impacted by human activities in other areas of the state. Based on the limited available information about this species, it appears to have relatively good health and be in stable condition.

#### 4.25 Townsend's Big-Eared Bat

**RSA.** There is one RSA for pallid bat, hoary bat, Townsend's big-eared bat and American badger. The definition is provided above, under Pallid Bat.

**Historical Context.** The Townsend's big-eared bat (*Corynorhinus townsendii*) is found throughout California, but specific details of its distribution are not well-documented (CDFW 2000). Human activities

in the late 1800s such as mining and building construction removed areas of old-growth conifers, a known roosting site of Townsend's big-eared bat; however, these activities also created new roosting habitat in mines and building structures (Sherwin et al. 2009 – cited in CDFW 2016). In 1986, *P. townsendii* was designated a Species of Special Concern in California, based on the limited data that was available at the time, which indicated that the species was declining (Williams 1986, as cited in CDFG 1988). A study conducted in 1987-1988 involved surveying a 15 kilometer radius for each of 12 sites of known maternity colonies in ten counties of California. The survey found that there was a 46.2% decline in the number of colonies for the surveyed areas in the preceding 50 years (CDFW 2018). A 1998 study that summarized surveys of Townsend's big-eared bat maternity colonies and hibernacula throughout much of the species' range in California during the period from 1987 to 1991 inferred that the population of this species had declined over the several decades before the study, compared with original site reports from the period of 1918 to 1974 (Pierson and Rainey 1998 – cited in CDFW 2016).

**Current Health.** Townsend's big-eared bat's perceived susceptibility to human disturbance at roost sites is usually cited as a key behavioral characteristic putting the species at conservation risk (Twente 1955, Barbour and Davis 1969, Humphrey and Kunz 1976 – cited in CDFW 2016). While the mortality rate among juveniles is fairly high, females that return to their natal roost after their first winter have approximately a 75 percent chance of survival in each succeeding year, with the average age of an individual being 5 years (Pearson et al. 1952, as cited in CDFG 1988). The California Department of Fish and Wildlife has funded a new statewide survey targeting known and highly-suitable locations for maternity and hibernation roosts (CDFW 2016). Based on the limited available information about this species, it appears to be a condition of poor health, and there is potential that conditions in California are declining.

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Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix E

Step 4 Technical Memorandum



## **Technical Memorandum**

**To:** Parag Mehta, Kimley Horn

**From:** Laura Prickett and Johnnie Chamberlin

**Date:** January 16, 2018 (Updated June 28, 2018)

**Re:** **Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis – Step 4**

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### **1.0 Purpose and Organization of this Memorandum**

This memorandum documents the findings of Step 4 of Caltrans' eight-step cumulative impact analysis methodology for the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project (Tier I/Tier II Project).

Step 4 of the cumulative impact analysis is to identify direct and indirect impacts of the proposed project that might contribute to a cumulative impact. This memorandum provides an introduction to the project and requirement for this analysis, a description of the methodology used in Step 4, and a description of the impacts of the proposed project that may contribute to a cumulative impact.

### **2.0 Introduction**

The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 to 2021, upon approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition. A complete description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a).

Cumulative impacts of the proposed improvements are evaluated in the Draft EIR/EA; however, this current analysis is being conducted as a result of public comments on the Draft EIR/EA, which circulated in November 2015. As requested by Caltrans, this analysis uses the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration

(Caltrans 2016), to confirm that all cumulative impacts are adequately addressed. This memorandum presents the results of Step 4 of the analysis. The information presented in this memorandum is based primarily on information presented in the Draft EIR/EA and its supporting technical studies (Caltrans 2015c).

### 3.0 Methodology

To identify direct and indirect impacts of the proposed project that might contribute to a cumulative impact, Horizon reviewed the impacts identified in the Draft EIR/EA, and its supporting technical studies. Horizon also reviewed the public comments submitted on the Draft EIR/EA that pertain to the resources addressed by the cumulative impacts analysis, and the technical study addenda that have been prepared to address issues identified in public comments that required further analysis. For each impact of the proposed project, Horizon considered the specific contributions to cumulative impacts that could result from the Tier I and Tier II projects. The results are presented in Section 4 of this memorandum. Please note that, while the Tier I Project overlaps the entire Tier II Project area, impacts from each Tier were totaled exclusive of each other to avoid double-counting.

### 4.0 Summary of Impacts

The direct and indirect impacts of the proposed project that might contribute to a cumulative impact are discussed below, by resource topic area. The 25 resource topic areas are presented in the sequence established in the Cumulative Impact Analysis Step 1 Memorandum, although some resources are grouped together for discussion, based on the similarity of impacts. Additionally, a 26<sup>th</sup> topic, Environmentally Sensitive Habitat Area (ESHA) Policies is addressed in Step 4, to discuss policies regarding Environmentally Sensitive Habitat Areas, based on information presented in Section 2.1.1, Land Use, of the Draft EIR/EA. Table 4-1 presents the 25 resource topic areas included in the cumulative impact analysis, indicating those that have been identified as or encompass ESHAs, and listing the section of this memorandum that addresses the resource.

**Table 4-1. Resources Considered in the Cumulative Impact Analysis**

Resource No.	Resource Name	Resources Identified as or Encompassing ESHAs	Section of Memorandum
1	Riverine/freshwater marsh	✓	4.1
2	Wetlands and other waters	✓	4.2
3	Tidewater goby		4.3
4	Central California coastal steelhead		4.4
5	California tiger salamander		4.5
6	Santa Cruz long-toed salamander		4.5
7	California red-legged frog		4.6
8	Foothill yellow-legged frog	✓	4.7
9	Western pond turtle	✓	4.7
10	Riparian forest	✓	4.8
11	Cooper's hawk	✓	4.9
12	Tricolored blackbird		4.10
13	Short-eared owl	✓	4.9
14	White-tailed kite		4.10
15	Least Bell's vireo		4.11

Resource No.	Resource Name	Resources Identified as or Encompassing ESHAs	Section of Memorandum
16	Southwestern willow flycatcher		4.11
17	American badger	✓	4.12
18	Oak woodland		4.13
19	Monarch butterfly		4.14
20	Coastal scrub	✓	4.15
21	Visual resources		4.16
22	Water quality and stormwater	✓	4.17
23	Pallid bat	✓	4.18
24	Hoary bat	✓	4.18
25	Townsend's big-eared bat	✓	4.18

## 4.1 Riverine/Freshwater Marsh Natural Community

### 4.1.1 Tier I Corridor Alternatives

Both Tier I Corridor Alternatives would have both permanent and temporary impacts on natural communities. Table 4.1-1 presents the permanent and temporary impacts that would occur to riverine/freshwater marsh as a result of each of the Tier I Corridor Alternatives.

**Table 4.1-1: Riverine/Freshwater Marsh Natural Community –  
Impacts of the Tier I Corridor Alternatives**

Natural Community	HOV Lane Alternative: Permanent and Temporary Impacts (acres)	TSM Alternative Permanent and Temporary Impacts (acres)
Riverine/Freshwater Marsh	1.08	0.30
Source: Caltrans 2015b		

### 4.1.2 Tier II Auxiliary Lane Alternative

Table 4.1-2: identifies the impacts that would occur to the riverine/freshwater marsh natural community under the Tier II Auxiliary Lane Alternative. This table breaks down the impacts according to whether they are permanent or temporary.

**Table 4.1-2: Impacts to Riverine/Freshwater Marsh Natural Community – Tier II Auxiliary Lane  
Alternative**

Natural Community	Tier II Auxiliary Lane Alternative (in acres)	
	Permanent	Temporary
Riverine/Freshwater Marsh	0.02	0.06
Source: Caltrans 2015b		

#### 4.1.3 No Build Alternative

There would be no impact to the riverine/freshwater marsh natural community habitat areas under the No Build Alternative.

## 4.2 Wetlands and Other Waters

### 4.2.1 Tier I Corridor Alternatives

The Tier I Corridor Alternatives have the potential to cause permanent and temporary impacts to U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Local Coastal Plan/California Coastal Commission jurisdictional areas associated with nine creeks and drainages that cross, or are adjacent to, Route 1. It is not possible to avoid impacts to wetlands and other waters entirely because the highway already crosses these nine water courses. The permanent and temporary impacts would result from similar activities for both Tier I Corridor Alternatives; however, the impacts would be lesser under the TSM Alternative. Permanent impacts would result from changes in bank configuration, loss of riparian habitat associated with road widening and culvert extensions, realignment of existing roadways, and construction of new road sections. Temporary impacts would result from stream diversion installation and removal, streambed disturbance during culvert removal and replacement, removal and reconstruction of roadside ditches, vegetation removal, and road construction. Impacts resulting from the Tier I Corridor Alternatives are summarized in Table 4.2-1.

**Table 4.2-1 Tier I Corridor Alternatives  
Potential Impacts to Wetlands and Other Waters of the United States**

Jurisdictional Area	Permanent (acres)	Temporary (acres)
<b>HOV Lane Alternative</b>		
U.S. Army Corps of Engineers Wetlands	0.78	0.22
U.S. Army Corps of Engineers Other Waters	0.15	0.10
Jurisdiction of Local Coastal Plan approved by Coastal Commission <sup>1</sup>	3.22	0.46
California Department of Fish and Wildlife jurisdiction <sup>2</sup>	8.98	1.41
<b>TSM Alternative</b>		
U.S. Army Corps of Engineers Wetlands	0.23	0.03
U.S. Army Corps of Engineers Other Waters	0.10	0.02
Jurisdiction of Local Coastal Plan approved by Coastal Commission <sup>1</sup>	2.20	0.33
California Department of Fish and Wildlife jurisdiction <sup>2</sup>	3.58	0.95
<sup>1</sup> Local Coastal Plan/California Coastal Commission jurisdiction includes U.S. Army Corps of Engineers areas.		
<sup>2</sup> California Department of Fish and Wildlife jurisdiction includes U.S. Army Corps of Engineers areas.		

### 4.2.2 Tier II Auxiliary Lane Alternative

Road widening, retaining wall, and soundwall construction may require the placement of pilings, abutments, or other supports, or fill placement that could permanently impact jurisdictional waters. Potential impacts to streamside vegetation could result from grading, excavation, materials placement,

temporary dewatering, hazardous material spills, and increased erosion and sedimentation. Water quality degradation could result from concrete spills, fuel spills, or excessive project-related sedimentation, which could adversely impact wetland habitats or other waters. The Tier II Auxiliary Lane Alternative impacts to jurisdictional areas are summarized in Table 4.2-1 and discussed below.

**Table 4.2-2: Tier II Auxiliary Lane Alternative  
Potential Impacts to Wetlands and Other Waters of the United States**

<b>Jurisdictional Area</b>	<b>Permanent (acres)</b>	<b>Temporary (acres)</b>
U.S. Army Corps of Engineers Wetlands	0.0	0.0
U.S. Army Corps of Engineers Other Waters (ditch adjacent to the Soquel Drive-In)	0.02	0.06
California Department of Fish and Wildlife jurisdiction* (Rodeo Creek Gulch and ditch adjacent to the Soquel Drive-In)	0.15	0.15
* California Department of Fish and Wildlife jurisdiction includes U.S. Army Corps of Engineers areas.		

#### **Rodeo Creek Gulch**

Proposed permanent and temporary impact areas at Rodeo Creek Gulch consist of roadway widening and retaining wall construction on existing road berm areas directly above and draining into the channel of Rodeo Creek Gulch. No work is proposed within the active channel area (U.S. Army Corps of Engineers jurisdiction) of Rodeo Creek Gulch itself. The gulch through which the creek flows contains riparian forest canopy, and all jurisdictional impacts would consist of loss of riparian trees and riparian canopy area (California Department of Fish and Wildlife jurisdiction).

#### **Ditch Adjacent to the Soquel Drive-In**

Proposed permanent and temporary impact areas at the ditch adjacent to the former Soquel Drive-In theater consist of roadway widening and retaining wall construction that would encroach into the active channel of this seasonal roadside ditch. This area contains defined bed and bank structure, and it directs runoff to Rodeo Creek Gulch. Jurisdictional impacts at the ditch adjacent to the Soquel Drive-In would consist of loss of bed and bank/other waters habitat (California Department of Fish and Wildlife and U.S. Army Corps of Engineers jurisdiction).

#### **4.2.3 No Build Alternative**

The No Build Alternative would have no impact on wetlands and other waters.

### **4.3 Tidewater Goby**

#### **4.3.1 Tier I Corridor Alternatives**

The Tier I Corridor Alternatives have the potential to temporarily and permanently affect waters of the United States, as reported in Section 4.2, Wetlands and Other Waters. Potential impacts to tidewater goby are listed below. Permanent impacts are likely to be minimal.

- Permanent loss of habitat due to placement of fill for bridges or other structures within the wetted portions of streams.

- Direct impacts to the species in the form of injury or mortality resulting from dewatering/diversion and construction in aquatic areas inhabited by tidewater goby.
- Stranding of individual tidewater gobies in dewatered areas, potentially resulting in mortality if animals are not detected and safely captured and relocated promptly.
- Indirect impacts, such as temporary dewatering/diversion that would disrupt normal flows, temporarily and perhaps permanently affecting the structure of the streambed substrate, which could affect tidewater goby microhabitats.
- Temporary and/or permanent impacts to vegetation along tidewater goby critical habitat in Aptos Creek, which may offer shade and microhabitat temperature regulation in the channel.
- Introduction of silt/sedimentation, dewatering/diversion, and streambank erosion of tidewater goby critical habitat in Aptos Creek could have adverse impacts to downstream water quality and habitat for tidewater goby.

#### **4.3.2 Tier II Auxiliary Lane Alternative**

The Tier II Auxiliary Lane Alternative has the potential to temporarily and permanently affect waters of the United States, as reported in Section 4.2, Wetlands and Other Waters. The Tier II Auxiliary Lane Alternative project would not affect tidewater goby critical habitat. Potential impacts to tidewater goby are listed below.

- Permanent loss of habitat due to placement of fill for bridges or other structures within the wetted portions of streams. Permanent impacts of 0.02 acre of habitat loss and temporary impacts of 0.06 acre of habitat loss are anticipated.
- Direct impacts to the species in the form of injury or mortality resulting from dewatering/diversion and construction in aquatic areas inhabited by tidewater goby.
- Stranding of individual tidewater gobies in dewatered areas, potentially resulting in mortality if animals are not detected and safely captured and relocated promptly.
- Indirect impacts, such as temporary dewatering/diversion that would disrupt normal flows, temporarily and perhaps permanently affecting the structure of the streambed substrate, which could affect tidewater goby microhabitats.
- The Tier II Auxiliary Lane Alternative would include retaining walls designed to span Rodeo Creek Gulch, which are anticipated to impact areas of riparian forest under the jurisdiction of California Department of Fish and Wildlife; however, the walls would not result in fill of freshwater marsh/riverine that provides habitat for tidewater goby.

#### **4.3.3 No Build Alternative**

The No Build Alternative would have no impact on tidewater goby.



## **4.4 Central California Coast Steelhead**

### **4.4.1 Tier I Corridor Alternatives**

Potential impacts to central California coast steelhead resulting from either Tier I Corridor Alternative are listed below.

- Temporary and/or permanent impacts on central California coast steelhead critical habitat.
  - The project may affect vegetation along Arana Gulch, Aptos Creek, and Soquel Creek and tributaries, which may offer shade and microhabitat temperature regulation in the channel.
  - Temporary “loss of service” of steelhead habitat due to construction activities, dewatering/ diversion, and streambank erosion, which could introduce silt/sedimentation into Aptos Creek, potentially leading to adverse impacts to downstream water quality and habitat for steelhead.
- Potential project-related impacts to steelhead are expected to be similar to those described above for the tidewater goby.
- Dewatering/diversion that would disrupt normal flows could result in indirect impacts that could affect the structure of the streambed substrate. This could be particularly detrimental to steelhead, which uses streambed gravels and cobbles for spawning and rearing of young.

### **4.4.2 Tier II Auxiliary Lane Alternative**

Due to a lack of suitable habitat in the Tier II study area, the Tier II Auxiliary Lane Alternative would result in no impact to central California coast steelhead.

### **4.4.3 No Build Alternative**

The No Build Alternative would have no impact on central California coast steelhead.

## **4.5 California Tiger Salamander and Santa Cruz Long-toed Salamander**

These species are addressed together because they utilize the same types of habitat.

### **4.5.1 Tier I Corridor Alternatives**

The Tier I Corridor Alternatives will avoid construction activities in Valencia Lagoon, as well as areas of upland habitat that may be utilized by California tiger salamander (CTS) and Santa Cruz long-toed salamander (SCLTS). Minor lane/shoulder widening along the southbound lanes adjacent to the lagoon/channel would be limited to impervious gravel areas identified during the field surveys. Valencia Lagoon, Valencia Channel, and areas of upland habitat for SCLTS would be identified as environmentally sensitive areas in which construction impacts would be avoided. Because of the fully protected status of the SCLTS, all impacts will be avoided.

#### **4.5.2 Tier II Auxiliary Lane Alternative**

Due to a lack of suitable habitat in the Tier II study area, the Tier II Auxiliary Lane Alternative would result in no impact to California tiger salamander and Santa Cruz long-toed salamander.

#### **4.5.3 No Build Alternative**

The No Build Alternative would have no impact on California tiger salamander and Santa Cruz long-toed salamander.

### **4.6 California Red-Legged Frog**

#### **4.6.1 Tier I Corridor Alternatives**

Both Tier I Corridor Alternatives have potential to affect habitat for California red-legged frog, which is known to inhabit wetlands and riverine/freshwater marsh and riparian forest areas. Placement of retaining walls, bridge supports, or other highway-related facilities in aquatic or riparian areas or dewatering in these areas could affect habitat for California red-legged frog or result in incidental take if frogs were present in the project vicinity during construction. It is not possible to avoid these areas entirely because the existing Route 1 crosses nine streams and watercourses, some of which meander longitudinally along the roadway. The Tier I Corridor Alternatives project area does not include designated critical habitat units for California red-legged frog. Impacts to potential habitat for this species are quantified as follows:

- Tier I HOV Lane Alternative: 9.96 acres
- Tier I TSM Alternative: 4.88 acres

#### **4.6.2 Tier II Auxiliary Lane Alternative**

The Tier II Auxiliary Lane Alternative has potential to affect habitat for California red-legged frog, which is known to inhabit wetlands and riverine/freshwater marsh and riparian forest areas. Placement of retaining walls or other highway-related facilities in aquatic or riparian areas or dewatering in these areas could affect habitat for California red-legged frog or result in incidental take if frogs were present in the project vicinity during construction. The Tier II project area does not include designated critical habitat units for California red-legged frog. Impacts to potential habitat for this species are quantified as follows:

- Permanent impact: 0.15 acre
- Temporary impact: 0.15 acre

#### **4.6.3 No Build Alternative**

The No Build Alternative would have no impact on California red-legged frog.

### **4.7 Foothill Yellow-Legged Frog and Western Pond Turtle**

These species are addressed together because they utilize the same types of habitat: riverine/freshwater marsh and riparian forest.

#### **4.7.1 Tier I Corridor Alternatives**

Under either of the Tier I Corridor Alternatives, the placement of retaining walls, bridge supports, or other highway-related facilities in riparian or riverine/freshwater marsh areas or dewatering in these areas would potentially affect habitat for foothill yellow-legged frog and western pond turtle. Impacts to potential habitat for this species are quantified as follows:

- Riverine/freshwater marsh
  - Tier I HOV Lane Alternative: 1.08 acres
  - Tier I TSM Alternative: 0.30 acre
- Riparian forest
  - Tier I HOV Lane Alternative: 8.88 acres
  - Tier I TSM Alternative: 4.58 acres

#### **4.7.2 Tier II Auxiliary Lane Alternative**

Under the Tier II Auxiliary Lane Alternative, the placement of retaining walls or other highway-related facilities in riparian or riverine/freshwater marsh areas or dewatering in these areas would potentially affect habitat for foothill yellow-legged frog and western pond turtle. Impacts to potential habitat for this species are quantified as follows:

- Riverine/freshwater marsh impact:
  - Permanent: 0.02 acre
  - Temporary: 0.06 acre
- Riparian forest impact:
  - Permanent: 0.13 acre
  - Temporary: 0.09 acre

#### **4.7.3 No Build Alternative**

No direct impact on foothill yellow-legged frog and western pond turtle would result from the No Build Alternative.

### **4.8 Riparian Forest**

#### **4.8.1 Tier I Corridor Alternatives**

Both Tier I Corridor Alternatives would have both permanent and temporary impacts on the riparian forest natural community. Table 4.8-1 presents the permanent and temporary impacts that would occur to riparian forest as a result of each of the Tier I Corridor Alternatives.

**Table 4.8-1: Riparian Forest Natural Community –  
Impacts of the Tier I Corridor Alternatives**

<b>Natural Community</b>	<b>HOV Lane Alternative: Permanent and Temporary Impacts (acres)</b>	<b>TSM Alternative Permanent and Temporary Impacts (acres)</b>
Riparian Forest	8.88	4.58
Source: Caltrans 2015b		

#### **4.8.2 Tier II Auxiliary Lane Alternative**

Table 4.8-2 identifies the impacts that would occur to the riparian forest natural community under the Tier II Auxiliary Lane Alternative. This table breaks down the impacts according to whether they are permanent or temporary.

**Table 4.8-2: Impacts to Riparian Forest Natural Community – Tier II Auxiliary Lane Alternative**

<b>Natural Community</b>	<b>Tier II Auxiliary Lane Alternative (in acres)</b>	
	<b>Permanent</b>	<b>Temporary</b>
Riparian Forest	0.13	0.09
Source: Caltrans 2015b		

#### **4.8.3 No Build Alternative**

There would be no impact to the riparian forest natural community habitat areas under the No Build Alternative.

### **4.9 Cooper's Hawk and Short-Eared Owl**

These bird species are addressed together because it is expected that these species would be subjected to similar potential project-related impacts, particularly during the nesting season.

#### **4.9.1 Tier I Corridor Alternatives**

Under either of the Tier I Corridor Alternatives, the removal of vegetation and/or the removal of nests could directly affect nesting birds and any eggs or young residing in nests.

#### **4.9.2 Tier II Auxiliary Lane Alternative**

There would be no impact to Cooper's hawk and short-eared owl under the Tier II Auxiliary Lane Alternative.

#### **4.9.3 No Build Alternative**

There would be no impact to Cooper's hawk and short-eared owl under the No Build Alternative.

#### **4.10 White-Tailed Kite and Tricolored Blackbird**

These bird species are addressed together because it is expected that these species would be subjected to similar potential project-related impacts.

##### **4.10.1 Tier I Corridor Alternatives**

The removal of vegetation and/or the removal of nests could directly impact white-tailed kite and tricolored blackbird nests and any eggs or young residing in nests. As birds can be sensitive to noise disturbance, indirect impacts could also result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. Because of the fully protected status of the white-tailed kite, and state-listing of the tricolored blackbird, all impacts will be avoided.

##### **4.10.2 Tier II Auxiliary Lane Alternative**

There would be no impact to white-tailed kite and tricolored blackbird under the Tier II Auxiliary Lane Alternative.

##### **4.10.3 No Build Alternative**

There would be no impact to white-tailed kite and tricolored blackbird under the No Build Alternative.

#### **4.11 Least Bell's Vireo and Southwestern Willow Flycatcher**

These bird species are addressed together because it is expected that these species would be subjected to similar potential project-related impacts.

##### **4.11.1 Tier I Corridor Alternatives**

Least Bell's vireo and southwestern willow flycatcher would only receive impacts from the Tier I Project to the extent that impacts would occur under the Tier II Auxiliary Lane Alternative, as described below.

##### **4.11.2 Tier II Auxiliary Lane Alternative**

###### *Least Bell's Vireo*

The stratified canopy that Rodeo Creek Gulch provides would support the foraging strategy of least Bell's vireo and the dense foliage of the understory vegetation is sufficient to support nesting activity of the species. Although sightings of least Bell's vireo are rare in northern California, there is potential for the species to occur in Rodeo Creek Gulch. Focused protocol surveys according to USFWS survey guidelines will be conducted within one year prior to construction wherever suitable habitat is present within 500 feet of the limits of construction.

*Southwestern Willow Flycatcher* Southwestern willow flycatcher is considered a federal and state endangered species. Similar to least Bell's vireo (described above), the southwestern willow flycatcher



requires dense riparian habitat. Riparian habitat that is suitable for least Bell's vireo would be expected to also be suitable for southwestern willow flycatcher. Thus, there is potential for this species to occur in Rodeo Creek Gulch. Focused protocol surveys according to USFWS survey guidelines will be conducted within one year prior to construction wherever suitable habitat is present within 500 feet of the limits of construction.

#### **4.11.3 No Build Alternative**

The No Build Alternative would have no impact on least Bell's vireo and southwestern willow flycatcher.

### **4.12 American Badger**

#### **4.12.1 Tier I Corridor Alternatives**

Under either of the Tier I Corridor Alternatives, construction in grassland habitat could result in direct impacts to small mammal burrows. If these burrows contained badger dens, grading and other clearing activities associated with construction could entomb animals, resulting in injury or mortality. No badgers were observed to be using grassland areas within the biological study area during field surveys, and the potential for such impacts is considered low. Impacts to potential habitat for this species are quantified as follows:

- Annual grassland
  - Tier I HOV Lane Alternative: 4.53 acres
  - Tier I TSM Alternative: 0.58 acres

#### **4.12.2 Tier II Auxiliary Lane Alternative**

The Tier II Auxiliary Lane Alternative would result in no impact to American badger.

#### **4.12.3 No Build Alternative**

There would be no impact to American badger under the No Build Alternative.

### **4.13 Oak Woodland**

#### **4.13.1 Tier I Corridor Alternatives**

Both Tier I Corridor Alternatives would have both permanent and temporary impacts on the coast live oak woodland natural community. Table 4.13-1 presents the permanent and temporary impacts that would occur to oak woodland as a result of each of the Tier I Corridor Alternatives.

**Table 4.13-1: Coast Live Oak Woodland Natural Community –  
Impacts of the Tier I Corridor Alternatives**

<b>Natural Community</b>	<b>HOV Lane Alternative: Permanent and Temporary Impacts (acres)</b>	<b>TSM Alternative Permanent and Temporary Impacts (acres)</b>
Coast Live Oak Woodland	9.45	4.89
Source: Caltrans 2015b		

#### **4.13.2 Tier II Auxiliary Lane Alternative**

Table 4.13-2 identifies the impacts that would occur to the coast live oak woodland natural community under the Tier II Auxiliary Lane Alternative. This table breaks down the impacts according to whether they are permanent or temporary.

**Table 4.13-2: Impacts to Coast Live Oak Woodland Natural Community –  
Tier II Auxiliary Lane Alternative**

Natural Community	Tier II Auxiliary Lane Alternative (in acres)	
	Permanent	Temporary
Coast Live Oak Woodland	0.001	0.12
Source: Caltrans 2015b		

#### **4.13.3 No Build Alternative**

There would be no impact to the riparian forest natural community habitat areas under the No Build Alternative.

### **4.14 Monarch butterfly**

#### **4.14.1 Tier I Corridor Alternatives**

Removal of eucalyptus and mixed conifer woodland or other suitable roosting trees during monarch butterfly winter roosting season could impact potential winter roosting habitat, and it could directly impact monarch butterflies if they were found to be utilizing eucalyptus trees or mixed conifer woodland habitat onsite as winter roosts. Impacts to potential habitat for this species are quantified as follows:

- Eucalyptus Woodland
  - Tier I HOV Lane Alternative: 1.02 acres
  - Tier I TSM Alternative: 0.28 acres
- Mixed Conifer Woodland
  - Tier I HOV Lane Alternative: 6.08 acres
  - Tier I TSM Alternative: 2.03 acres

#### **4.14.2 Tier II Auxiliary Lane Alternative**

The Tier II Auxiliary Lane Alternative would result in no impact to monarch butterfly.

#### **4.14.3 No Build Alternative**

There would be no impact to monarch butterfly under the No Build Alternative.

## 4.15 Coastal Scrub Natural Community

### 4.15.1 Tier I Corridor Alternatives

Both Tier I Corridor Alternatives would have both permanent and temporary impacts on the coastal scrub natural community. Table 4.15-1 presents the permanent and temporary impacts that would occur to oak woodland as a result of each of the Tier I Corridor Alternatives.

**Table 4.15-1: Coastal Scrub Natural Community –  
Impacts of the Tier I Corridor Alternatives**

Natural Community	HOV Lane Alternative: Permanent and Temporary Impacts (acres)	TSM Alternative Permanent and Temporary Impacts (acres)
Coastal Scrub	2.76	0.87
Source: Caltrans 2015b		

### 4.15.2 Tier II Auxiliary Lane Alternative

The Tier II Auxiliary Lane Alternative would result in no impact to the coastal scrub natural community.

### 4.15.3 No Build Alternative

There would be no impact to the coastal scrub natural community habitat areas under the No Build Alternative.

## 4.16 Visual Resources

### 4.16.1 Tier I Corridor Alternatives

#### 4.16.1.1 Permanent Impacts

The proposed improvements under either of the Tier I Corridor Alternatives would have an adverse impact on the visual quality of the corridor. The changes would focus on the structural, landscaping and miscellaneous elements associated with these alternatives, as listed and quantified in Table 4.16-1.

**Table 4.16-1: Summary of Permanent Visual Elements –Tier I Build Alternatives**

Project Visual Element	Units	Tier I HOV Lane Alternative	Tier I TSM Alternative
<b>Structural Elements<sup>1</sup></b>			
New or Widened Over/ Undercrossings (Bridges)	Total No.	15	7
New Pedestrian/Bicycle Bridges (including Ramps)	Total No.	3	3
New Retaining Walls	Linear Feet	33,000	16,000
New Soundwalls	Linear Feet	17,800	23,600

**Table 4.16-1: Summary of Permanent Visual Elements –Tier I Build Alternatives**

Project Visual Element	Units	Tier I HOV Lane Alternative	Tier I TSM Alternative
Ramp Metering, including metering lights and signage	No. of Interchanges	9	9
<b>Landscape Elements</b>			
Vegetation Removal, including removal of skyline eucalyptus trees	Acres	109	61
Replanting Areas – Trees, Shrubs, Groundcovers <sup>2</sup>	Acres	15	10
Replanting Areas – Shrubs and Groundcovers <sup>2</sup>	Acres	50	13
<b>Miscellaneous Elements</b>			
Glare Potential <sup>3</sup>	N/A	Moderate	Moderate
Local Streets Widened	N/A	Yes	No
New Concrete Median Barrier	N/A	Yes	Yes
1 While widening of the highway paving would be a noticeable element, it is implied with each alternative. 2 Based on Caltrans' setback requirements for trees, not all planting areas can include large trees as part of the planting palette. 3 Glare potential is considered possible from the relocation of street lights within interchanges and the reduction of vegetation along the edges of the highway, which would allow headlight glare into areas surrounding the highway.			

**4.16.1.2 Temporary Impacts**

Under both Tier I Corridor Alternatives, visual impacts during the construction period would include the use of equipment, stockpiling of soils and materials, and other visual signs of construction. Both alternatives would result in the temporary clearing of some areas of vegetation, as described below:

- The Tier I Corridor TSM Alternative would result in the clearing of approximately 61 acres of existing vegetation, with 23 acres of this area available for replanting.
- The Tier I Corridor HOV Lane Alternative would result in the clearing of approximately 109 acres of existing vegetation, with 65 acres of this area available for replanting.

**4.16.2 Tier II Auxiliary Lane Alternative****4.16.2.1 Permanent Impacts**

The proposed improvements under the Tier II Auxiliary Lane Alternative would have an adverse impact on the visual quality of the corridor. The changes would focus on the structural, landscaping and miscellaneous elements associated with this alternative, as listed and quantified in Table 4.16-2.

**Table 4.16-2: Summary of Permanent Visual Elements –Tier II Auxiliary Lane Alternative**

Project Visual Element	Units	Tier II Auxiliary Lane Alternative
<b>Structural Elements<sup>1</sup></b>		
New or Widened Over/Undercrossings (Bridges)	Total No.	0

**Table 4.16-2: Summary of Permanent Visual Elements –Tier II Auxiliary Lane Alternative**

<b>Project Visual Element</b>	<b>Units</b>	<b>Tier II Auxiliary Lane Alternative</b>
New Pedestrian/Bicycle Bridge (including Ramps) at Chanticleer Avenue	Total No.	1
Retaining Walls	Linear Feet	1,200
Soundwalls	Linear Feet	310
Ramp Metering, including metering lights and signage	Number of Interchanges	0
<b>Landscape Elements</b>		
Vegetation Removal	Acres	9.3
Replanting Areas – Trees, Shrubs, Groundcovers <sup>2</sup>	Acres	1
Replanting Areas – Shrubs and Groundcovers <sup>2</sup>	Acres	2
<b>Miscellaneous Elements</b>		
Glare Potential <sup>3</sup>	N/A	Moderate
Local Streets Widened	N/A	No
New Concrete Median Barrier	N/A	Yes
<sup>1</sup> While widening of the highway paving would be a noticeable element, it is implied with each alternative. <sup>2</sup> Based on Caltrans' setback requirements for trees, not all planting areas can include large trees as part of the planting palette. <sup>3</sup> Glare potential is considered possible from the relocation of street lights within interchanges and the reduction of vegetation along the edges of the highway, which would allow headlight glare into areas surrounding the highway.		

#### 4.16.2.2 *Temporary Impacts*

Under the Tier II Auxiliary Lane Alternative, construction activities would involve use of equipment, stockpiling of soils and materials, and other visual signs of construction. Approximately 9.3 acres of existing vegetation within the highway corridor would be removed by construction activities, and approximately 3 acres of this area would be available for replanting.

#### 4.16.3 **No Build Alternative**

Activities that would occur under the No Build Alternative include routine maintenance of the project corridor that currently is conducted. The No Build Alternative would not create new permanent or temporary visual impacts.

### 4.17 **Water Quality and Stormwater**

This section summarizes the potential permanent and temporary water quality impacts anticipated from the proposed project.

#### 4.17.1 **Tier I Corridor Alternatives**

##### 4.17.1.1 *Permanent Impacts*

Stormwater runoff volumes and velocities from the proposed project area are expected to increase with implementation of the proposed project due to the increase in impervious surfaces; therefore, pollutant loading may also be increased. The added impervious area is directly related to the potential permanent



water quality impacts. For the Tier I Corridor HOV Lane Alternative, the proposed increase in impervious area is 64 total acres within the 8.9 mile project limits, and for the Tier I Corridor TSM Alternative, the proposed increase in impervious area is 22 total acres. Table 4.17-1 shows the increase in impervious surface that would occur within the watersheds of direct receiving waters, along with the increases in impervious surfaces that affect floodplain areas for the Tier I Corridor HOV and TSM Alternatives. The proposed project's design goal is to maintain preconstruction stormwater discharge flows by promoting infiltration and metering or detaining flows to preconstruction rates prior to discharge to a receiving water body or to a municipal separate storm sewer system.

**Table 4.17-1: Increase in Impervious Areas for Tier I Corridor Alternatives  
in Comparison to Overall Watershed**

Crossing	Increased Impervious Area (acres)		Overall Watershed Area (acres)	Percentage Increase in Overall Watershed Area	
	HOV Lane	TSM		HOV Lane	TSM
Unnamed Water of the United States	0	0	Not available	Not calculated	Not calculated
Valencia Channel	9.19	1.77	Not available	Not calculated	Not calculated
Valencia Creek	3.40	0.44	4,106	0.08	0.01
Aptos Creek	10.56	5.32	15,360	0.07	0.03
Ord Gulch	1.89	1.11	156	1.21	0.71
Pot Belly Creek	0.86	0.61	82	1.05	0.75
Borregas Creek	1.37	0.99	116	1.18	0.85
Tannery Gulch	1.73	0.83	797	0.22	0.10
Unnamed Tributary to Tannery Gulch	1.86	0.49	146	1.28	0.34
Nobel Creek	5.90	1.71	614	0.96	0.28
Soquel Creek	13.79	2.27	27,520	0.05	0.01
Rodeo Creek Gulch	2.39	1.35	1,572	0.15	0.09
Arana Gulch	6.30	4.49	2,239	0.28	0.20
Tributary to Arana Gulch at Sta 175+98	0.38	0.15	71	0.53	0.21
Tributary to Arana Gulch at Sta 177+92	0.70	0.24	113	0.62	0.21
Tributary to Arana Gulch at Sta 183+01	3.00	0.00	Not available	Not calculated	Not calculated
Source: Caltrans 2013					

#### 4.17.1.2 Temporary Impacts

Generally, as the area of soil disturbed by construction increases, the potential for temporary water quality impacts also increases. The Tier I Corridor TSM Alternative would result in an estimated disturbed soil area of 101 acres, and the Tier I Corridor HOV Lane Alternative has an estimate of 250 acres of disturbed soil area. Under either of the Tier I Corridor Alternatives, construction activities could result in

temporary changes in water volume or flow and increased siltation, sedimentation, erosion, and water turbidity. There is a potential for temporary water quality impacts due to grading activities and removal of existing vegetation, which can cause increased erosion. Stormwater runoff from the project site may transport pollutants to nearby creeks and storm drains if Best Management Practices are not properly implemented.

#### **4.17.2 Tier II Auxiliary Lane Alternative**

##### **4.17.2.1 Permanent Impacts**

Stormwater runoff within the Tier II Auxiliary Lane Alternative project limits drains into Soquel Creek, Rodeo Creek Gulch, and Arana Gulch, and it eventually discharges to Monterey Bay. Highway widening projects increase impervious areas; therefore, they potentially increase the volume and velocity of stormwater flow to downstream receiving water bodies. The Tier II Auxiliary Lane Alternative would increase the impervious area by 4.89 acres. Stormwater runoff volumes and velocities from the proposed project area are expected to increase with implementation of the Tier II Auxiliary Lane Alternative due to the increase in impervious surfaces; however, in comparison with the overall watersheds of Soquel Creek, Rodeo Creek Gulch, and Arana Gulch (see Table 4.17-1), the increase in flow due to the proposed widening of Route 1 would not be substantial. The proposed project's design goal is to maintain preconstruction stormwater discharge flows by promoting infiltration and metering or detaining flows to preconstruction rates prior to discharge to a receiving water body or to a municipal separate storm sewer system.

##### **4.17.2.2 Temporary Impacts**

The Tier II Auxiliary Lane Alternative would result in approximately 18.5 acres of disturbed soil area. Similar to the Tier I Corridor alternatives, construction activities for the Tier II Auxiliary Lane Alternative could result in temporary changes in water volume or flow and increased siltation, sedimentation, erosion, and water turbidity. There is a potential for temporary water quality impacts due to grading activities and removal of existing vegetation, which can cause increased erosion. Stormwater runoff from the project site may transport pollutants to nearby creeks and storm drains if Best Management Practices are not properly implemented.

#### **4.17.3 No Build Alternative**

The No Build Alternative may have potential permanent water quality impacts due to continuing congestion, leading to a greater deposition of particulates from exhaust and heavy metals from braking in comparatively worse stop-and-go traffic. Currently, no Treatment Best Management Practices are proposed along Route 1 within the project limits to treat roadway runoff; therefore, the water quality of the receiving water bodies would continue to be affected by highway runoff under the No Build Alternative.

#### **4.18 Pallid Bat, Hoary Bat and Townsend's Big-Eared Bat**

These bat species are addressed together because it is expected that these species would be subjected to similar potential project-related impacts.

#### **4.18.1 Tier I Corridor Alternatives**

Under either of the Tier I Corridor Alternatives, the removal of structures or vegetation used by roosting bats could impact these species. These impacts will be quantified when focused surveys within the biological study area are conducted to confirm presence or absence of roosting bats. The focused surveys will be conducted prior to circulation of environmental documents for future Tier II projects.

#### **4.18.2 Tier II Auxiliary Lane Alternative**

Under the Tier II Auxiliary Lane Alternative, the removal of vegetation used by roosting bats could impact roosting bats.

#### **4.18.3 No Build Alternative**

There would be no impact to bat species under the No Build Alternative.

### **4.19 Environmentally Sensitive Habitat Areas (ESHA) Policies**

#### **4.19.1 Tier 1 Corridor Alternatives**

Table 4.19-1 evaluates whether the Tier I Corridor Alternatives are consistent with policies from the Local Coastal Programs of the city and county of Santa Cruz regarding environmentally sensitive habitat areas (ESHAs)/coastal resources.

As shown in Table 4.19-1, the Tier I Corridor Alternatives are potentially inconsistent with policies from the Santa Cruz County and City of Santa Cruz Local Coastal Programs regarding biological resources, and wetland and creek protection. Specific impacts to coastal streams are summarized in Section 4.17, Water Quality and Stormwater. Biological resources that are identified as ESHAs in the Local Coastal Programs are identified in Table 4-1.

#### **4.19.2 Tier II Auxiliary Lane Alternative**

The Tier II Auxiliary Lane Alternative is located outside of coastal zone jurisdiction; therefore, no coastal zone determinations would be required.

#### **4.19.3 No Build Alternative**

As shown in Table 4.19-1, the Tier I No Build Alternative would be consistent with coastal zone policies protecting ESHAs/coastal resources.

**Table 4.19-1: Potential Inconsistency with Policies Protecting ESHAs/Coastal Resources**

<b>Subject of Policy</b>	<b>Local Policies</b>	<b>Assessment</b>
Biological Resources	County of Santa Cruz – Local Coastal Program:	<b><i>Tier I Corridor Alternatives</i></b> The Tier I Corridor Alternatives would affect sensitive habitats and is potentially inconsistent with policies that relate to protection of sensitive habitats. The project would have permanent and temporary impacts on the following habitats

**Table 4.19-1: Potential Inconsistency with Policies Protecting ESHAs/Coastal Resources**

Subject of Policy	Local Policies	Assessment
	<ul style="list-style-type: none"> <li>Policy 5.1.6 – Development within sensitive habitats</li> <li>Policy 5.1.7 – Protection of sensitive habitats</li> </ul> <p>City of Santa Cruz – Local Coastal Program – Environmental Quality Element Policies 4.5.3 – Protection of monarch butterfly</p>	<p>that have been identified as in poor or declining health: riverine/freshwater marsh, riparian forest, coast live oak woodland, and coastal scrub. Removal of this habitat could affect species identified as in poor or declining health, including foothill yellow-legged frog, California red-legged frog, Santa Cruz long-toed salamander, California tiger salamander, western pond turtle, tidewater goby, central California coast steelhead, monarch butterfly, Cooper’s hawk, tricolored blackbird, short-eared owl, white-tailed kite, least Bell’s vireo, southwestern willow flycatcher, pallid bat, hoary bat, Townsend’s big-eared bat, and American badger.</p> <p><b>No Build Alternative</b> The No Build Alternative would be consistent with these policies because it would not affect sensitive habitats.</p>
Wetland and Creek Protection	<p>County of Santa Cruz – Local Coastal Program:</p> <ul style="list-style-type: none"> <li>Policy 5.2.2 – Riparian corridor and wetland protection</li> <li>Policy 5.2.3 – Activities within riparian corridors and wetlands</li> <li>Policy 5.2.5 – Setbacks from wetlands</li> </ul> <p>City of Santa Cruz – Local Coastal Program – Environmental Quality Element Policies 4.2.2, 4.2.2.4 – Minimize the impact of development upon riparian and wetland areas</p>	<p><b>Tier I Corridor Alternatives</b> The project would be potentially inconsistent with policies that protect wetlands and creeks. The Tier I Corridor Alternatives would permanently affect 0.23 acre of U.S. Army Corps of Engineers wetlands, 0.10 acre of U.S. Army Corps of Engineers other waters, 2.20 acres under the jurisdiction of Local Coastal Plans approved by the California Coastal Commission, and 3.58 acres of California Department of Fish and Wildlife jurisdiction wetland area. Permanent impacts would result from changes in bank configuration, loss of riparian habitat associated with road widening and culvert extensions, realignment of existing roadways, and construction of new road sections.</p> <p><b>No Build Alternative</b> The No Build Alternative would be consistent with these policies because it would not affect wetlands or other waters.</p>

## 5.0 References

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Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix F

Step 5 Technical Memorandum



## Technical Memorandum

To: Parag Mehta, Kimley Horn

From: Laura Prickett, Michael Lee, Trevor Howard, and Johnnie Chamberlin

Date: December 21, 2017 (Updated June 28, 2018)

Re: Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis – Step 5

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### 1.0 Purpose and Organization of this Memorandum

This memorandum documents the findings of Step 5 of Caltrans' eight-step cumulative impact analysis methodology for the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project (Tier I/Tier II Project).

Step 5 of the cumulative impact analysis is to identify other current and reasonably foreseeable projects to be considered in the cumulative impact analysis. This step identifies current and reasonably foreseeable transportation and non-transportation projects within the RSA for resources included in the cumulative impact analysis and considers whether these projects may result in potential impacts to the resources.

### 2.0 Introduction

Horizon Water and Environment, LLC (Horizon) is providing support to NV5 consultant team in conducting an analysis of the cumulative impacts of the Tier I/Tier II Project. The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 to 2021 upon approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition. A complete description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a).

Cumulative impacts of the proposed improvements are evaluated in the Draft EIR/EA; however, this current analysis is being conducted as a result of public comments on the Draft EIR/EA, which circulated in November 2015. As requested by Caltrans, this analysis uses the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration (Caltrans 2016), to confirm that all cumulative impacts are adequately addressed.

### 3.0 Methodology

To identify current and reasonably foreseeable projects, a spreadsheet of projects was compiled by first identifying projects listed on the websites of Santa Cruz, Capitola, Scott's Valley, and Watsonville, as well as Santa Cruz and Santa Clara counties, and the Governor's Office of Planning and Research's CEQANet database. The Regional Transportation Plan, local General Plans and Specific Plans, and Caltrans Transportation Concept Reports were also consulted to identify projects that have reasonable probability to be implemented over the next 20 years. Staff from planning departments of the cities and county were consulted to assess the likelihood that project identified in the respective General Plans would be built over the next 20 years, and to identify any other reasonably foreseeable projects. The locations of the identified reasonably foreseeable projects were compared to the boundaries of the Resource Study Areas (RSA) developed in Step 2. A master table of projects, included in Attachment A, was developed, identifying the RSAs in which each project is located. Each project listed in Attachment A was assigned a project number. Project numbers for projects located within the City of Capitola begin with "Cap." Project numbers for projects located within the City of Santa Cruz begin with "SCi." Project numbers for projects that are located partially or completely within unincorporated county begin with "SCo."

Information presented in Attachment A was used to prepare a resource-specific table for each resource, which are included in Attachment B and identify the projects that are located in the respective RSAs. A map of each RSA is included in Appendix C, Step 2 Memorandum, of the Cumulative Impact Analysis Technical Report. Information about the projects, including anticipated environmental impacts and mitigation was obtained to the extent available. However, some projects included in this analysis are too small to require the preparation of an environmental document, and other projects are in an early planning phase, prior to the initiation of environmental review.

Where available, information regarding impacts and mitigation measures were taken from projects' environmental documents. For projects with no available environmental document, unless specified otherwise in the discussion of a specific resource, the potential for a project to result in impacts to a resource was assessed based on observations of the project site and surrounding areas using Google Earth and, where applicable, USGS blue line stream and National Wetland Inventory (NWI) data. For biological resources, this analytical approach was used to determine whether the applicable habitat types potentially occur in the project area. Project sites considered to possibly contain suitable habitat for a biological resource were considered to have potential for impact. For individual species, unless specified otherwise, potential impacts were identified using a two-part methodology. First, known occurrences for each species were identified using CDFW's California Natural Diversity Database (CNDDB). Sites overlapping or adjacent to occurrences were deemed to have potential to impact the resource. The second part of the methodology involved reviewing information on species' preferred habitats, referring to the Natural Environment Study for the Tier I/Tier II project (Caltrans 2015b) and the Step 2 and Step 3 memos of the cumulative impacts analysis, and using the GIS resources discussed above to assess the potential for the habitat to occur on the site. While limited in terms of reliability and accuracy, this approach provided the best available information regarding potential impacts.

### 4.0 Current and Reasonably Foreseeable Future Projects

Summaries of the impacts of current and reasonably foreseeable future projects that are included in the cumulative impact analysis are discussed below, organized by resource. Each of the following sections references a resource-specific table, which is provided in Attachment B and includes a summary of impacts and mitigation measures for the applicable resource. Where available, impacts and mitigation measures were taken from projects' environmental documents. For projects with no available environmental document, potential impacts were identified using the methodology described in Section 3.0, Methodology, unless indicated otherwise.



Table 4-1 presents the 25 resource topic areas included in the cumulative impact analysis, indicating those that have been identified as or encompass ESHAs, and listing the section of this memorandum that addresses the resource.

**Table 4-1. Resources Considered in the Cumulative Impact Analysis**

<b>Resource No.</b>	<b>Resource Name</b>	<b>Resources Identified as or Encompassing ESHAs</b>	<b>Section of Memorandum</b>
1	Riverine/freshwater marsh	✓	4.1
2	Wetlands and other waters	✓	4.2
3	Tidewater goby		4.3
4	Central California coastal steelhead		4.4
5	California tiger salamander		4.5
6	Santa Cruz long-toed salamander		4.6
7	California red-legged frog		4.7
8	Foothill yellow-legged frog	✓	4.8
9	Western pond turtle	✓	4.9
10	Riparian forest	✓	4.10
11	Cooper's hawk	✓	4.11
12	Tricolored blackbird		4.12
13	Short-eared owl	✓	4.13
14	White-tailed kite		4.14
15	Least Bell's vireo		4.15
16	Southwestern willow flycatcher		4.16
17	American badger	✓	4.17
18	Oak woodland		4.18
19	Monarch butterfly		4.19
20	Coastal scrub	✓	4.20
21	Visual resources		4.21
22	Water quality and stormwater	✓	4.22
23	Pallid bat	✓	4.23
24	Hoary bat	✓	4.23
25	Townsend's big-eared bat	✓	4.23

#### 4.1 Riverine/Freshwater Marsh

The development projects included in the cumulative impact analysis that are located in the Riverine/Freshwater Marsh RSA are listed in Table B-1. A total of 42 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 15 of these projects. The environmental documents for eight of these projects identified potential riverine and freshwater marsh impacts. Table B-1 provides a summary of potential riverine and freshwater marsh impacts, and identified mitigation measures addressing these impacts, for each project. For projects with no available environmental document, entries in the column titled "Riverine/Freshwater Marsh Potential Impacts" indicate whether the project has potential to result in impacts to riverine/freshwater marsh natural communities. The potential for impacts was identified based on an assessment made using Google Earth and US Geological Survey (USGS) blue-line stream data. A project was considered to have the potential to impact this resource if the project site overlapped, or was located adjacent to, a blue-line stream. National Wetlands Inventory (NWI) data for this type of resource was also consulted. If the project site appeared to include or be adjacent to a marsh in the NWI, the location was double-checked by viewing satellite imagery in Google Earth to see if that type of resource could indeed be present. A total of eight

projects with no available environmental document are considered to have potential for riverine and freshwater marsh impacts to occur.

#### 4.2 Wetlands and Other Waters

The development projects included in the cumulative impact analysis that are located in the Wetlands and Other Waters RSA are listed in Table B-2. A total of 42 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 15 of these projects. The environmental documents for 10 of these projects identified potential impacts to wetlands or other waters. A summary of the potential wetlands or other waters impacts, and, where applicable, mitigation measures addressing these impacts, is provided for each project. For projects with no available environmental document, entries in the column titled "Wetlands and Other Waters Potential Impacts" indicate whether the project has potential to result in impacts to wetlands and other waters of the US. The potential for impacts was identified based on whether the project location includes or is adjacent to any wetlands or other waters of the US. This analysis was conducted using USGS blue line stream data, the NWI and Google Earth. If any of these data sources appeared to show the project site included or was adjacent to wetlands or other waters of the US, then it was considered to have the potential for impact. Nine of the projects with no available environmental document may have potential for wetlands or other waters impacts to occur.

#### 4.3 Tidewater Goby

The development projects included in the cumulative impact analysis that are located in the Tidewater Goby RSA are listed in Table B-3. A total of 15 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for six of these projects. The environmental documents for five of the projects identified potential for impacts to tidewater goby. For projects with no available environmental document, the potential for impact to tidewater goby was identified based on whether the project location is directly adjacent to a stream, using USGS blue line stream data. Tidewater goby prefer brackish shallow lagoons and lower stream reaches where water is fairly still, but not stagnant (Caltrans 2015b). This review identified six projects that have no available environmental that may have potential to result in impacts to this species. A summary of the potential impacts to tidewater goby, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-3.

#### 4.4 Central California Coast Steelhead

The development projects included in the cumulative impact analysis that are located in the Central California Coast Steelhead RSA are listed in Table B-4. A total of 109 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 47 of these projects. The environmental documents for 18 of these projects identified potential impacts to Central California coast steelhead. For projects with no available environmental document, the potential for impact to Central California coast steelhead was identified based on whether the project location is directly adjacent to a stream, using USGS blue line stream data. Central California coast steelhead prefer clear, cool water with abundant instream cover, well-vegetated stream margins, relatively stable water flow (Caltrans 2015b). The results of this review showed that 19 projects with no available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to Central California coast steelhead, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-4.

#### 4.5 California Tiger Salamander

The development projects included in the cumulative impact analysis that are located in the California Tiger Salamander RSA are listed in Table B-5. A total of seven reasonably foreseeable projects were

identified in this RSA. Environmental documents were available for five of these projects. All five of the environmental documents identified potential impacts to California tiger salamander. For projects with no available environmental document, the potential for impact to California tiger salamander was identified based on whether the project location is within a 1.3-mile radius of the water bodies identified in the mapping of upland habitat for Santa Cruz Long-Toed Salamander and California tiger salamander, described in the Natural Environmental Study (NES) Addendum prepared for the Tier I/Tier II Project (Caltrans 2017b), and whether potential upland habitat exists at the project site based on observations using Google Earth imagery. California tiger salamander breed in vernal pools and other wetlands; after metamorphosing, juveniles leave the pond and occupy burrows created by small mammals, where they estivate until they reach maturation and then emerge from their burrows and disperse up to 1.3 miles to breed. Open land within 1.3 miles of vernal pools or other wetlands is assumed to provide upland habitat for this species (Caltrans 2017b). The results of this review showed that two projects with no available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to California tiger salamander, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-5.

#### 4.6 Santa Cruz Long-Toed Salamander

The development projects included in the cumulative impact analysis that are located in the Santa Cruz Long-Toed Salamander RSA are listed in Table B-6. A total of seven reasonably foreseeable projects were identified in this RSA. Environmental documents were available for five of these projects. All five of the environmental documents identified potential for Santa Cruz long-toed salamander to be present. A summary of the potential impacts, and any identified mitigation measures addressing these impacts, is provided for each project in the table. However, because this is a fully-protected species under the California Fish and Game Act, take of this species must be avoided. For projects with no available environmental document, the potential presence of Santa Cruz long-toed salamander was identified based on whether the project location is within a 1.3-mile radius of the water bodies identified in the mapping of habitat for Santa Cruz long-toed salamander and California tiger salamander, described in the NES Addendum prepared for the Tier I/Tier II Project (Caltrans 2017b), and whether potential upland habitat exists at the project site based on observations using Google Earth imagery. SCLTS are found among root systems of plants in upland chaparral and woodland areas of coast live oak or Monterey pine, and in strips of riparian vegetation such as arroyo willows, cattails, and bulrush, where they are protected from heat and direct sunlight (USFWS 1999 - cited in Horizon 2017b). Open land within 1.3 miles of vernal pools or other wetlands located in the SCLTS RSA is assumed to provide upland habitat for SCLTS. The results of this review indicated that Santa Cruz long-toed salamander habitat may be present in the vicinity of two projects with no available environmental document. A summary of the potential for projects to result in impacts to Santa Cruz long-toed salamander is provided for each project in Table B-6.

#### 4.7 California Red-Legged Frog

The development projects included in the cumulative impact analysis that are located in the California Red-Legged Frog RSA are listed in Table B-7. A total of 57 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 19 of these projects. The environmental documents for seven of these projects identified potential impacts to California red-legged frog. For projects with no available environmental document, the potential for impact to California red-legged frog was identified using the two-step process described in Section 3.0, Methodology, California red-legged frog prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of fairly sturdy underwater supports such as cattails. The largest densities of this subspecies are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation (Jennings and Hayes 1994 - cited in Caltrans 2015b). The results of this review indicated that 14 projects with no

available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to California red-legged frog, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-7.

#### 4.8 Foothill Yellow-Legged Frog

The development projects included in the cumulative impact analysis that are located in the Foothill Yellow-Legged Frog (FYLF) RSA are listed in Table B-8. A total of 20 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for seven of these projects. Environmental documents for five of these projects included potential for impacts to foothill yellow-legged frog. As described in Section 3.0, Methodology, Google Earth imagery, USGS blue line stream data, and NWI data were reviewed to consider whether there is potential for FYLF habitat to occur. This species is frequently found in shallow, flowing water, in small to moderate-sized streams with at least some cobble-sized substrate. The species is rarely observed far from permanent water and may be found in or near rocky streams in a variety of habitats, including, but not limited to, valley foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types (Caltrans 2015b). This review identified six projects with no available environmental document that may have potential to result in impacts to this species. A summary of the potential impacts to FYLF, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-8.

#### 4.9 Western Pond Turtle

The development projects included in the cumulative impact analysis that are located in the Western Pond Turtle RSA are listed in Table B-9. A total of 20 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for seven of these projects. Environmental documents for five of these projects included potential for impacts to western pond turtle. As described in Section 3.0, Methodology, Google Earth imagery, USGS blue line stream data, and NWI data were reviewed to consider whether there is potential for western pond turtle habitat to occur. Pond turtles live where water persists year-round in ponds along foothill streams or in broad washes near the coast. The species is mostly aquatic, leaving its aquatic site to reproduce, estivate, and over-winter (Caltrans 2015b). Overwintering sites are, on average, located 167 meters (548 feet), from the watercourse but have been found as far as 400 meters (1,312 feet) from the watercourse (Reese 1996 - cited in Horizon 2017a). This review identified six projects with no available environmental document that may have potential to result in impacts to this species. A summary of the potential impacts to western pond turtle, and any identified mitigation measures addressing the impacts, is provided for each project in Table B-9.

#### 4.10 Riparian Forest

The development projects included in the cumulative impact analysis that are located in the Riparian Forest RSA are listed in Table B-10. A total of 11 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for four of these projects. All four of these environmental documents identified potential riparian forest impacts. A summary of the potential riparian forest impacts, and mitigation measures addressing these impacts, is provided for each project. For projects with no available environmental document, entries in the column titled "Riparian Forest Potential Impacts" indicate whether the project has potential to result in impacts to riparian forest natural community. The potential for impacts was identified based on an assessment made using Google Earth and USGS blue-line stream data, in a two-step process. First, a determination was made whether a project site overlapped, or was located adjacent to, a blue-line stream. For projects that met that criterion, Google Earth imagery was consulted to determine whether any forested areas were present along the stream at that site. Five projects with no available environmental document are considered to have potential for riparian forest impacts to occur.

#### 4.11 Cooper's Hawk

The development projects included in the cumulative impact analysis that are located in the Cooper's Hawk RSA are listed in Table B-11. A total of 57 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 18 of these projects. Environmental documents for 10 of these projects included potential impacts to Cooper's hawk, nesting raptors, nesting birds, or unspecified animal species. As described in the introduction to Section 3.0, Methodology, Google Earth imagery, USGS blue line stream data, and NWI data were reviewed to consider whether there is potential for Cooper's hawk habitat to occur. Cooper's hawk occupies forests and woodlands, especially near edges. It is rarely found in areas without dense tree stands or patchy woodland habitat. This species nests and forages in and near deciduous riparian areas (Caltrans 2015b). This review identified 15 projects with no available environmental document that may have potential to result in impacts to this species. A summary of the potential impacts, and, as applicable, mitigation measures addressing these impacts, is provided for each project in Table B-11.

#### 4.12 Tricolored Blackbird

The development projects included in the cumulative impact analysis that are located in the Tricolored Blackbird RSA are listed in Table B-12. A total of 34 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 15 of these projects. The environmental documents for nine of these projects indicated a potential for impacts to tricolored blackbird. For projects with no available environmental document, the potential for impact to tricolored blackbird was identified using the two-step process described in Section 3.0, Methodology. The primary foraging habitat for tri-colored blackbirds is now artificial habitats, particularly croplands in which shallow flood irrigation, mowing, or grazing keeps the vegetation at a height less than approximately 6 inches. Tri-colored blackbirds also forage in remnant native habitats, including wet and dry vernal pools and other seasonal wetlands, riparian scrub habitats, and open marsh borders (Shuford and Gardali 2008 - cited in Caltrans 2015b). The results of this review indicated that four projects with no available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to tricolored blackbird, and any identified mitigation measures addressing these impacts, is provided for each project in the table.

#### 4.13 Short-Eared Owl

The development projects included in the cumulative impact analysis that are located in the Short-Eared Owl RSA are listed in 1 Table B-13. A total of seven reasonably foreseeable projects were identified in this RSA. Environmental documents were available for five of these projects. None of the environmental documents specifically discussed short-eared owl, but all of the environmental documents identified potential impacts to nesting birds or unspecified animal species. As described in Section 3.0, Methodology, Google Earth imagery was reviewed to consider whether there is potential for short-eared owl habitat to occur. Short-eared owl is usually found in open areas with few trees, such as annual and perennial grasslands, prairies, dunes, meadows, irrigated lands, and saline and fresh emergent wetlands and freshwater marsh habitat (Caltrans 2015b). Short-eared owls require broad expanses of open land with low vegetation, such as grasslands or low-structured open shrublands, for hunting and for nesting (Holt and Leasure 1993 - cited in Horizon 2017b). The review of the two projects in this RSA with no available environmental document found that neither project appears to have potential to result in impacts to this species. A summary of the potential impacts, and, as applicable, mitigation measures addressing the impacts, is provided for each project in the Table B-13.



#### 4.14 White-Tailed Kite

The development projects included in the cumulative impact analysis that are located in the White-Tailed Kite RSA are listed in Table B-14. A total of 57 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 19 of these projects. The environmental documents for 10 of these projects indicated that habitat for white-tailed kite may be present. A summary of the potential impacts to white-tailed kite, and any identified mitigation measures addressing these impacts, is provided for each project in the table. However, because this is a fully-protected species under the California Fish and Game Act, take of this species must be avoided. For projects with no available environmental document, the potential for impact to white-tailed kite was identified using the two-step process described in Section 3.0, Methodology. White-tailed kite is generally found in open cultivated and marshy bottomlands with scattered trees, savannahs, agricultural areas with windbreaks, orchards, and roadsides. Nesting and roosting occurs in dense, broadleafed deciduous groves of trees (Caltrans 2015b). The results of this review indicated that 16 projects with no available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to white-tailed kite, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-14.

#### 4.15 Least Bell's Vireo

The development projects included in the cumulative impact analysis that are located in the Least Bell's Vireo RSA are listed in Table B-15. A total of 15 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for six of these projects. The environmental documents for all six projects indicated a potential for impacts to least Bell's vireo. For projects with no available environmental document, the potential for impact to least Bell's vireo was identified using the two-step methodology described in Section 3.0, Methodology. This species is known to occur abundantly in lowland riparian habitats, building their nests in a variety of plants that provide concealment in the form of dense foliage. The most frequently used species include willows (*Salix* spp.), mulefat (*Baccharis glutinosa*), California wild rose, poison oak, mugwort, and cottonwood (*Populus* spp.) (Caltrans 2015b). The results of this review indicated that six projects with no available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to least Bell's vireo, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-15.

#### 4.16 Southwestern Willow Flycatcher

The development projects included in the cumulative impact analysis that are located in the southwestern willow flycatcher RSA are listed in Table B-15. A total of 15 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for six of these projects. The environmental documents for all six projects indicated a potential for impacts to southwestern willow flycatcher. For projects with no available environmental document, the potential for impact to southwestern willow flycatcher was identified using the two-step process described in Section 3.0, Methodology. Similar to least Bell's vireo (described above), the southwestern willow flycatcher requires dense riparian habitat. Southwestern willow flycatcher requires microclimatic conditions dictated by local surroundings such as saturated soils, standing water, or nearby stream, pools, etc. Riparian habitat that is suitable for least Bell's vireo would be expected to also be suitable for southwestern willow flycatcher (Caltrans 2017b). The results of this review indicated that six projects with no available environmental document may have potential to result in impacts to this species. A summary of the potential impacts to southwestern willow flycatcher, and any identified mitigation measures addressing these impacts, is provided for each project in Table B-15.

#### 4.17 American Badger

The development projects included in the cumulative impact analysis that are located in the American Badger RSA are listed in Table B-16. A total of 57 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 18 of these projects. The environmental document for two of these projects identified potential impacts to American badger. As described in Section 3.0, Methodology, Google Earth imagery was reviewed to consider whether there is potential for American badger habitat to occur. American badger prefers drier open stages of shrub, forest, and herbaceous habitats (including annual grasslands), with friable soils; needs sufficient food and open, uncultivated ground; digs burrows (Caltrans 2015b). This review identified six projects with no available environmental document that may have potential to impact American badger. A summary of the potential impacts to American badger, and, as applicable, mitigation measures addressing these impacts, is provided for each project in Table B-16.

#### 4.18 Oak Woodland

The development projects included in the cumulative impact analysis that are located in the Oak Woodland RSA are listed in Table B-17. A total of 13 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for four of these projects. Potential oak woodland impacts were identified in all four of these environmental documents. A summary of the potential oak woodland impacts, and, where applicable, mitigation measures addressing these impacts, is provided for each project. For projects with no available environmental document, entries in the column titled "Oak Woodland Potential Impacts" indicate whether the project has potential to result in impacts to oak woodland communities. The potential for impacts was identified using Google Earth imagery to identify any potential oak woodland areas at the project site. Sites with no woodland areas were assumed to have no potential impact. If the tree species was indeterminate, it was conservatively assumed that there may be potential for oak woodland impact. Four of the projects for which no environmental document was available may have potential for oak woodland impacts to occur.

#### 4.19 Monarch Butterfly

The development projects included in the cumulative impact analysis that are located in the Monarch Butterfly RSA are listed in Table B-18. A total of 14 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for four of these projects. All four of the environmental documents identified potential impacts to monarch butterfly. Overwintering sites are known to occur in dense, wind-protected tree groves (e.g., eucalyptus [*Eucalyptus* spp.], Monterey pine, and Monterey cypress) near the coast from northern Mendocino to Baja California (Sakai 2007, CNDDDB 2012 – cited in Caltrans 2015b). For projects which did not have an environmental document, Google Earth imagery of the site and surrounding areas were reviewed based on the methodology described above to consider whether there is potential for monarch butterfly overwintering habitat to occur. This review identified nine projects with no available environmental document that may have potential to result in impacts to monarch butterfly. A summary of the potential impacts to monarch butterfly, and, where applicable, mitigation measures addressing the impacts, is provided for each project in Table B-18.

#### 4.20 Coastal Scrub

The development projects included in the cumulative impact analysis that are located in the Coastal Scrub RSA are listed in Table B-19. A total of 13 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for six of these project. None of these environmental documents identified potential coastal scrub impacts. A summary of the potential coastal scrub impacts is provided for each project. For projects with no available environmental document, entries in the column

titled “Coastal Scrub Potential Impacts” indicate whether the project has potential to result in impacts to coastal scrub communities. The potential for impacts was identified using Google Earth imagery to identify any potential coastal scrub areas at the project site. If a site consisted entirely of development and ornamental landscaping, it was assumed to have no potential impact. If the habitat type of undeveloped land was indeterminate, it was conservatively assumed that there may be potential for coastal scrub impact. Two of the projects with no available environmental document may have potential for coastal scrub impacts to occur.

#### 4.21 Visual Resources

The development projects included in the cumulative impact analysis that are located in the Visual RSA are identified in Table B-20. A total of 13 reasonably foreseeable projects were identified in this RSA. Environmental documents were located for seven of these projects. In six of the environmental documents, potential visual impacts were identified. Table B-20 includes a summary of the potential visual impacts, and any mitigation measures addressing the impacts identified in the environmental documents.

Table B-20 also includes the identified projects with no available environmental document. For these projects, the entries in the column titled “Visual Potential Impacts” indicate whether the project has potential to result in visual impacts, based on a review of the project description and Google Earth imagery of the project site. For visual resources, impacts of modifications to existing buildings or new structures located in developed areas that do not remove trees would likely be minor; while projects in more natural settings, or projects that require the clearing of trees have potential to result in a larger impact. Transportation projects involving repairs or service updates would have minor impacts, while projects involving the construction of new infrastructure in areas that are undeveloped or sparsely developed would have greater potential for impacts on visual resources. Six projects with no available environmental document may have potential for visual impact to occur.

#### 4.22 Water Quality and Stormwater

The RSA for water quality and stormwater consists of the following coastal stream watersheds: Arana-Rodeo, Soquel North, Soquel South, and Aptos – which encompass other water bodies, including Soquel Lagoon, Valencia Lagoon, and Valencia Channel. The development projects included in the cumulative impact analysis that are located in these watersheds are listed in Table B-21, which presents the potential impacts of the projects on water quality and stormwater, as well as any mitigation commitments to address these impacts. A total of 42 reasonably foreseeable projects were identified in this RSA. Environmental documents were located for 15 of these projects. The environmental documents for 13 of the projects identified potential water quality and stormwater impacts.

For projects with no available environmental document, entries in the column titled “Water Quality and Stormwater Potential Impacts” indicate whether the project has potential to result in water quality and stormwater impacts, based on a review of the project description and Google Earth imagery of the project site, and best professional judgement regarding the potential for water quality and stormwater impacts to result from the various types of projects. Impacts may occur in the form of increased sediment entering nearby waterways from soil disturbance and from changes in runoff patterns due to increases in impervious surface area. Impacts of small-scale projects on existing buildings or those with minimal soil disturbance would likely be minor; while larger projects, projects in more natural settings, or projects that require the clearing of large areas of land would have a greater potential impact. Redeveloping a previously developed site can help to reduce stormwater and water quality impacts compared with comparable development on a previously undeveloped site. Transportation projects involving repairs or service updates would likely have minor impacts, while projects involving the construction of new large-scale infrastructure would have potentially larger impacts on water quality and stormwater. Increases in

peak stormwater flows have the potential to result in the erosion of creeks that receive discharges of stormwater runoff. Increased erosion may create channel instability and add to the sediment load. Increases in sedimentation may affect fish habitat.

All projects are located in jurisdictions that are permittees under the Statewide Phase II National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (Phase II General Permit), State Water Resources Control Board (SWRCB) Order No. 2013-0001-DWQ. It is anticipated that, as required by this permit, permanent stormwater treatment measures would be installed for projects located in areas subject to the Phase II General Permit that create and/or replace 5,000 square feet or more of impervious surface, excluding individual detached single-family home projects that are not part of a larger plan of development. The primary purpose of permanent stormwater treatment measures is to reduce the pollution conveyed by stormwater runoff to receiving waters, and many of these facilities provide added benefits, such as reducing the amount of development-induced stormwater runoff that is conveyed to receiving waters. Additionally, hydromodification management (HM) measures are anticipated to be included in projects located in areas subject to the Phase II General Permit that create and/or replace one acre or more of impervious surface and increase impervious surface area over the pre-project condition. The purpose of HM measures is to reduce the potential for creek erosion due to stormwater runoff from developed areas. During construction, construction site stormwater best management practices (BMPs) are anticipated to be in place for all projects that disturb one acre or more of land, as required by the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), SWRCB Order No. 2009-0009-DWQ. It is also anticipated that construction BMPs would be in place during construction of all projects that disturb less than one acre and are located in areas subject to the Phase II General Permit, due to permit requirements for the agencies subject to the permit to implement programs to require construction site stormwater control at construction projects that disturb less than one acre of land.

A total of 26 projects with no available environmental document are considered to have potential for water quality and stormwater impacts to occur.

#### 4.23 Pallid Bat, Hoary Bat, and Townsend's Big-eared Bat

The development projects included in the cumulative impact analysis that are located in the Pallid Bat, Hoary Bat and Townsend's big-eared bat RSA are listed in Table B-22. A total of 57 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for 18 of these projects. The environmental documents for eight of these projects identified potential impacts to one or both of these species, or to unspecified bat species. As described in Section 3.0, Methodology, Google Earth imagery was reviewed to consider whether there is potential for pallid bat or hoary bat habitat to occur. Pallid bat inhabits deserts, grasslands, shrublands, woodlands, and forests, and is most common in open, dry habitats with rocky areas for roosting. Hoary bat prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding, and roosts in dense foliage of medium to large trees (Caltrans 2015b). Townsend's big-eared bat prefers montane forests that are thick with pine, fir and forestry. Roosting sites are typically made in caves, cliffs, and rock ledges as well as abandoned mines and other man-made structures (Sullivan 2009). This review identified 12 projects with no available environmental document that may have potential to impact pallid bat and nine projects that may have potential to impact hoary bat. Projects that have the potential to impact Pallid bat are anticipated to also impact Townsend's big-eared bat. A summary of the potential impacts, and applicable mitigation measures addressing these impacts, is provided for each project in Table B-22.

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Attachment A:  
Development Projects Addressed in the Cumulative Impact Analysis



Appendix A: Development Projects Addressed in the Cumulative Impact Analysis

Table A-1 lists the projects included in the cumulative impact analysis and presents the results of an analysis to identify the resource study area(s) that each project is located in. Maps depicting the resource study areas are included in Appendix C.

Table A-1: Development Projects Included in the Cumulative Impact Analysis

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
Jurisdiction: City of Capitola																		
Cap-01	105 Sacramento Ave / Same	Demolition of existing and new single-family home (City of Capitola 2016a)	Application approved without side yard variance at 11/3/16 PC. Decision appealed to tentatively scheduled 1/12/17 CC.	x		x		x	x		x	x			x			
Cap-02	114 Grand Ave / Same	Historic Review (City of Capitola 2016a)	Application under 3rd Party Review: Historic.	x		x		x	x		x	x			x			
Cap-03	115 Saxon Ave / Same	Remodel and addition (City of Capitola 2016a)	Application incomplete.	x		x		x	x		x	x			x			
Cap-04	1810 Wharf Rd / Same	Historic Review (City of Capitola 2016a)	Application under 3rd Party Review: Historic.	x	x	x		x	x	x	x	x		x	x	x	x	x
Cap-05	208 Capitola Ave / Same	Upgrade to façade and addition of living space (City of Capitola 2016a)	Application complete as of 10/27/16. Scheduled for 12/1/16 PC.	x	x	x		x	x	x	x	x		x	x	x	x	x
Cap-06	2091 and 2097 Wharf Rd / Same	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	Application under 3rd Party Review: Stormwater.	x	x	x		x	x	x	x	x		x	x	x	x	x
Cap-07	2205 Wharf Rd / Same	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	Application incomplete.	x	x	x		x	x	x	x	x		x	x	x	x	x
Cap-08	226 Monterey Ave / Same	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	Application approved at 11/3/16 PC.	x		x		x	x		x	x		x	x			
Cap-09	4015 Capitola Rd / Same	Exterior remodel of "Sears" creating 2 new tenant spaces (City of Capitola 2016a)	Application complete. Scheduled for 12/1/16 PC.	x		x		x			x	x			x			
Cap-10	4025 Brommer St / Same	Conceptual Review of 3-story proposal (City of Capitola 2016a)	Application complete. Applicant received feedback on conceptual design at 11/3/16 PC.	x		x		x			x	x			x			

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
Cap-11	407 El Salto Dr. / Same	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	Application Incomplete.	x		x		x	x		x				x			
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements (AMBAG 2014).	Fiscally constrained project in RTP.	x		x		x			x	x			x			x
Cap-13	4530 Garnet St / Same	Remodel and addition to residence (City of Capitola 2016a)	Application Incomplete.	x		x		x			x	x			x			
Cap-14	502 Pine St / Same	Create condo map for new duplex (City of Capitola 2016a)	Staff processing.	x		x		x	x		x	x			x			
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature (Capitola 2014b).	Unknown	x		x		x			x	x			x			x



Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	Unknown	x		x		x			x	x			x			
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Unknown	x	x	x		x	x	x	x	x		x	x	x	x	

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Unknown	x	x	x		x	x	x	x	x		x	x	x	x	
Jurisdiction: City of Santa Cruz																		
SCi-01	131 Bixby / Same	Duplex (City of Santa Cruz 2016a)	Approved.			x		x			x				x			
SCi-02	1314-1400 Ocean / Same	8,400 square feet commercial development (City of Santa Cruz 2016a)	Under construction.			x												
SCi-03	135 Vista Branciforte / Same	Minor Land Division to create three lots from two (City of Santa Cruz 2016a)	Approved.			x		x			x				x			
SCi-04	150 Jewell / Same	48-unit memory care facility (City of Santa Cruz 2016a)	Under construction.			x												
SCi-05	1547 Pacific (Park Pacific) / Same	63 residential units and 5,750 square feet commercial (City of Santa Cruz 2016a)	Approved.			x												
SCi-06	1804-1812 Ocean Street Extension / Same	11 townhouses (City of Santa Cruz 2016a)	Under construction.			x												
SCi-07	214 Plymouth / Same	Three lot subdivision and construction of a duplex on each new lot (City of Santa Cruz 2016a)	Approved.			x												
SCi-08	215 Beach (La Bahia) / Same	165 Room Hotel (City of Santa Cruz 2016a)	Approved.			x												

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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SCi-09	2200 Delaware / Same	395,400 square feet industrial; 248 maximum residential units (197,100 sf) (City of Santa Cruz 2016a)	1st phase complete.			x												
SCi-10	230 Grandview / Same	Demolish single family residence and construct 12 apartment units (City of Santa Cruz 2016a)	Approved.			x												
SCi-11	2415 Mission / 2415 Mission Street, Santa Cruz, CA	14 apartment units (City of Santa Cruz 2016a)	Approved.			x												
SCi-12	2956 Mission (Fairfield Inn) / Same	82-room hotel (City of Santa Cruz 2016a)	Under construction.			x												
SCi-13	301 Beach / Same	Add 5 rooms to an existing hotel (City of Santa Cruz 2016a)	Under construction.			x		x			x				x			
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott) / Same	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms. (City of Santa Cruz 2016a)	Under construction.			x		x			x				x			
SCi-15	350 Ocean / Same	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail (City of Santa Cruz 2016a)	Approved.			x		x			x				x			
SCi-16	407 Broadway (Hyatt) / Same	106-room hotel (City of Santa Cruz 2016a) (City of Santa Cruz 2016a)	Under construction.	x		x		x			x	x			x			
SCi-17	413 Laurel / Same	Convert office building to two residential units and one commercial space (City of Santa Cruz 2016a)	Approved.			x												
SCi-18	430 South Branciforte / Same	Lot split (City of Santa Cruz 2016a)	Approved.			x		x			x				x			
SCi-19	514 Frederick / Same	4 townhome units (City of Santa Cruz 2016a)	Under construction.	x		x		x			x				x			

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SCi-20	555 Pacific / Same	94 small ownership units (single occupancy units)/5,000 square feet of commercial space (City of Santa Cruz 2016a)	Under construction.			x												
SCi-21	618 Windsor / Same	5 apartments (City of Santa Cruz 2016a)	Under construction.			x		x			x				x			
SCi-22	710 Emeline / Same	Demolish single-family residence and construct triplex (City of Santa Cruz 2016a)	Under construction.			x		x			x				x			
SCi-23	716 Darwin / Same	15 apartments (City of Santa Cruz 2016a)	Under construction.	x		x		x			x				x			
SCi-24	716-724 Seabright (Seabright Breakers) / Same	11 townhouses (City of Santa Cruz 2016a)	Under construction.	x		x		x			x				x			
SCi-25	738 Pacheco / Same	Three lot subdivision (City of Santa Cruz 2016a)	Approved.	x		x		x			x				x			
SCi-26	745 Ocean (Starbucks) / Same	2,000 square feet coffee shop (City of Santa Cruz 2016a)	Approved.			x												
SCi-27	800 Soquel / Same	Two units above 2,600 square feet commercial space (City of Santa Cruz 2016a)	Approved.			x		x			x				x			
SCi-28	912 Western Drive / Same	3-lot minor land division (City of Santa Cruz 2016a)	Under construction.			x												
SCi-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave (City of Santa Cruz 2016a).	Project approved.			x		x			x				x			
SCi-30	Coastal Science Campus Parking Lots /	Construction of a new 91-space parking lot (parking lot E) and reconfiguration and expansion of the existing Seymour Marine Discovery Center parking lot to add 55 spaces (City of Santa Cruz 2016a).	Project approved.			x												

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SCi-31	Eastern Access to the University of California - Santa Cruz	Development of new access roads in conjunction with the development of a new, approximately 196,000 gsf infill student housing complex on the main UCSC campus	Unknown			x												
SCi-32	Highway 1/9 Intersection Improvement Project /	Widen the intersection at Route 1 and Route 9 in the City of Santa, to accommodate additional vehicle turn lanes, bicycle lanes, and shoulders to improve traffic operations and better accommodate existing and projected traffic volumes (Caltrans 2015c).	Environmental phase complete; notice of availability of Final Initial Study/Mitigated Negative Declaration.			x												
SCi-33	Hwy 1/Mission St at Chestnut/King/Union Intersection Modification	Modify design of existing intersections to add lanes and upgrade the traffic signal operations to add capacity, reduce delay and improve safety. Provide access ramps and bike lanes on King and Mission. Includes traffic signal coordination.	Unknown			x												
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	Permitting.	x	x	x		x			x				x	x		
SCi-35	Pacific Station / 920 Pacific Ave	The current conceptual plan is for a 5-story, mixed use, transit-oriented development with the expanded Metro center on the ground floor, along with limited commercial uses; parking on the second floor; and affordable housing with limited office space on the remaining 3 floors, approximately 1 mile from Route 1 (City of Santa Cruz 2016a).	Conceptual design process is approaching completion.			x												



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SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	Unknown	x	x	x		x			x				x			
SCi-37	Recycling Yard and Great Meadow Bike Path Projects /	Amends the UC Santa Cruz Long Range Development Plan to revise the land use designation of portions of the Recycling Yard site. 2.4 acres of the 6.1-acre site would be used for a new access road and storm water detention areas. The project also includes design approval of Phase 1 of the new facility, which includes perimeter landscaping, fencing, and open area for a working yard (University of California Santa Cruz 2015)	Project approved.			x												
SCi-38	Route 1 San Lorenzo Bridge Widening /	Widen the Route 1 San Lorenzo River Bridge to improve flow from Route 17 through the Junction of Routes 1 and 9 (Caltrans 2013)	Planning phase.			x												
SCi-39	San Lorenzo River Lagoon Interim Management Program /	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-foot. horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean (City of Santa Cruz 2015).	Project approved.			x		x			x				x			
SCi-40	Santa Cruz 1/17 Shoulder Widening (05-1A870)	Re-striping and shoulder widening on SR 1 from NB merge with SR 17 to NB off-ramp to Ocean St.	PSE/ROW.			x												

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SCi-41	Santa Cruz Bridge Rails	Bridge rail upgrade at the SR 1/SR 17 connector separation and Ocean St undercrossing – 4 bridges.	CANDIDATE.			x												
SCi-42	Santa Cruz Wharf Master Plan / 21 Municipal Wharf	Adopt and implement the Wharf Master Plan and construct two projects recommended in the Master Plan: Relocate the Wharf entry gate and construct the East Promenade for pedestrian use. The Master Plan includes: recommendations for expansion of the wharf for public access and construction of improvements and three new buildings; structural wharf improvements; and circulation and parking improvements (City of Santa Cruz 2016b).	Comment period on Revised Initial Study/ Mitigated Negative Declaration ended Nov. 16, 2016.			x												
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	Unknown	x		x		x			x				x			
SCi-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beulah Park undercrossing.	PSE/ROW.			x		x			x				x			
SCi-45	Upper Quarry Amphitheater Renovation Phase 1 / 1156 High Street	Provide life safety, building code, accessibility and basic operational upgrades to an existing 1,600 seat outdoor amphitheater, which was constructed in the late 1960s in a historic lime quarry and has been closed since 2006 due to disrepair (City of Santa Cruz 2016b).	Final IS/MND approved in November 2016.			x												

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Jurisdiction: County of Santa Cruz																		
SCo-01	7th Avenue / Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	Unknown	x		x		x			x			x	x			
SCo-02	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	Unknown				x	x	x		x	x	x		x	x	x	
SCo-03	Santa Cruz Branch Rail Line	Conversion of a 32-mile coastal freight rail corridor to a mix of passenger rail, transit, bicycle, and pedestrian uses.	Unknown															
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	Unknown	x	x	x		x			x	x			x			x
SCo-05	1240 Chanticleer Ave. / Same	2-lot Minor Land Division (County of Santa Cruz 2016c).	Open building permit in Application status.	x		x		x			x	x			x			

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SCo-06	1930 Ocean Street Extension / Same	40-unit apartment/ condominium development (County of Santa Cruz 2016c)	Environmental review.			x												
SCo-07	735 Meder Street /	The project would construct a single-family residence, accessory structures, well, water storage tanks, septic system, and access road within a 7-acre development envelope on a 50-acre parcel (County of Santa Cruz 2016b).	Permitting.			x												
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter) (County of Santa Cruz 2016a).	Planning application prep PC; lacking info on building permit.	x		x		x			x				x			
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	Included in Regional Transportation Plan (AMBAG 2014).	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SCo-10	Castle Rock State Park Entrance Relocation / 15435 Skyline Blvd, Los Gatos	Relocation of the Park entrance and phased construction of a Park gateway. Phase One would demolish existing structures and construct: a new driveway and entrance, deceleration and acceleration lanes, parking lot, amphitheater, restrooms, picnic areas and trails. Phase Two would construct a visitor's center complex of about 6,000 sq. ft. and related improvements (County of Santa Cruz 2014a)	Planning application approved; lacking information on building permits.			x												
SCo-11	Chaminade Lane Grading /	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development. (County of Santa Cruz 2014b).	Planning application approved; building applications complete but lacking information on building permit approval.	x		x		x			x	x			x			

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SCo-12	County Rountree Rehabilitation and Re-Entry Facility / 100 Rountree Lane	Demolish approximately 5,692 square feet of an existing County jail building, and construct additions totaling approximately 14,629 square feet. Includes grading of approximately 3,800 cubic yards of cut and 4,800 cubic yards of fill; installation of new loop road, storm water improvements, outdoor recreation, expanded service yard and inmate intact sally ports; removal of 28 existing trees, and planting of 28 replacement trees (County of Santa Cruz 2015a)	Building application approved, but undergoing application check for proposal for revisions to approved project.			x												
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016i)	Permit approved - project on hold.	x	x	x		x			x	x		x	x	x		
SCo-14	Hochler Minor Land Division /	Divide a 37,314-square-foot parcel (0.86 acres) into three parcels of 11,835 net developable square feet (Lot 1; 12,315 net developable square feet (Lot 2); and 10,861 net developable square feet (Lot 3), with a right-of-way of 2,303 square feet. No building is contemplated as part of this Minor Land Division.	Planning application approved; building permits likely to be approved since some structures have been completed.			x												
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Drive, Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	Planning application approved; building application complete; lacking info on building permit approval.			x		x			x				x			
SCo-16	Johnson Grading /	Construct a 2,270-foot-long driveway and single-family dwelling. Includes approximately 2,100 cubic yards of excavation and 1,500 cubic yards of fill and the removal and replacement of an existing ephemeral stream crossing.	Planning application approved; building applications complete but lacking information on building permit approval.			x	x											



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SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area (County of Santa Cruz 2015c).	Planning application approved; lacking information on building permits.	x		x		x			x	x			x			
SCo-18	Juvenile Hall Recreation Facility / 3650 Graham Hill Road, Felton, CA	Construct a 6,880-square foot pre-fabricated steel-frame building to be used as a recreational facility for the Santa Cruz County Juvenile Hall.	Planning application approved; lacking information on building permits.			x												
SCo-19	Juvenile Hall Seed to Table / NA	Renovate and upgrade the existing juvenile hall, including upgrades to septic system; construction of onsite greenhouse and garden plots; replacement of security fencing; and building renovations and upgrades.	Planning application complete; building application resubmitted and routing.			x												
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well (County of Santa Cruz 2016j).	Mitigated Negative Declaration approved. No building permit in Application Status and Permit History.					x			x	x			x			
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	Included in Regional Transportation Plan (AMBAG 2014).	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SCo-22	Lode Street Wet Weather Retention Basin Project /	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (County of Santa Cruz 2016g).	Mitigated Negative Declaration approved.	x		x		x	x		x	x			x			

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SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	Included in Regional Transportation Plan (AMBAG 2014).	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SCo-24	Monterey Bay Sanctuary Scenic Trail Network Master Plan (Santa Cruz Branch Line) /	The Monterey Bay Sanctuary Scenic Trail Network Master Plan establishes an alignment and set of design standards for a multi-use trail for the length of Santa Cruz County (County of Santa Cruz RTC 2013).	The FEIR was certified on November 7, 2013. City of Watsonville is preparing to implement Segment 18 (RTC 2016).			x												
SCo-25	Mt. Hermon Felton Meadow Project /	This proposal would allow the site to be developed with recreation and educational facilities consisting of small and large bike pump tracks with hillside flow trails, an aerial adventure course, splash-park, a community garden, a retail building with concessions and welcome center and a classroom/day camp building. A pedestrian bridge is proposed to be constructed at the eastern edge of the site to provide a safe pedestrian crossing at Zayante Road. (County of Santa Cruz 2016h).	Environmental review.			x												
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	Environmental document circulated 2008.	x		x		x	x		x	x			x			
SCo-27	Pasatiempo Water Storage Tank /	Construct a 500,000-gallon water tank for storage of tertiary treated non-potable water, on-site well water, and City of Santa Cruz Water Department water for irrigation of the Pasatiempo Golf Course; construct a 625-square-foot pump house; maintenance access road off of Sims Road; and 230 sq. ft. restroom and associated leach field. Includes approximately 2,699	Planning application approved; Building application routing for approval to construct 960 sq. ft. CMU block filtration building.			x												

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		c.y. of cut and 1,710 c.y. of fill (County of Santa Cruz 2015e)																
SCo-28	Pure Water Soquel /	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells (Soquel Creek Water District 2016).	Environmental review.	x		x			x			x	x	x			x	x
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	Included in Regional Transportation Plan (AMBAG 2014).	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SCo-30	Santa Cruz Highway 17 Pasatiempo Shoulder Widening / State Route 17	Caltrans proposes to improve the safety of southbound SR 17 in Santa Cruz County from the southbound exit to SR-17 in Santa Cruz County from the southbound exit ramp to SR 1 (post mile .01) to the entrance ramp from Pasatiempo Drive (post mile 0.4 by constructing a retaining wall and widen the outside shoulder to 10 feet (Caltrans 2015e).	Environmental document approved in 2016.			x												
SCo-31	SR 17 Pasatiempo Shoulder Widening(05-1C670)	Shoulder widening and soil nail wall from SB exit ramp to SR 1 to Pasatiempo Dr entrance ramp.	PAED.			x												
SCo-32	SR 17 Shoulder Widening and Concrete Guardrail (O5-0T980)	Shoulder widening and concrete guardrail from 0.9 mile north of Vinehill Rd to 0.5 mile south of Glenwood Dr. \$6.2 million construction cost.	PSE/ROW.			x												

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
SCo-33	SR 236 Segment 1	Route Concept: Maintain two-lane conventional highway.	Corridor Data Sheet: <a href="http://www.dot.ca.gov/dist05/planning/sys_plan_docs/factsheets_datasheets/SR236/sr236_appendixa_datasheet.pdf">http://www.dot.ca.gov/dist05/planning/sys_plan_docs/factsheets_datasheets/SR236/sr236_appendixa_datasheet.pdf</a> .			x												
SCo-34	The Lumberyard Mixed Use Development /	Demolish an existing lumberyard building and construct a 9,600-square foot-commercial, retail building with one commercial condominium (County of Santa Cruz 2015d).	Planning application approved; lacking information on building permits.	x		x		x			x	x			x			
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	PSE/ROW.	x	x	x	x	x		x	x	x	x	x	x	x	x	x
City of Scotts Valley																		
SV-01	1440 Center	The proposed project, known as the 1440 Center, involves the redevelopment of the existing Bethany University Campus site into an educational learning center for individuals, groups, and corporations through a variety of faculty and curriculum. Guests will attend either a weekday session occurring Sunday through Friday, or a weekend session occurring Friday through Sunday, and will be provided overnight accommodation with on-site dining facilities.	<a href="http://www.scottsvally.org/downloads/planning/1440Mitigated_Negative_Declaration.pdf">http://www.scottsvally.org/downloads/planning/1440Mitigated_Negative_Declaration.pdf</a> .			x												
SV-02	440 Kings Village Rd.	The proposed project is a General Plan Amendment and Zone change of the 21-acre site from Light Industrial to Residential Medium High Density (approximately 12 acres) and Open Space (approximately seven acres). The remaining two areas are roadways. Additionally, approximately two acres would be dedicated for an on-site roadway. The applicant of the proposed project is 440 Kings Village, LLC (applicant).	<a href="http://www.scottsvally.org/downloads/planning/Current%20Projects/440%20Kings%20Village%20Road%20GPA%20&amp;%20Rezone/440_Kings_Village_Road_Notice_of_Preparation_2017-01-30.pdf">http://www.scottsvally.org/downloads/planning/Current%20Projects/440%20Kings%20Village%20Road%20GPA%20&amp;%20Rezone/440_Kings_Village_Road_Notice_of_Preparation_2017-01-30.pdf</a> .			x												

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
SV-03	Dunslee Way Commercial and Residential Project	<p>Commercial Lot: The proposed project will include a street frontage commercial building (5,000 square feet) with surface parking, trash enclosure, and related property improvements. Commercial tenant(s) or use(s) are not known but will be subject to the City's C-S zoning regulations. Access is proposed off Scotts Valley Drive and Dunslee Way.</p> <p>Residential Lots: In four separate buildings, twenty-five residential townhouses will be located behind the commercial building. Each townhouse will be located on a separate lot, with lot sizes ranging between 1,100 to 1,900 square feet. The majority of the townhouses will be 3-story (22 of 25 townhouses), while Buildings 2-4 will have one 2-story townhouse closest to Dunslee Way. Floor areas will range from 1,342 to 2,233 square feet. Each townhouse includes a front porch and 2-story deck. All garages are designed for two cars with interior dimensions of 21 feet x 21 feet.</p>	<p><a href="http://www.scottsvally.org/downloads/planning/Dunslee_Way_Planned_Development/Dunslee_Way-Initial_Study_&amp;_MND_2016-10-11.pdf">http://www.scottsvally.org/downloads/planning/Dunslee_Way_Planned_Development/Dunslee_Way-Initial_Study_&amp;_MND_2016-10-11.pdf</a>;</p> <p><a href="http://www.scottsvally.org/downloads/council/2016/12-07-16.Item3.pdf">http://www.scottsvally.org/downloads/council/2016/12-07-16.Item3.pdf</a>.</p>			x												
SV-04	Emergency Access SR 17/Granite Creek Rd (SV-P24)	Connect Granite Creek Rd. to SR 17 via Navarra Drive to Sucinto Drive, for emergency access.	Unconstrained.			x												



Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
SV-05	Enterprise Way	The proposed project involves the construction of a hotel and residential townhomes on Santa's Village Road north of the existing Enterprise Technology Center (aka "Borland"). The currently vacant project site is located on the northern edge of the City of Scotts Valley (the City) in northern Santa Cruz County. On the southwestern portion (2.48 acres) of the project site, the applicant would construct a four-story, 120-room hotel and associated surface parking lot. The hotel would operate under an extended stay, select service model, and each room would have a living area and kitchen space. On 3.87 acres of the project site, the applicant would construct a 50-unit townhouse development comprising three-bedroom, three-story units spread among ten buildings. Each unit would have its own two-car garage at the ground level, and include circulation and visitor parking areas.	Unknown			x												
SV-06	Gateway South Retail Store	The project sponsor, Title Two Investments, proposes to construct a 143,000-square foot retail store and 517 associated parking spaces, including a 57,650-square-foot parking deck. The project site is located on the west side of State Route 17, on La Madrona Drive, generally southwest of the Mt. Hermon Road / La Madrona Drive exit, in the City of Scotts Valley in Santa Cruz County. The elevated western portion of the site, which contains mature redwood and native live oak trees, would be retained as open space. The proposed project includes an amendment to the Gateway South Specific Plan to accommodate the proposed building coverage.	Unknown			x												

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
SV-07	Glenwood Open Space Management Plan	The City of Scotts Valley, Scotts Valley Water District and the Land Trust of Santa Cruz County are pleased to announce the opportunity for consultants to provide expertise in the development of a Long-Term Management Plan (LTMP) for the 160-acre Glenwood Preserve, located in Scotts Valley, California. It is anticipated that the Land Trust of Santa Cruz County will work in partnership with the City of Scotts Valley to manage the Preserve. The LTMP is intended to guide management of the Preserve to protect and enhance its natural resource values, while accommodating low-intensity recreational use that is compatible with the natural resource objectives for the site.	Unknown			x												
SV-08	Scotts Valley Middle School Modernization Project /	Demolition and removal of the existing gymnasium, snack shack, portable classrooms, two maintenance buildings, and two free standing classrooms; construction of a new library, gymnasium and kitchen facilities; installation of pre-fabricated administration and classroom buildings supporting 12 classrooms; resurfacing and restriping of the main parking lot and driveway (City of Santa Cruz 2016b).	Project approved.			x												
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	PID.			x		x			x				x			
SV-10	SR 17/Granite Creek Rd Interchange (SV-P08)	Realign/reconfigure the Granite Creek Rd overcrossing, add bike lanes and sidewalks.	Unconstrained.			x												
SV-11	SR 17/Midtown Interchange (SV-P01)	Construct new SR 17 interchange midway between Mt Hermon Rd and Granite Creek Rd. Will require right-of-way.	Unconstrained.			x												

Project No.	Project Name / Street Address	Project Description	Status	RSAs in which the Project is Located (number corresponds to figure number in Appendix C)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
				Watersheds (Water Quality/Stormwater, Wetlands/Other Waters & /Riverine/Freshwater Marsh)	Tidewater Goby	Steelhead	California Tiger Salamander & Santa Cruz Long-Toed Salamander	California Red-Legged Frog & White-Tailed Kite	Foothill Yellow-Legged Frog & Western Pond Turtle	Riparian Forest	Cooper's Hawk	Tri-Colored Blackbird	Short-Eared Owl	Least Bell's Vireo & Southwestern Willow Flycatcher	American Badger, Pallid Bat, Hoary Bat & Townsends Big-Eared Bat	Coast Live Oak Woodland & Monarch Butterfly	Coastal Scrub	Visual
SV-12	SR 17/Mt Hermon Rd Interchange (SV-P44)	Add lane to SB off-ramp at Mt Hermon Rd.	Unconstrained.			x												
SV-13	The Terrace at Scotts Valley Townhouse Subdivision	Create 20 townhouse residential lots and one common lot from a vacant 2.6-acre lot and construct a townhouse dwelling on each lot and associated common owned improvements on the common lot.	Unknown			x												
Jurisdiction: City of Watsonville																		
Wat-01	MBSST Rail Trail: Lee Road, 4000 feet east to City Slough Trail connection	Construction of 4000-foot long pathway parallel to the railroad tracks: eight-foot width asphalt (hma) and two-foot base rock shoulders on each side. A 500-foot-long retaining wall up to 3-foot-tall with fence will be needed near Lee Road. A four foot by 6- foot railroad building at the Ohlone Parkway will need to be relocated. A drainage structure east of Ohlone Parkway will need to be modified. Connection to Lee Road shall require installation of pathway or sidewalk to link to the existing sidewalk. At grade crossing at Ohlone Parkway and at a spur line located between Lee Road and Highway 1.	Unknown			x												

Attachment B:  
Projects Located in Resource Study Areas (RSAs)

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TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Table B-1: Projects Located in the Riverine/Freshwater Marsh Natural Community RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
<b>City of Capitola</b>						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-02	114 Grand Ave.	Historic Review.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application under 3rd Party Review: Historic Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application Incomplete Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review.	Riverine/freshwater marsh habitat may exist adjacent to the project site. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application under 3rd Party Review: Historic Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting Date of Publication: December, 2016



TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision.	Riverine/freshwater marsh habitat may exist adjacent to the project site. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd.	Exterior remodel of "Sears" creating 2 new tenant spaces.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Approved December 1, 2016  Date of Publication: December, 2016
Cap-10	4025 Brommer St.	Conceptual Review of 3-story proposal.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Approved November 3, 2016  Date of Publication: December, 2016
Cap-11	407 El Salto Dr.	Front yard fence and wall in public right-of-way.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	The proposed project could cross several riverine and freshwater marsh habitats. Construction of the project could impact riverine and freshwater marsh as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, construction in riverine or freshwater marsh habitat should be avoided. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on riverine habitat and protecting freshwater marshland.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St.	Remodel and addition to residence.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application Incomplete Date of Publication: December, 2016
Cap-14	502 Pine St.	Create condo map for new duplex.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application Status Unknown Date of Publication: December, 2016
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i> Status: Current Status Unknown Date of Publication: August, 2013

TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-16	Capitola Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Riverine/freshwater marsh habitat may exist adjacent to the project site. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Riverine/freshwater marsh habitat may exist adjacent to the project site. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016

TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Santa Cruz						
SCi-16	407 Broadway (Hyatt)	106-room hotel.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-19	514 Frederick	4 townhome units.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-23	716 Darwin	15 apartments.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-24	716-724 Seabright (Seabright Breakers)	11 townhouses.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-25	738 Pacheco	Three lot subdivision.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Approved Date of Publication: November 30, 2016
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned.	The project crosses and is located above and adjacent to riverine habitat. There may be potential for indirect impact such as the flow of runoff from project activities. It appears that there could be direct impact to riverine habitat during wet pile installation; however, the available document focuses on the effects on marine species and does not discuss impacts to riverine/ freshwater marsh habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i> Status: Permitting Date of Publication: January, 2015

TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon “Y”. Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	The proposed project could cross several riverine and freshwater marsh habitats. Construction of the MBSST Network project could impact riverine and freshwater marsh as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	Best management practices will be implemented during construction. Project-level environmental documents will evaluate the need for compensatory mitigation for impacts.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	No riverine/freshwater marsh habitat exists within the project area. Therefore, there is no potential impact to riverine/freshwater marsh resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown  Date of Publication: 2016
<b>Santa Cruz County</b>						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	Riverine/freshwater marsh habitat may exist adjacent to the project site. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016.  Date of Publication: August 12, 2016
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	No freshwater marsh impacts are discussed in the environmental document. The project includes stream restoration and bridge replacement within and alongside an ephemeral channel. These impacts are expected to be less than significant.	Not discussed in ED	Y	Document Title: <i>“The Farm Neighborhood Park and Community Center” Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-05	1240 Chanticleer Ave.	2-lot Minor Land Division.	No discussion of riverine/freshwater marsh impacts is included in environmental document.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown  Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter).	No discussion of riverine/freshwater marsh impacts is included in environmental document.	Not discussed in ED	Y	Document Title: <i>E. Cliff Dr. “Road House” Site Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Current Status Unknown  Date Published: October 24, 2016



TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The proposed project could cross several riverine and freshwater marsh habitats. Construction of the Bus Rapid Transit project could impact riverine and freshwater marsh as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, construction in riverine and freshwater marsh habitats should be avoided. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on riverine and freshwater marsh habitats.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development.	No discussion of riverine/freshwater marsh impacts is included in environmental document.	Not discussed in ED	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i> Status: Current Status Unknown Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	Riverine/freshwater marsh habitat may exist adjacent to the project site. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects</i> Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area.	The proposed project is not located near any riverine or freshwater marsh habitat and would not alter the existing overall drainage pattern of the site.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i> Status: Current Status Unknown Date of Publication: July, 2015
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The proposed project could cross several riverine and freshwater marsh habitats. Disturbances associated with the construction and operation of these facilities may increase erosion, sediment, and otherwise alter water entering nearby waterways and marsh land. These impacts would be determined on a site by site basis.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, construction in riverine and freshwater marsh habitats should be avoided. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on riverine and freshwater marsh habitats.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017



TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material.	The environmental document did not identify marshlands or riverine habitat in the project area. Therefore, it is assumed that there is no potential impact to riverine/freshwater marsh resources.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Approved Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The proposed project would cross several riverine and freshwater marsh habitats. Disturbances associated with the construction and operation of these facilities may increase erosion, sediment, and otherwise alter water entering nearby waterways and marsh land. Any impacts are expected to be significant, but mitigable.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, construction on riverine or freshwater marsh habitat should be avoided. Where necessary, a dewatering/diversion plan and mitigation shall be prepared and submitted to NMFS, USFWS, CDFW, and USACE for review and approval.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1.	The proposed project has the potential to alter riverine habitat as a result of development from an outflow structure on Rodeo Creek Gulch. Riverine and freshwater marsh impacts are expected to be less than significant.	The proposed project shall develop a mitigation plan in which riverine impacts are minimized. No earth or organic material shall be deposited or placed where it may be directly carried into a stream, march slough, lagoon, or body of standing water.  Runoff shall be minimized through percolation, eliminate erosion through the use of non-erodible materials, and comply with all permitting requirements.	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i> Status: Current Status Unknown Date of Publication: September, 2008
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells.	The potential for construction and operational activities associated with the proposed Project resulting in on-site erosion or potential release of hazardous materials that could impact water quality (surface and groundwater) are being considered. Water quality studies are also being conducted to assess changes in riverine quality associated with: groundwater injection, changes in saline water intrusion patterns, or other riverine effects. Impacts on riverine and freshwater marsh are expected to be potentially significant.	While the proposed Project would not introduce substantial new land uses or structures within the Project area, consideration of the potential for construction related impacts is underway. In addition, it is unclear what impacts and necessary mitigation measures will arise from this groundwater replenishment project. Exact mitigation measures will be released once the EIR is complete.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i> Status: Current Status Unknown Date of Publication: November, 2016

TABLE B-1:  
PROJECTS LOCATED IN THE RIVERINE/FRESHWATER MARSH NATURAL COMMUNITY RSA

Project No.	Project Name / Street Address	Project Description	Riverine/ Freshwater Marsh Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The proposed project could cross several riverine and freshwater marsh habitats. Disturbances associated with the construction and operation of these facilities may increase erosion, sediment, and otherwise alter water entering nearby waterways and marsh land. These impacts would be determined on a site by site basis.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, construction in riverine and freshwater marsh habitats should be avoided. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on riverine and freshwater marsh habitats.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium.	The project is not located near any riverine or freshwater marsh habitat and would not alter the existing overall drainage of the site.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development Initial Study</i> Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Riverine/freshwater marsh habitat may exist adjacent to some project activities. However, the positive identification of riverine/freshwater habitat would need to be performed on-site by a qualified biologist. There may be potential for indirect impact such as runoff from the site entering riverine/freshwater marsh habitat.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda. Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016

TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA

Table B-2: Projects Located in the Wetlands and Other Waters RSA

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home.	Because the project site is adjacent to Monterey Bay, wetlands and/or other waters of the U.S. occur adjacent to the project site. There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-02	114 Grand Ave.	Historic Review.	Because the project site is adjacent to Monterey Bay, wetland and other waters occur adjacent to the project site. There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review.	Because the project site is adjacent to Soquel Creek, wetlands and/or other waters occur adjacent to the project site. There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016

TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision.	Because the project site is adjacent to Soquel Creek, wetland and/or other waters occur adjacent to the project site. There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd.	Exterior remodel of "Sears" creating 2 new tenant spaces.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-10	4025 Brommer St.	Conceptual Review of 3-story proposal.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impacts to wetlands and other waters resources..	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-11	407 El Salto Dr.	Front yard fence and wall in public right-of-way.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impacts to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	The proposed project could cross wetland habitats. Construction of the project could impact wetlands as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	All projects occurring within/adjacent to aquatic habitats shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. In addition, construction on wetlands should be avoided. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on wetlands.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St.	Remodel and addition to residence.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St.	Create condo map for new duplex.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Status Unknown  Date of Publication: December, 2016
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i>  Status: Current Status Unknown  Date of Publication: August, 2013

TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-16	Capitola Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Because the project site is adjacent to Soquel Creek, wetland and/or other waters occur adjacent to the project site. There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Because the project site is adjacent to Soquel Creek, wetland and/or other waters occur adjacent to the project site. There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016



TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Santa Cruz						
SCi-16	407 Broadway (Hyatt)	106-room hotel.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-19	514 Frederick	4 townhome units.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-23	716 Darwin	15 apartments.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-24	716-724 Seabright (Seabright Breakers)	11 townhouses.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-25	738 Pacheco	Three lot subdivision.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Approved Date of Publication: December, 2016
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned.	Because the project spans the Santa Cruz harbor and Arana Gulch, wetland and/or other waters occur on the project site. Impact to wetlands and/or other waters may occur if there is any disturbance of or runoff into delineated wetlands and/or other waters of the U.S.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i> Status: Permitting Date of Publication: January, 2015

TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	The proposed project could cross wetland habitat. Construction of the project could impact wetlands as a result of development which could alter or degrade habitat. These impacts would be determined on a site-by-site basis by a qualified biologist.	Compensatory mitigation would be provided for direct impact to wetlands. At this time, no specific environmental mitigation measures (such as for wetlands) have been developed. Specific environmental measures that would be identified in future project-level environmental documents for sections of the trail.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: November 7, 2013
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	No wetland or other waters occur on or adjacent to the project site. Therefore, there is no potential impact to wetlands and other waters resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown Date of Publication: 2016
<b>County of Santa Cruz</b>						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	The proposed project could develop land adjacent to Woods Lagoon (Santa Cruz Harbor). There may be potential for indirect impact such as runoff from the site entering wetlands or other waters.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016. Date of Publication: August 12, 2016
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	The project includes stream restoration and bridge replacement within and alongside a stream channel. Construction activities or runoff generated by the project could result in impacts to wetlands and/or other waters of the U.S.	A stream hydrology and hydraulics report was developed requiring drainage improvements, a riparian buffer, and restoration work to minimize or eliminate any impacts on wetlands or other waters.	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017. Date of Publication: 2011
SCo-05	1240 Chanticleer Ave.	2-lot Minor Land Division.	No wetland or other waters impacts are included in the environmental document. Therefore, there is no potential impact to wetlands and other waters resources.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter).	No impacts on wetland or other waters are included in the environmental document. Therefore, there is no potential impact to wetlands and other waters resources.	Not discussed in ED	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Current Status Unknown Date Published: October 24, 2016

**TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA**

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The proposed project could cross wetlands or other waters. Construction of the project could impact wetlands as a result of development which could alter or degrade habitat. These impacts would be identified by a qualified biologist on a site by site basis.	All projects occurring within/adjacent to aquatic habitats shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. In addition, construction on wetlands should be avoided. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on wetlands.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development.	The project is not located near any federally protected wetlands. However, there is potential for seasonal wetlands on the project site. Construction of the project could impact wetlands as a result of development which could alter or degrade habitat. These impacts would be identified by a qualified biologist on a site by site basis.	No specific discussion of mitigation for wetlands or other waters occurs within the document. However, a number of different erosion control and wetland/waterway avoidance measures are included in the document.	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i>  Status: Current Status Unknown  Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	The proposed project could develop a vacant parcel that may qualify as a wetland habitat. A delineation of wetlands and other waters would need to be made by a qualified biologist on site. Impacts may occur there is any disturbance of or runoff into delineated wetlands and/or other waters of the U.S.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area.	The proposed project is not located on any designated wetlands and would not have any significant impacts. Therefore, there is no potential impact to wetlands and other waters resources.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i>  Status: Current Status Unknown  Date of Publication: July, 2015
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The proposed project could cross wetland habitats. Construction of the project could impact wetlands as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	All projects occurring within/adjacent to aquatic habitats shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. In addition, construction on wetlands should be avoided. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on wetlands.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material.	The project is not located on wetlands or other waters. However, the project directly effects water flow and runoff into Moran Lake, and an erosion control plan is included in the project to minimize downstream impacts from construction.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Approved  Publication Date: March, 2016

**TABLE B-2:  
PROJECTS LOCATED IN THE WETLANDS AND OTHER WATERS RSA**

Project No.	Project Name / Street Address	Project Description	Wetlands and Other Waters Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The proposed project could cross wetland habitat. Disturbances associated with the construction and operation of these facilities may increase erosion, sediment, and otherwise wetlands. Any impacts are expected to be significant, but mitigable. These impacts would be determined on a site by site basis.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, construction on wetlands should be avoided. Where necessary, a dewatering/diversion plan and mitigation shall be prepared and submitted to NMFS, USFWS, CDFW, and USACE for review and approval.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1.	No discussion of impacts on wetland or other waters occurs within the environmental document. Therefore, it is assumed that there is no potential impact to wetlands and other waters resources.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i>  Status: Current Status Unknown Date of Publication: September, 2008
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells.	The potential for construction and operational activities associated with the proposed Project resulting in wetland impacts are being considered. Information will be released with this Project's EIR. Impacts on wetlands are expected to be potentially significant.	It is unclear what impacts and necessary mitigation measures will arise from this groundwater replenishment project. Exact mitigation measures, if any, will be released once the EIR is complete.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i>  Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The proposed project could cross wetland habitats. Construction of the project could impact wetlands as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	All projects occurring within/adjacent to aquatic habitats shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species. In addition, construction on wetlands should be avoided. The sponsor of a 2035 MTP/SCS project shall ensure that efforts are focused on eliminating impacts on wetlands.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium.	No discussion of impacts on wetland or other waters occurs within the environmental document. Therefore, it is assumed that there is no potential impact to wetlands and other waters resources..	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development</i>  Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	The proposed project may potentially include activities in or adjacent wetlands or other waters. However, positive identification of wetlands and other waters would require site-specific investigation by a qualified biologist.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016



TABLE B-3:  
PROJECTS LOCATED IN THE TIDEWATER GOBY RSA

Table B-3: Projects Located in the Tidewater Goby RSA

Project No.	Project Name / Street Address	Project Description	Tidewater Goby Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
<b>City of Capitola</b>						
Cap-04	1810 Wharf Rd	Historic Review.	Tidewater Goby habitat may exist adjacent to the property; however, the positive identification of tidewater goby habitat would need to be performed on-site by a qualified biologist. Any disturbance of identified habitat, project-induced runoff to identified habitat, or reduction in streamflow may have potential to impact tidewater goby habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave	Upgrade to façade and addition of living space.	No tidewater goby habitat exists within the project area. Therefore, there is no potential impact to Tidewater Goby habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016
Cap-06	2091 and 2097 Wharf Rd	Existing home with addition and 2 new single-family homes on 3 lot subdivision.	Tidewater Goby habitat may exist adjacent to the property; however, the positive identification of tidewater goby habitat would need to be performed on-site by a qualified biologist. Any disturbance of identified habitat, project-induced runoff to identified habitat, or reduction in streamflow may have potential to impact tidewater goby habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit	No tidewater goby habitat exists within the project area. Therefore, there is no potential impact to Tidewater Goby habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-17	New Library Intersection of Clares Street and Wharf Road	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community’s needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	No tidewater goby habitat exists within the project area; however, the site is located across Wharf Road from Soquel Creek. The positive identification of tidewater goby habitat would need to be performed on-site by a qualified biologist. Any disturbance of identified habitat, project-induced runoff to identified habitat, or reduction in streamflow may have potential to impact tidewater goby habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013

TABLE B-3:  
PROJECTS LOCATED IN THE TIDEWATER GOBY RSA

Project No.	Project Name / Street Address	Project Description	Tidewater Goby Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Tidewater goby habitat may potentially be present; however, the available document focuses on impacts to marine mammals. The positive identification of tidewater goby habitat would need to be performed on-site by a qualified biologist. Any disturbance of identified habitat, project-induced runoff to identified habitat, or reduction in streamflow may have potential to impact tidewater goby habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned.	Tidewater goby habitat may potentially be present; however, the available document focuses on impacts to marine mammals. The positive identification of tidewater goby habitat would need to be performed on-site by a qualified biologist. Any disturbance of identified habitat, project-induced runoff to identified habitat, or reduction in streamflow may have potential to impact tidewater goby habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	Implementation of the Rail Trail could result in impacts to Tidewater Goby. The impact is described as "Class II, significant but mitigable." Tidewater goby could be affected through: streambed disturbance, encroachment upon suitable habitat, and tree removal, and permanent loss of habitat. Dewatering/diversion could result in direct impacts in the form of injury or mortality and could result in individual tidewater gobies becoming stranded in dewatered areas.	If suitable habitat for tidewater goby cannot be avoided, any in-stream portions of each segment shall be dewatered/diverted. A dewatering/diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. All dewatering/diversion activities shall be monitored by a qualified fisheries biologist.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
Santa Cruz County						
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	No discussion of tidewater goby in the environmental document. Therefore, it is assumed that there is no potential impact to Tidewater Goby habitats.	Not discussed in ED	Y	Document Title: The Farm Project: Negative Declaration and Notice of Determination  Status: Unknown  Date of Publication: March 3, 2007



TABLE B-3:  
PROJECTS LOCATED IN THE TIDEWATER GOBY RSA

Project No.	Project Name / Street Address	Project Description	Tidewater Goby Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The potential to adversely affect tidewater goby (TWG) was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to TWG could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-13	Erlach Site on Cunnison Lane— MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	No tidewater Goby habitat exists in the project area. Therefore, there is no potential impact to Tidewater Goby habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The potential to adversely affect tidewater goby (TWG) was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to TWG could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The proposed project could cross several landscapes that provide habitat to tidewater goby. Construction of the project could impact tidewater goby as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis by a qualified biologist.	If suitable habitat for tidewater goby cannot be avoided, any in-stream portions of each segment (where drainage crossings require in-stream work) shall be dewatered/diverted. A dewatering/diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. Additional mitigation will occur on a site-by-site basis.	Y	Document Title: Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The potential to adversely affect tidewater goby (TWG) was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to TWG could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Portions of the project corridor cross waterways with known tidewater goby occurrences. Although the safety improvements may be minor and may not affect any waterways, based on the limited information about the project, the potential for impact to tidewater goby cannot be ruled out.	Not available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Table B-4: Projects Located in the Central California Coast Steelhead RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
City of Capitola						
Cap-01	105 Sacramento Ave	Demolition of existing and new single-family home	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Capitola Planning Permit List, November 2016</i> Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-02	114 Grand Ave	Historic Review	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Capitola Planning Permit List, November 2016</i> Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-03	115 Saxon Ave	Remodel and addition	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Capitola Planning Permit List, November 2016</i> Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-04	1810 Wharf Rd	Historic Review	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application under 3rd Party Review: Historic Date of Publication: December, 2016
Cap-05	208 Capitola Ave	Upgrade to façade and addition of living space	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting Date of Publication: December, 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application under 3rd Party Review: Stormwater Date of Publication: December, 2016

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
Cap-07	2205 Wharf Rd	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave	Remodel, addition, and new secondary dwelling unit	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd	Exterior remodel of "Sears" creating 2 new tenant spaces	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-10	4025 Brommer St	Conceptual Review of 3-story proposal	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-11	407 El Salto Dr	Front yard fence and wall in public right-of-way	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	The potential to adversely affect Central Coast steelhead was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to steelhead could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017

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PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
Cap-13	4530 Garnet St	Remodel and addition to residence	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St	Create condo map for new duplex	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Status Unknown  Date of Publication: December, 2016
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	The potential to adversely affect Central Coast steelhead was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to steelhead could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017

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PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016

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PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
City of Santa Cruz						
SCi-01	131 Bixby	Duplex	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-02	1314-1400 Ocean	8,400 square feet commercial development	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date: November, 2016
SCi-03	135 Vista Branciforte	Minor Land Division to create three lots from two	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-04	150 Jewell	48-unit memory care facility	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date: November, 2016
SCi-05	1547 Pacific (Park Pacific)	63 residential units and 5,750 square feet commercial	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-06	1804-1812 Ocean Street Extension	11 townhouses	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date: November, 2016



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Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-07	214 Plymouth	Three lot subdivision and construction of a duplex on each new lot	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-08	215 Beach (La Bahia)	165 Room Hotel	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-09	2200 Delaware	395,400 square feet industrial; 248 maximum residential units (197,100 sf)	Steelhead habitat may exist on or adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: 1 <sup>st</sup> phase complete  Date: November, 2016
SCi-10	230 Grandview	Demolish single family residence and construct 12 apartment units	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-11	2415 Mission / 2415 Mission Street, Santa Cruz, CA	14 apartment units	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-12	2956 Mission (Fairfield Inn)	82-room hotel	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date: November, 2016

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PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-13	301 Beach	Add 5 rooms to an existing hotel	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date: November, 2016
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott)	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-15	350 Ocean	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-16	407 Broadway (Hyatt)	106-room hotel	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-17	413 Laurel	Convert office building to two residential units and one commercial space	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-18	430 South Branciforte	Lot split	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016

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Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-19	514 Frederick	4 townhome units	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-20	555 Pacific	94 small ownership units (single occupancy units)/5,000 square feet of commercial space	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-21	618 Windsor	5 apartments	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-22	710 Emeline	Demolish single-family residence and construct triplex	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-23	716 Darwin	15 apartments	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-24	716-724 Seabright (Seabright Breakers)	11 townhouses	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016

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Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-25	738 Pacheco	Three lot subdivision	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-26	745 Ocean (Starbucks)	2,000 square feet coffee shop	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-27	800 Soquel	Two units above 2,600 square feet commercial space	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-28	912 Western Drive	3-lot minor land division	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under Construction  Date of Publication: December, 2016
SCi-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Branciforte Creek Bridge &amp; Multi-Use Path Project Information Form</i>  Status: Project approved  Date of Publication: September, 2012
SCi-30	Coastal Science Campus Parking Lots	Construction of a new 91-space parking lot (parking lot E) and reconfiguration and expansion of the existing Seymour Marine Discovery Center parking lot to add 55 spaces.	No discussion of impacts on steelhead habitat occurs within the document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>UCSC Marine Science Campus CLDRP EIR</i>  Status: Project approved  Date of Publication:
SCi-31	Eastern Access to the University of California - Santa Cruz	Development of new access roads in conjunction with the development of a new, approximately 196,000-gsf infill student housing complex on the main UCSC campus.	No discussion of impacts on steelhead habitat occurs within the document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>East Campus Infill Project Final Environmental Impact Report</i>  Status: Unknown  Date of Publication: July, 2009.

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Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-32	Highway 1/9 Intersection Improvement Project	Widen the intersection at Route 1 and Route 9 in the City of Santa, to accommodate additional vehicle turn lanes, bicycle lanes, and shoulders to improve traffic operations and better accommodate existing and projected traffic volumes (Caltrans 2015c)	Letter of concurrence for a Not Likely to Adversely Affect conclusion received from NMFS. Project impacts to the steelhead and designated critical habitats include temporary increases in turbidity and sedimentation and potential discharges of contaminants into the San Lorenzo River.	Caltrans/City would conduct in-water construction activities during the dry season to avoid the main migration seasons of adult and juvenile salmonids and minimize the potential for adverse effects on water quality and aquatic habitat in the San Lorenzo River resulting from temporary increases in suspended sediment and turbidity.	Y	Document Title: <i>Route 1/9 Intersection Improvement Project Initial Study with Proposed Mitigated Negative Declaration</i>  Status: Environmental phase complete; notice of availability of Final Initial Study/Mitigated Negative Declaration  Date of Publication: May, 2014
SCi-33	Hwy 1/Mission St at Chestnut/King/Union Intersection Modification	Modify design of existing intersections to add lanes and upgrade the traffic signal operations to add capacity, reduce delay and improve safety. Provide access ramps and bike lanes on King and Mission.	No discussion of steelhead in the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Initial Study with Proposed Mitigated Negative Declaration</i>  Status: Unknown  Date of Publication: May, 2014
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned.	Steelhead habitat appears to exist adjacent to the project; however, the available document focuses on marine mammals. Positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCi-35	Pacific Station / 920 Pacific Ave	The current conceptual plan is for a 5-story, mixed use, transit-oriented development with the expanded Metro center on the ground floor, along with limited commercial uses; parking on the second floor; and affordable housing with limited office space on the remaining 3 floors, approximately 1 mile from Route 1.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Strategic Plan</i>  Status: Conceptual design process is approaching completion.  Date of Publication: June, 2015.
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	There is potential impact to Central Coast steelhead. The extent of impacts would depend on the final design of the drainage crossings. The use of span bridges may result in no impacts. If bridge support structures are necessary then impacts may result during bridge installation. Indirect impacts may also result due to erosion and sedimentation from ground disturbance near suitable habitat.	If suitable habitat for steelhead, cannot be avoided, any in-stream portions of each segment (where drainage crossings require instream work) shall be dewatered/diverted, following a dewatering/diversion plan approved by regulatory agencies. Turbidity of water will be monitored, equipment will not be allowed in wetted portions of streams, onsite monitoring by biologist to confirm that avoidance, minimization and mitigation measures are implemented.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013

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Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-37	Recycling Yard and Great Meadow Bike Path Projects	Amends the UC Santa Cruz Long Range Development Plan to revise the land use designation of portions of the Recycling Yard site. 2.4 acres of the 6.1-acre site would be used for a new access road and storm water detention areas. The project also includes design approval of Phase 1 of the new facility, which includes perimeter landscaping, fencing, and open area for a working yard.	No discussion of steelhead impacts occurs in the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Initial Study/Mitigated Negative Declaration for the Great Meadow Bike Path Project at the University of California, Santa Cruz</i>  Status: Project approved Date of Publication: April, 2015
SCi-38	Route 1 San Lorenzo Bridge Widening	Widen the Route 1 San Lorenzo River Bridge to improve flow from Route 17 through the Junction of Routes 1 and 9	The preliminary analysis determined that the project provides critical habitat for steelhead. If any construction were to occur within riverine or riparian habitat, this work could impact steelhead habitat. Future reports are anticipated to describe what, if any impacts may occur as a result of a number of construction options.	Mitigation for impacts on steelhead habitat will be discussed in future environmental documents.	Pending	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Project Study Report-Project Development Support to Request Approval of a Locally Funded Project to Proceed to PA&amp;ED Phase</i>  Status: Planning phase Date of Publication: November 7, 2013.
SCi-39	San Lorenzo River Lagoon Interim Management Program	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-ft. horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean.	Potentially significant impact on migrating juvenile steelhead would be reduced to less than significant by implementing mitigation.	A potentially significant impact on steelhead juvenile migration will be mitigated through controlling the operational start date of the head-driven culvert.	Y	Document Title: <i>San Lorenzo River Lagoon Interim Management Program IS/MND</i> .  Status: Project approved Date of Publication: 2016.
SCi-40	Santa Cruz 1/17 Shoulder Widening (05-1A870)	Re-striping and shoulder widening on SR 1 from NB merge with SR 17 to NB off-ramp to Ocean St.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Transportation Concept Report: Route 17</i>  Status: PSE/ROW Date of Publication: November, 2015
SCi-41	Santa Cruz Bridge Rails	Bridge rail upgrade at the SR 1/SR 17 connector separation and Ocean St undercrossing – 4 bridges.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. However, due to the limited scope of the project, impacts would be unlikely.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Project Scope Summary Report: Structure Rehabilitation</i>  Status: Candidate Date of Publication: June, 2015



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Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCi-42	Santa Cruz Wharf Master Plan / 21 Municipal Wharf	Adopt and implement the Wharf Master Plan and construct two projects recommended in the Master Plan: Relocate the Wharf entry gate and construct the East Promenade for pedestrian use. The Master Plan includes: recommendations for expansion of the wharf for public access and construction of improvements and three new buildings; structural wharf improvements; and circulation and parking improvements.	Installation of piles could result in indirect harm, disturbance or injury and/or harassment to fish, including special status species, which may be in the vicinity of the Wharf during pile installation. Steelhead have a high potential to occur in the study area.	Prepare and implement a hydroacoustic, fish and a marine mammal monitoring plan that includes pre-construction monitoring to update information on the animals' occurrence; environmental training for construction crews; an underwater "exclusion zone" that can be modified based on underwater noise measurement; and in-water construction biological monitoring.	Y	Document Title: <i>Santa Cruz Wharf Master Plan Mitigated Negative Declaration/Initial Study</i>  Status: Comment period on Revised Initial Study/ Mitigated Negative Declaration ended Nov. 16, 2016  Date of Publication: October, 2016
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown  Date of Publication: 2016
SCi-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beaulah Park undercrossing.	No discussion of steelhead in the environmental document. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Santa Cruz 17 Sediment Control: Initial Study with Proposed Mitigated Negative Declaration</i>  Status: PSE/ROW  Date of Publication: March, 2014
SCi-45	Upper Quarry Amphitheater Renovation Phase 1 / 1156 High Street	Provide life safety, building code, accessibility and basic operational upgrades to an existing 1,600 seat outdoor amphitheater, which was constructed in the late 1960s in a historic lime quarry and has been closed since 2006 due to disrepair.	No discussion of impacts on steelhead occurs within the document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Final Initial Study/Mitigated Negative Declaration UC Santa Cruz Upper Quarry Amphitheater Renovation Phase 1</i>  Status: Final IS/MND approved in November 2016.  Date of Publication: November, 2016
<b>City of Scotts Valley</b>						
SV-01	1440 Center	The proposed project, known as the 1440 Center, involves the redevelopment of the existing Bethany University Campus site into an educational learning center for individuals, groups, and corporations through a variety of faculty and curriculum. Guests will attend either a weekday session occurring Sunday through Friday, or a weekend session occurring Friday through Sunday, and will be provided overnight accommodation with on-site dining facilities.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration: 1440 Center</i>  Status: Unknown  Date of Publication: July, 2014

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SV-02	Aviza/440 Kings Village Rd.	The proposed project is a General Plan Amendment and Zone change of the 21-acre site from Light Industrial to Residential Medium High Density (approximately 12 acres) and Open Space (approximately seven acres). The remaining two areas are roadways. Additionally, approximately two acres would be dedicated for an on-site roadway. The applicant of the proposed project is 440 Kings Village, LLC (applicant).	It appears that future studies would determine whether the future development of the 21-acre site would affect steelhead. Construction of projects in this area could potentially impact steelhead as a result of development that could alter or degrade habitat. These impacts are anticipated to be determined on a project by project basis.	The document was not specific as to mitigation measures. If necessary, these will be developed during the preparation of future environmental documents.	Pending	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>NOP of an Environmental Impact Report for the Aviza Residential Project</i>  Status: Unknown  Date of Publication: January 30, 2017
SV-03	Dunslee Way Commercial and Residential Project	Commercial Lot: The proposed project will include a street frontage commercial building (5,000 square feet) with surface parking, trash enclosure, and related property improvements. Commercial tenant(s) or use(s) are not known but will be subject to the City's C-S zoning regulations. Access is proposed off Scotts Valley Drive and Dunslee Way.  Residential Lots: In four separate buildings, twenty-five residential townhouses will be located behind the commercial building. Each townhouse will be located on a separate lot, with lot sizes ranging between 1,100 to 1,900 square feet. The majority of the townhouses will be 3-story (22 of 25 townhouses), while Buildings 2-4 will have one 2-story townhouse closest to Dunslee Way. Floor areas will range from 1,342 to 2,233 square feet. Each townhouse includes a front porch and 2-story deck. All garages are designed for two cars with interior dimensions of 21 feet x 21 feet.	Steelhead habitat may exist on or adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Dunslee Way Commercial &amp; Residential Project initial Study/Mitigated Negative Declaration</i>  Status: Project appears to have been completed in 2013.  Date of Publication: October, 2016
SV-04	Emergency Access SR 17/Granite Creek Rd (SV-P24)	Connect Granite Creek Rd. to SR 17 via Navarra Drive to Sucinto Drive, for emergency access.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Transportation Concept Report State Route 17</i>  Status: Unconstrained  November 2015

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SV-05	Enterprise Way	The proposed project involves the construction of a hotel and residential townhomes on Santa's Village Road north of the existing Enterprise Technology Center (aka "Borland"). The currently vacant project site is located on the northern edge of the City of Scotts Valley (the City) in northern Santa Cruz County. On the southwestern portion (2.48 acres) of the project site, the applicant would construct a four-story, 120-room hotel and associated surface parking lot. The hotel would operate under an extended stay, select service model, and each room would have a living area and kitchen space. On 3.87 acres of the project site, the applicant would construct a 50-unit townhouse development comprising three-bedroom, three-story units spread among ten buildings. Each unit would have its own two-car garage at the ground level, and include circulation and visitor parking areas	There is potential for indirect effects from construction-related activities, including the proposed removal of riparian vegetation, which could increase erosion and sedimentation within Carbonera Creek. If uncontrolled, an increase in erosion and sedimentation into the creek has the potential to adversely affect populations of steelhead occurring in Carbonera Creek or farther downstream in the San Lorenzo River.	Retain 25,000 square feet of riparian habitat on the project site; complete the bulk of grading during the dry season; replace riparian woodland with habitat of similar functions and values; prepare and implement a vegetation planting and maintenance plan to provide for the successful revegetation of riparian habitat.	Y	Document Title: <i>Enterprise Way Draft EIR</i> Status: Project appears to have been completed in 2009/10. Date: December 31, 2015
SV-06	Gateway South Retail Store	The project sponsor, Title Two Investments, proposes to construct a 143,000-square foot retail store and 517 associated parking spaces, including a 57,650-square foot parking deck. The project site is located on the west side of State Route 17, on La Madrona Drive, generally southwest of the Mt. Hermon Road / La Madrona Drive exit, in the City of Scotts Valley in Santa Cruz County. The elevated western portion of the site, which contains mature redwood and native live oak trees, would be retained as open space. The proposed project includes an amendment to the Gateway South Specific Plan to accommodate the proposed building coverage.	No discussion of steelhead occurs in the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Gateway South Supplemental EIR</i> Status: Unknown Date: September, 2009
SV-07	Glenwood Open Space Management Plan	The City of Scotts Valley, Scotts Valley Water District and the Land Trust of Santa Cruz County are pleased to announce the opportunity for consultants to provide expertise in the development of a Long-Term Management Plan (LTMP) for the 160-acre Glenwood Preserve, located in Scotts Valley, California. It is anticipated that the Land Trust of Santa Cruz County will work in partnership with the City of Scotts Valley to manage the Preserve. The LTMP is intended to guide management of the Preserve to protect and enhance its natural resource values, while accommodating low-intensity recreational use that is compatible with the natural resource objectives for the site.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Glenwood Open Space Management Plan Request for Proposals</i> Status: Unknown Date: June 4, 2003

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SV-08	Scotts Valley Middle School Modernization Project	Demolition and removal of the existing gymnasium, snack shack, portable classrooms, two maintenance buildings, and two free standing classrooms; construction of a new library, gymnasium and kitchen facilities; installation of pre-fabricated administration and classroom buildings supporting twelve classrooms; resurfacing and restriping of the main parking lot and driveway (City of Santa Cruz 2016b).	No steelhead habitat exists in the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Low-effect Habitat Conservation Plan for the Scotts Valley Middle School Modernization Project</i>  Status: Project approved  Date: June, 2016
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Transportation Concept Report: State Route 17</i>  Status: PID  Date: November, 2015
SV-10	SR 17/Granite Creek Rd Interchange (SV-P08)	Realign/reconfigure the Granite Creek Rd overcrossing, add bike lanes and sidewalks.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Project Study Report: Project Development Support, SR 17</i>  Status: PID  Date: November, 2015
SV-11	SR 17/Midtown Interchange (SV-P01)	Construct new SR 17 interchange midway between Mt Hermon Rd and Granite Creek Rd. Will require right-of-way.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Transportation Concept Report: State Route 17</i>  Status: PID  Date: November, 2015
SV-12	SR 17/Mt Hermon Rd Interchange (SV-P44)	Add lane to SB off-ramp at Mt Hermon Rd.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Transportation Concept Report: State Route 17</i>  Status: PID  Date: November, 2015
SV-13	The Terrace at Scotts Valley Townhouse Subdivision	Create 20 townhouse residential lots and one common lot from a vacant 2.6-acre lot and construct a townhouse dwelling on each lot and associated common owned improvements on the common lot.	No discussion of impacts on steelhead habitat occurs within the document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>The Terrace at Scotts Valley Initial Study/Mitigated Negative Declaration</i>  Status: Unknown  Date: July 15, 2015

**TABLE B-4:**  
**PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA**

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
<b>City of Watsonville</b>						
Wat-01	MBSST Rail Trail: Lee Road, 4000 feet east to City Slough Trail connection	Construction of 4000-foot long pathway parallel to the railroad tracks: eight-foot width asphalt (hma) and two-foot base rock shoulders on each side. A 500-foot-long retaining wall up to three-foot-tall with fence will be needed near Lee Road. A four foot by six-foot railroad building at the Ohlone Parkway will need to be relocated. A drainage structure east of Ohlone Parkway will need to be modified. Connection to Lee Road shall require installation of pathway or sidewalk to link to the existing sidewalk. At grade crossing at Ohlone Parkway and at a spur line located between Lee Road and Highway 1.	The project crosses multiple streams that are known to provide habitat for steelhead spawning and rearing. However, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	The use of span bridges may result in impacts. Indirect impacts may also result due to erosion and sedimentation from ground disturbance near suitable habitat. A dewatering/ diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. All dewatering/diversion activities shall be monitored by a qualified fisheries biologist.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: November 7, 2013
<b>Santa Cruz County</b>						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	Steelhead habitat may exist adjacent to the project; however, the positive identification of steelhead habitat would need to be performed on-site by a qualified biologist. Any disturbance of habitat, runoff to habitat, or changed streamflow may have potential to impact downstream steelhead.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016. Date of Publication: August 12, 2016
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	Construction of various proposed elements of the neighborhood park and community center have potential to alter or degrade steelhead habitat. These impacts would be determined on a project by project basis by a qualified biologist.	The proposed development plan includes stream restoration and avoids stream channel alteration as a result of bridge construction. Riparian restoration work will be required.	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017. Date of Publication: 2011
SCo-05	1240 Chanticleer Ave.	2-lot Minor Land Division	No discussion of steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown Date Published: December 7, 2015
SCo-06	1930 Ocean Street Extension	40-unit apartment/ condominium development	No discussion of steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>1930 Ocean Street Extension Residential Project Environmental Impact Report</i>  Status: Environmental review Date of Publication: May, 2017
SCo-07	735 Meder Street	The project would construct a single-family residence, accessory structures, well, water storage tanks, septic system, and access road within a 7-acre development envelope on a 50-acre parcel	No discussion of impacts on steelhead occurs within the document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration: 735 Meder St.</i>  Status: Permitting Date: February 16, 2016



**TABLE B-4:**  
**PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA**

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter)	No discussion of impacts on steelhead occurs within the document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Current Status Unknown Date Published: October 24, 2016
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion	The potential to adversely affect Central Coast steelhead was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to steelhead could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-10	Castle Rock State Park Entrance Relocation / 15435 Skyline Blvd, Los Gatos	Relocation of the Park entrance and phased construction of a Park gateway. Phase One would demolish existing structures and construct: a new driveway and entrance, deceleration and acceleration lanes, parking lot, amphitheater, restrooms, picnic areas and trails. Phase Two would construct a visitor's center complex of about 6,000 sq. ft. and related improvements	No discussion of steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Castle Rock State Park Entrance Relocation Mitigated Negative Declaration</i> Status: Planning application approved; lacking information on building permits Date of Publication: 5/27/2014
SCo-11	Chaminade Lane Grading	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development.	No discussion of steelhead habitat occurs within the environmental document. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i> Status: Current Status Unknown Date of Publication: February, 2014
SCo-12	County Rountree Rehabilitation and Re-Entry Facility / 100 Roundtree Lane	Demolish approximately 5,692 square feet of an existing County jail building, and construct additions totaling approximately 14,629 square feet. Includes grading of approximately 3,800 cubic yards of cut and 4,800 cubic yards of fill; installation of new loop road, storm water improvements, outdoor recreation, expanded service yard and inmate intact sally ports; removal of 28 existing trees, and planting of 28 replacement trees	No discussion of steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Roundtree Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Building application approved, but undergoing application check for proposal for revisions to approved project. Date of Publication: 11/2/2015
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	It does not appear that steelhead habitat exists on the project site. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects</i> Status: Permit approved - project on hold. Date of Publication: November 30, 2016



**TABLE B-4:**  
**PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA**

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCo-14	Hochler Minor Land Division	Divide a 37,314-square foot parcel (0.86 acres) into three parcels of 11,835 net developable square feet (Lot 1; 12,315 net developable square feet (Lot 2); and 10,861 net developable square feet (Lot 3), with a right-of-way of 2,303 square feet. No building is contemplated as part of this Minor Land Division.	No discussion of impacts on steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Planning application approved; building permits likely to be approved since some structures have been completed.  Date: 7/2/2015
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Drive, Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	No discussion of steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016
SCo-16	Johnson Grading	Construct a 2,270-foot long driveway and single-family dwelling. Includes approximately 2,100 cubic yards of excavation and 1,500 cubic yards of fill and the removal and replacement of an existing ephemeral stream crossing.	No steelhead habitat exists within or adjacent to the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration Notice of Public Review and Comment Period</i>  Status: Permit approved.  Date of Publication: August 20, 2014
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i>  Status: Current Status Unknown  Date of Publication: July, 2015
SCo-18	Juvenile Hall Recreation Facility / 3650 Graham Hill Road, Felton, CA	Construct a 6,880-square foot pre-fabricated steel-frame building to be used as a recreational facility for the Santa Cruz County Juvenile Hall.	No steelhead habitat exists in the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Planning application complete; building application resubmitted and routing.  Date of Publication: October 8, 2015.
SCo-19	Juvenile Hall Seed to Table	Renovate and upgrade the existing juvenile hall, including upgrades to septic system; construction of onsite greenhouse and garden plots; replacement of security fencing; and building renovations and upgrades.	No steelhead habitat exists in the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Planning application complete; building application resubmitted and routing.  Date of Publication: October 8, 2015.

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The proposed project could cross several waterways that provide habitat to steelhead. Construction of the project could impact steelhead as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis by a qualified biologist.	If suitable habitat for steelhead cannot be avoided, any in-stream portions of each segment (where drainage crossings require in-stream work) shall be dewatered/diverted. A dewatering/diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. Additional mitigation will occur on a site-by-site basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material.	No discussion of steelhead habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to steelhead habitats.	No discussion of steelhead mitigation occurs.	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Approved  Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The proposed project could cross several waterways that provide habitat to steelhead. Construction of the project could impact steelhead as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis by a qualified biologist.	The use of span bridges may result in no impacts. If bridge support structures are necessary then impacts may result during bridge installation. Indirect impacts may also result due to erosion and sedimentation from ground disturbance near suitable habitat. A dewatering/ diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. All dewatering/diversion activities shall be monitored by a qualified fisheries biologist.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCo-24	Monterey Bay Sanctuary Scenic Trail Network Master Plan (Santa Cruz Branch Line	The Monterey Bay Sanctuary Scenic Trail Network Master Plan establishes an alignment and set of design standards for a multi-use trail for the length of Santa Cruz County.	The proposed project could cross several waterways that provide habitat to steelhead. Construction of the project could impact steelhead as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis by a qualified biologist	The use of span bridges may result in impacts. Indirect impacts may also result due to erosion and sedimentation from ground disturbance near suitable habitat. A dewatering/ diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. All dewatering/diversion activities shall be monitored by a qualified fisheries biologist. The fisheries biologist shall be responsible for capture and relocation of fish species out of the work area during dewatering/diversion installation.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCo-25	Mt. Hermon Felton Meadow Project	This proposal would allow the site to be developed with recreation and educational facilities consisting of small and large bike pump tracks with hillside flow trails, an aerial adventure course, splash-park, a community garden, a retail building with concessions and welcome center and a classroom/day camp building. A pedestrian bridge is proposed to be constructed at the eastern edge of the site to provide a safe pedestrian crossing at Zayante Road.	It appears that future studies would determine whether the proposed project would encroach upon known steelhead habitat located adjacent to the project. Construction of the project could potentially impact steelhead as a result of potential development activities which could alter or degrade habitat. These impacts are anticipated to be determined on a site by site basis.	Not available	Pending	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Notice of Preparation of a Draft Environmental Impact Report</i> Status: Environmental review Date: March 9, 2016
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route c1.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i> Status: Current Status Unknown Date of Publication: September, 2008
SCo-27	Pasatiempo Water Storage Tank	Construct a 500,000-gallon water tank for storage of tertiary treated non-potable water, on-site well water, and City of Santa Cruz Water Department water for irrigation of the Pasatiempo Golf Course; construct a 625-square foot pump house; maintenance access road off of Sims Road; and 230 sq. ft. restroom and associated leach field. Includes approximately 2,699 c.y. of cut and 1,710 c.y. of fill	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration: Pasatiempo Water Storage Tank</i> Status: Planning application approved; Building application routing for approval to construct 960 sq. ft. CMU block filtration building Date: March 11, 2015
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells.	Future studies would determine whether the proposed project would impact known steelhead habitat located adjacent to the project. Construction of the project could impact steelhead as a result of development which could alter or degrade habitat and potentially altered streamflow. These impacts would be determined in future studies.	Steelhead mitigation measures will be released in future environmental documents.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i> Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The proposed project could cross several waterways that provide habitat to steelhead. Construction of the project could impact steelhead as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis by a qualified biologist.	If suitable habitat for steelhead cannot be avoided, any in-stream portions of each segment (where drainage crossings require in-stream work) shall be dewatered/diverted. A dewatering/diversion plan shall be prepared and submitted to the NMFS, the USFWS and the CDFW for review and approval. Additional mitigation will occur on a site-by-site basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-4:  
PROJECTS LOCATED IN THE CENTRAL CALIFORNIA COAST STEELHEAD RSA

Project No.	Project Name / Street Address	Project Description	Central California Coast Steelhead Potential Impacts	Mitigation Measures	Environmental Document?	Status
SCo-30	Santa Cruz Highway 17 Pasatiempo Shoulder Widening / State Route 17	Caltrans proposes to improve the safety of southbound SR 17 in Santa Cruz County from the southbound exit to SR-17 in Santa Cruz County from the southbound exit ramp to SR 1 (post mile .01) to the entrance ramp from Pasatiempo Drive (post mile 0.4 by constructing a retaining wall and widen the outside shoulder to 10 feet.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Pasatiempo Shoulder Widening Initial Study with Proposed Mitigated Negative Declaration</i>  Status: Environmental document approved in 2016 Date: December 2015
SCo-31	SR 17 Pasatiempo Shoulder Widening (05-1C670)	Shoulder widening and soil nail wall from SB exit ramp to SR 1 to Pasatiempo Dr entrance ramp.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>Pasatiempo Shoulder Widening Initial Study with Proposed Mitigated Negative Declaration</i>  Status: Environmental document approved in 2016 Date: December 2015
SCo-32	SR 17 Shoulder Widening and Concrete Guardrail (O5-0T980)	Shoulder widening and concrete guardrail from 0.9 mile north of Vinehill Rd. to 0.5 mile south of Glenwood Dr. \$6.2 million construction cost.	No steelhead habitat exists within the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>SR 17 Shoulder Widening and Concrete Guardrail Initial Study with Proposed Mitigated Negative Declaration</i>  Status: Environmental document approved in 2016 Date: December 2015
SCo-33	SR 236 Segment 1	Route Concept: Maintain two-lane conventional highway.	It appears that future studies would determine whether the proposed project would impact known steelhead habitat located adjacent to the project. Construction of the project could potentially impact steelhead as a result of potential development which could alter or degrade habitat. Potential impacts are anticipated to be determined in future studies.	The need for mitigation would be determined in the environmental document.	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Transportation Concept Report State Route 236</i>  Status: Unknown Date: November, 2015
SCo-34	The Lumberyard Mixed Use Development	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium	No steelhead habitat exists in the project area. Therefore, there is no potential impact to steelhead habitats.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development Initial Study</i>  Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Portions of the project corridor cross waterways known steelhead occurrences. Although the safety improvements may be minor, and may not affect any waterways, based on the limited information about the project, the potential to affect steelhead habitat cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016



TABLE B-5:  
PROJECTS LOCATED IN THE CALIFORNIA TIGER SALAMANDER RSA

Table B-5: Projects Located in the California Tiger Salamander RSA

Project No.	Project Name / Street Address	Project Description	California Tiger Salamander Potential Impact	Mitigation Measures	Environmental Document?	Information Source
City of Santa Cruz						
NA	NA					
Santa Cruz County						
SCo-02	San Andreas Rd. and Seascap <span>­</span> e Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	CTS habitat may exist adjacent to the project; however, the positive identification of CTS habitat would need to be performed on-site by a qualified biologist. Any disturbance of identified CTS habitat may have potential to result in impact to CTS.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The EIR states that CTS habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CTS habitat.	No specific CTS mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed or species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-16	Johnson Grading	Construct a 2,270-foot-long driveway and single-family dwelling. Includes approximately 2,100 cubic yards of excavation and 1,500 cubic yards of fill and the removal and replacement of an existing ephemeral stream crossing.	A biotic assessment found that the project is located adjacent to two known CTS breeding ponds and a number of other potential breeding ponds. Any development or alteration could impact CTS breeding, foraging, or migration patterns.	To minimize negative impacts, all surface-disturbing activities should be conducted during the dry seasons when CTS is not expected to be present. All construction should be designed to reduce barriers to movement. All ponds and waterways shall be avoided.	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration Notice of Public Review and Comment Period</i>  Status: Permit approved.  Date of Publication: August 20, 2014
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The EIR states that CTS habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CTS habitat.	No specific CTS mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed or species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The EIR denotes that CTS may exist within the project area. however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CTS habitat.	The EIR requires that habitat assessment and protocol surveys occur before any construction may begin. In addition, the EIR requires several avoidance measures including: 1) work may be conducted only during the dry season, 2) identified habitat disturbance	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013



TABLE B-5:  
PROJECTS LOCATED IN THE CALIFORNIA TIGER SALAMANDER RSA

Project No.	Project Name / Street Address	Project Description	California Tiger Salamander Potential Impact	Mitigation Measures	Environmental Document?	Information Source
				shall be avoided or minimized, and 3) mitigation shall be conducted on a project-by-project basis.		
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The EIR states that CTS habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CTS habitat.	No specific CTS mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed or species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Portions of the project corridor cross waterways that may provide some habitat areas, although such areas may be disturbed due to the established transportation use. Based on limited available information, the potential for disturbance of CTS habitat cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016

TABLE B-6:  
PROJECTS LOCATED IN THE SANTA CRUZ LONG-TOED SALAMANDER RSA

Table B-6: Projects Located in the Santa Cruz Long-Toed Salamander RSA

Project No.	Project Name / Street Address	Project Description	Santa Cruz Long-Toed Salamander Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Santa Cruz County						
SCo-02	San Andreas Rd. and Seascap <span>­</span> e Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	SCLTS habitat may exist adjacent to the project; however, the positive identification of SCLTS habitat would need to be performed on-site by a qualified biologist Any construction activities or disturbance of identified SCLTS habitat may have potential to result in adverse impact to SCLTS.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The EIR states that SCLTS habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to SCLTS habitat.	No specific SCLTS mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed or species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-16	Johnson Grading	Construct a 2,270-foot-long driveway and single-family dwelling. Includes approximately 2,100 cubic yards of excavation and 1,500 cubic yards of fill and the removal and replacement of an existing ephemeral stream crossing.	A biotic assessment found that the project is within 1.2 miles of two known SCLTS breeding ponds and a number of other potential breeding ponds. Any development or alteration could impact SCLTS breeding, foraging, or migration patterns.	To minimize negative impacts, all surface-disturbing activities should be conducted during the dry seasons when SCLTS is not expected to be present. All construction should be designed to reduce barriers to movement. All ponds and waterways shall be avoided.	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration Notice of Public Review and Comment Period</i>  Status: Permit approved.  Date of Publication: August 20, 2014
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The EIR states that SCLTS habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to SCLTS habitat.	No specific SCLTS mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed or species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The EIR denotes that SCLTS may exist within the project area. however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to SCLTS habitat.	The EIR requires that habitat assessment and protocol surveys occur before any construction may begin. In addition, the EIR requires several avoidance measures including: 1) work may be conducted only during the dry season, 2) identified habitat disturbance shall be avoided or minimized, and 3)	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013

TABLE B-6:  
PROJECTS LOCATED IN THE SANTA CRUZ LONG-TOED SALAMANDER RSA

Project No.	Project Name / Street Address	Project Description	Santa Cruz Long-Toed Salamander Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
				mitigation shall be conducted on a project-by-project basis.		
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions	The EIR states that SCLTS habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to SCLTS habitat.	No specific SCLTS mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed or species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Portions of the project corridor may be adjacent to SCLTS habitat areas, although such areas may be disturbed due to the established transportation use. Based on limited available information, the potential for disturbance SCLTS habitat cannot be ruled out. However, because this is a fully protected species it is anticipated that the project was designed to avoid impact.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Table B-7: Projects Located in the California Red-Legged Frog RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
City of Capitola						
Cap-01	105 Sacramento Ave / Same	Demolition of existing and new single-family home (City of Capitola 2016a)	This project is located directly along the coast with heavy tide activity. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-02	114 Grand Ave / Same	Historic Review (City of Capitola 2016a)	This project is located directly along the coast with heavy tide activity. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-03	115 Saxon Ave / Same	Remodel and addition (City of Capitola 2016a)	This project is located approximately 300 feet from the coast with heavy tide activity. The site is also located in a residential neighborhood with no other aquatic habitat nearby. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd / Same	Historic Review (City of Capitola 2016a)	This project is located along Soquel Creek close to an area that is likely to have dense stands of overhanging trees and sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave / Same	Upgrade to façade and addition of living space (City of Capitola 2016a)	This project is located approximately 400 feet to the east of the mouth of Soquel Creek where it terminates into the ocean. The project site is in an urban, heavily developed space with existing roadways and buildings surrounding it. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd / Same	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	This project is located approximately 250 feet west of Soquel Creek close to an area that is likely to have dense stands of overhanging trees and sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd / Same	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	This project is located approximately 320 feet west of Soquel Creek close to an area that is likely to have dense stands of overhanging trees and sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave / Same	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	This project is located approximately 800 feet northwest from the coast with heavy tide activity. The site is also located in a residential neighborhood with no other aquatic habitat nearby. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd / Same	Exterior remodel of "Sears" creating 2 new tenant spaces (City of Capitola 2016a)	This project is located in an urban, shopping mall space approximately 2,000 feet to the east of a known aquatic habitat. The site is surrounded by residential housing units and other commercial buildings. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-10	4025 Brommer St / Same	Conceptual Review of 3-story proposal (City of Capitola 2016a)	This project is located approximately 2,500 feet northwest from the coast. The site is also located in a residential neighborhood with no other aquatic habitat nearby. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-11	407 El Salto Dr / Same	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	This project is located approximately 270 feet west of the coast. The site is also located in a residential neighborhood with no other aquatic habitat nearby. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016



TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	The 2035 MTP/SCS and RTP's for Monterey, San Benito, and Santa Cruz Final EIR contains impact analysis and mitigation measures that include CRLF, as the projects covered in this programmatic EIR would occur over or in the vicinity of rivers and creeks that were determined to include areas of suitable habitat for this species.	No specific CRLF mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St / Same	Remodel and addition to residence (City of Capitola 2016a)	This project is located approximately 1,500 feet to the west of the mouth of Soquel Creek. The site is in a residential neighborhood with little vegetation and no other aquatic habitat nearby. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St / Same	Create condo map for new duplex (City of Capitola 2016a)	This project is located approximately 750 feet to the west of a known aquatic river or stream habitat. The site is surrounded by residential housing units in an urban built-up area. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Status Unknown  Date of Publication: December, 2016
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	This project is located approximately 900 feet to the west of a known aquatic river or stream habitat. The site is surrounded by residential housing units and commercial buildings in an urban built-up area. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i>  Status: Current Status Unknown  Date of Publication: August, 2013

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	This project is located in a heavily developed, urban area and is surrounded by commercial buildings. There are no aquatic habitats located near the project site. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	This project is located approximately 90 feet to the west of Soquel Creek. This area is likely to have dense stands of overhanging trees and sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Due to the adjacency to Soquel Creek the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
City of Santa Cruz						
SCi-01	131 Bixby / Same	Duplex (City of Santa Cruz 2016a)	This project is located approximately 340 feet north of Carbonera Creek-San Lorenzo River. This aquatic habitat is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-03	135 Vista Branciforte / Same	Minor Land Division to create three lots from two (City of Santa Cruz 2016a)	This project is located approximately 530 feet east of Branciforte Creek. The creek, however, is located on the opposite side of Market Street. The project site is surrounded by dense forest cover. There are no other aquatic habitats near the project. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-13	301 Beach / Same	Add 5 rooms to an existing hotel (City of Santa Cruz 2016a)	This project is located directly along the coast with heavy tide activity. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott) / Same	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms. (City of Santa Cruz 2016a)	This project is located approximately 250 feet south of Carbonera Creek-San Lorenzo River. This aquatic habitat is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-15	350 Ocean / Same	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail (City of Santa Cruz 2016a)	This project is located approximately 1,550 feet to the east of Carbonera Creek – San Lorenzo River. The project is surrounded by residential housing units in an urban/built up area. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-16	407 Broadway (Hyatt) / Same	106-room hotel (City of Santa Cruz 2016a) (City of Santa Cruz 2016a)	This project is located approximately 1,050 feet to the east of Carbonera Creek – San Lorenzo River. The project is surrounded by residential housing units in an urban/built up area. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCi-18	430 South Branciforte / Same	Lot split (City of Santa Cruz 2016a)	This project is located approximately 1,400 feet southeast of Carbonera Creek. The project is surrounded by residential housing units in a heavily urban/built up area. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-19	514 Frederick / Same	4 townhome units (City of Santa Cruz 2016a)	This project is located approximately 2,250 feet to the west of an unidentified stream or river. The site lies directly adjacent to Frederick Street and is surrounded by residential housing units. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-21	618 Windsor / Same	5 apartments (City of Santa Cruz 2016a)	This project is located in a heavily developed, urban area and is surrounded by residential housing units. There are no aquatic habitats located near the project site. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-22	710 Emeline / Same	Demolish single-family residence and construct triplex (City of Santa Cruz 2016a)	This project is located approximately 660 feet to the west of Carbonera Creek. This aquatic habitat is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-23	716 Darwin / Same	15 apartments (City of Santa Cruz 2016a)	This project is located approximately 3,200 feet to the west of an unidentified stream or river. This project is located in a heavily developed, urban area and is surrounded by residential housing units. There are no aquatic habitats located near the project site. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-24	716-724 Seabright (Seabright Breakers) / Same	11 townhouses (City of Santa Cruz 2016a)	This project is located approximately 1,500 feet to the west of an unidentified stream. This project is located in a heavily developed, urban area and is surrounded by residential housing units. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCi-25	738 Pacheco / Same	Three lot subdivision (City of Santa Cruz 2016a)	This project is located in a heavily developed, urban area and is surrounded by residential housing units. There are no aquatic habitats located near the project site. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-27	800 Soquel / Same	Two units above 2,600 square feet commercial space (City of Santa Cruz 2016a)	This project is located approximately 800 feet to the east of Carbonera Creek. The site lies directly along a major existing roadway (Soquel Ave) and is surrounded by residential housing units and commercial buildings. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Approved
SCi-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave (City of Santa Cruz 2016a).	This project is located approximately 320 feet to the east from an unidentified aquatic habitat. This aquatic habitat is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	This project is located above Woods Lagoon, which appears to be an estuarine environment. Based on limited available information, the potential for disturbance of CRLF habitat is considered unlikely.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013Document



TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCi-39	San Lorenzo River Lagoon Interim Management Program /	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-ft. horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean (City of Santa Cruz 2015).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>San Lorenzo River Lagoon Interim Management Program IS/MND</i> . Status: Project approved Date of Publication: 2016.
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	This project is located in a heavily developed, urban area and is surrounded by residential housing units. There are no aquatic habitats located near the project site. Based on limited available information, the potential for disturbance of CRLF habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i> Status: Current Status Unknown Date of Publication: 2016
SCi-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beulah Park undercrossing.	The environmental document determines that there are no sensitive species or habitats of concern within the project area. As a result, the environmental document does not include a discussion of CRLF.	Not discussed in ED	Y	Document Title: <i>Santa Cruz 17 Sediment Control: Initial Study with Proposed Mitigated Negative Declaration</i> Status: PSE/ROW Date of Publication: March, 2014
Santa Cruz County						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	This project site is located approximately 800 feet to the east of an unidentified stream or river. This aquatic habitat is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i> Status: RFQ was submitted with request for qualifications due by August 12, 2016. Date of Publication: August 12, 2016
SCo-02	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	CRLF habitat may exist adjacent to the project; however, the positive identification of CRLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or construction may have potential to result in impact to CRLF.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i> Status: Current Status Unknown Date of Publication: December 2, 1988

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-05	1240 Chanticleer Ave. / Same	2-lot Minor Land Division (County of Santa Cruz 2015h).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown  Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter) (County of Santa Cruz 2016a).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Current Status Unknown  Date Published: October 24, 2016
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The EIR states that CRLF habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CRLF habitat.	No specific CRLF mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading /	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development. (County of Santa Cruz 2014c).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i>  Status: Current Status Unknown  Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	This project is located approximately 250 feet to the west of an unidentified stream or river aquatic habitat. This aquatic habitat is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Drive, Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i>  Status: Current Status Unknown  Date of Publication: February, 2014
SCo-16	Johnson Grading	Construct a 2,270-foot-long driveway and single-family dwelling. Includes approximately 2,100 cubic yards of excavation and 1,500 cubic yards of fill and the removal and replacement of an existing ephemeral stream crossing.	Marginal habitat for CRLF exists in an area of the site that would not be impacted by the project. Impacts would be less than significant. Conditions are included in the project to place restrictions on disturbance timeframes, use of retaining walls, and swimming pool construction.	Not discussed in ED. Conditions are included in the project.	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration Notice of Public Review and Comment Period</i>  Status: Permit approved.  Date of Publication: August 20, 2014
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area County of Santa Cruz 2015c).	A biotic assessment found that the project is located within one mile of at least one known CRLF breeding ponds and a number of other potential breeding ponds. Any development or alteration could impact CRLF breeding, foraging, or migration patterns.	No specific CRLF mitigation is noted. However, the MND notes that: to minimize negative impacts, all surface-disturbing activities should be conducted during the dry seasons when CRLF is not expected to be present. All construction should be designed to reduce barriers to movement. All ponds and waterways shall be avoided.	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i>  Status: Current Status Unknown  Date of Publication: July, 2015
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well (Santa Cruz County 2016k).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration, Lilly Agricultural Well</i>  Status: Mitigated Negative Declaration approved. No building permit in Application Status and Permit History.
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The EIR states that CRLF habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CRLF habitat.	No specific CRLF mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State lister species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project /	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (Santa Cruz County 2016g).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Approved  Publication Date: March, 2016

TABLE B-7:  
PROJECTS LOCATED IN THE CALIFORNIA RED-LEGGED FROG RSA

Project No.	Project Name / Street Address	Project Description	California Red-Legged Frog Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The EIR denotes that CRLF may exist within the project area. however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CRLF habitat.	The EIR requires that habitat assessment and protocol surveys occur before any construction may begin. In addition, the EIR requires several avoidance measures including: 1) work may be conducted only during the dry season, 2) identified habitat disturbance shall be avoided or minimized, and 3) mitigation shall be conducted on a project-by-project basis.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i>  Status: Current Status Unknown  Date of Publication: September, 2008
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The EIR states that CRLF habitat may exist adjacent to the project; however, the positive identification of habitat would need to be performed on a site-by-site basis by a qualified biologist. Any disturbance or changed conditions may have potential to CRLF habitat.	No specific CRLF mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development /	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium (County of Santa Cruz 2015e).	The environmental document does not include a discussion of CRLF. Therefore, it can be assumed that there is no potential impact to CRLF habitats.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development Initial Study</i>  Status: Planning application approved; lacking information on building permits.  Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	This project spans a study area of over 16 miles, traveling through different types of land. There are portions of this project that could pass through areas of dense forestry and unidentified streams or rivers. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016
<b>City of Scotts Valley</b>						
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	This project crosses over Carbonera Creek, which is an aquatic habitat that is likely to have sturdy emergent vegetation. In addition, the creek is likely to have little flow with depths that are adequate for CRLF habitats. Based on limited available information, the potential for disturbance of CRLF habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Project Initiation Document

TABLE B-8:  
PROJECTS LOCATED IN THE FOOTHILL YELLOW-LEGGED FROG RSA

Table B-8: Projects Located in the Foothill Yellow-Legged Frog (FYLF) RSA

Project No.	Project Name /	Project Description	FYLF Potential Impacts	Mitigation	Environmental Document?	Information Source
<b>City of Capitola</b>						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola, November 2016  Status: Application approved without side yard variance at 11/3/16 PC. Decision appealed to tentatively scheduled 1/12/17 CC.  Date of Publication: December, 2016
Cap-02	114 Grand Ave.	Historic Review.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola, November 2016  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola, November 2016  Status: Application Incomplete  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review.	FYLF habitat may exist within the project area; however, the positive identification of FYLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or changes to identified habitat may have the potential to impact FYLF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 PC  Date of Publication: December, 2016



TABLE B-8:  
PROJECTS LOCATED IN THE FOOTHILL YELLOW-LEGGED FROG RSA

Project No.	Project Name /	Project Description	FYLF Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision.	FYLF habitat may exist within the project area; however, the positive identification of FYLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or changes to identified habitat may have the potential to impact FYLF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit.	FYLF habitat may exist within the project area; however, the positive identification of FYLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or changes to identified habitat may have the potential to impact FYLF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Projects, November 2016  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola, November 2016  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-11	407 El Salto Dr.	Front yard fence and wall in public right-of-way.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Projects, November 2016  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St.	Create condo map for new duplex.	Due to the lack of suitable aquatic habitat, FYLF is unlikely to occur in the project area. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: List of Planning Project Permits for the City of Capitola, November 2016  Status: Application Status Unknown  Date of Publication: December, 2016
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	FYLF habitat may exist within the project area; however, the positive identification of FYLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or changes to identified habitat may have the potential to impact FYLF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: Santa Cruz Public Libraries Facilities Master Plan 2014-2023  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013

TABLE B-8:  
PROJECTS LOCATED IN THE FOOTHILL YELLOW-LEGGED FROG RSA

Project No.	Project Name /	Project Description	FYLF Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	FYLF habitat may exist within the project area; however, the positive identification of FYLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or changes to identified habitat may have the potential to impact FYLF habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
N/A	N/A					
Santa Cruz County						
SCo-02	San Andreas Rd. and Seascap Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	FYLF habitat may exist within the project area; however, the positive identification of FYLF habitat would need to be performed on-site by a qualified biologist. Any disturbance or changes to identified habitat may have the potential to impact FYLF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The potential to adversely affect FYLF was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to FYLF could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for each project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The potential to adversely affect FYLF was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to FYLF could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material.	The environmental document does not include a discussion of FYLF. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not discussed in ED	Y	Document Title: Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration  Status: Approved  Publication Date: March, 2016

TABLE B-8:  
PROJECTS LOCATED IN THE FOOTHILL YELLOW-LEGGED FROG RSA

Project No.	Project Name /	Project Description	FYLF Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	This project could potentially cross FYLF habitat and could result in disturbance of FYLF or adverse impacts to FYLF habitat. Impacts would be evaluated on a site-by-site basis.	Measures will follow guidance from, and involve consultation with, USFWS and CDFW. Measures will include surveys, work schedule limitations, and supervision by an approved biologist. All mitigation will be developed on a site-by-site basis.	Y	Document Title: Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report  Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Ave.	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1.	The environmental document does not discuss any impacts on FYLF habitat. Therefore, it is assumed that there is no potential impact to FYLF habitats.	Not discussed in ED	Y	Document Title: Nigh Property Notice of Environmental Review Period  Status: Current Status Unknown Date of Publication: September, 2008
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells.	The environmental document does not include a discussion of FYLF. However, it does list all biological resource issues as being potentially significant impacts.	Not discussed in ED	Y	Document Title: PUREWater Soquel Notice of Preparation/Initial Study  Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The potential to adversely affect FYLF was evaluated at a programmatic level for all projects included in the Regional Transportation Plan. Due to the programmatic level of the evaluation and lack of project-specific information, impacts to FYLF could not be ruled out for this project and could potentially occur. Project-specific impacts would be evaluated in a project level environmental document.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted on a site-by-site basis that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-9:  
PROJECTS LOCATED IN THE WESTERN POND TURTLE RSA

Table B-9: Projects Located in the Western Pond Turtle RSA

Project No.	Project Name / Street Address	Project Description	Western Pond Turtle Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home (City of Capitola 2016a)	This project is located approximately 1 mile southeast of the closest known occurrence area for Western Pond Turtle. Although located close to the Soquel Cove Coast, it does not lie along foothill streams or in broad washes. Based on this information, it is unlikely that his project could potentially result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-02	114 Grand Ave.	Historic Review (City of Capitola 2016a)	This project is located approximately 1 mile south of the closest known occurrence area for Western Pond Turtle. Although located close to the Soquel Cove Coast, it does not lie along foothill streams or in broad washes. Based on this information, it is unlikely that his project could potentially result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition (City of Capitola 2016a)	This project is located approximately 0.9-mile southeast of the closest known occurrence area for Western Pond Turtle. Although located close to the Soquel Cove Coast, it does not lie along foothill streams or in broad washes. Based on this information, it is unlikely that his project could potentially result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	This project is located approximately 0.7-mile south of the closest known occurrence area for Western Pond Turtle. This project is also located along the bank of the same river that the known occurrence area lies on, but downstream towards the coast. Although the project is located in a suburban residential neighborhood, due to the adjacency to the same stream as the closest known occurrence and the proximity to the coast, this project may have potential to result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	This project is located approximately 0.9-mile south of the closest known occurrence area. It is also located approximately 450 feet to the east of the mouth of Soquel Creek. Although this project is located close to the coast and Soquel Creek, which is known to have WPT occurrences, it is located in a heavily developed and built-up area with little to no vegetation or direct access to a stream. Therefore, this project is unlikely to potentially result in the disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application complete as of October 27, 2016, Scheduled for 12/1/16 PC  Date of Publication: December, 2016

TABLE B-9:  
PROJECTS LOCATED IN THE WESTERN POND TURTLE RSA

Project No.	Project Name / Street Address	Project Description	Western Pond Turtle Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	This project is located along Soquel Creek approximately 0.5-mile downstream of the closest known occurrence area for Western Pond Turtle. Due to the close proximity to a stream and the coast, as well as being located along the same stream where a known occurrence area lies on, this project may have potential to result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	This project is located along Soquel Creek approximately 0.4-mile downstream of the closest known occurrence area for Western Pond Turtle. Due to the close proximity to a stream and the coast, as well as being located along the same stream where a known occurrence area lies on, this project may have potential to result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	This project is located approximately 0.8-mile south of the closest known occurrence area. It is also located approximately 0.2-mile to the east of the mouth of Soquel Creek. Although this project is located close to the coast and Soquel Creek, which is known to have WPT occurrences, it is located in a heavily developed and built-up area with little to no vegetation or direct access to a stream. Therefore, this project is unlikely to potentially result in the disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-11	407 El Salto Dr.	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	This project is located approximately 0.9-mile southeast of the closest known occurrence area. It is also located approximately 0.4-mile to the east of the mouth of Soquel Creek and approximately 270 feet from the coast. This project is located in a developed and built-up residential area with little to no vegetation or direct access to a stream or other still waters. Therefore, this project is unlikely to potentially result in the disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St.	Create condo map for new duplex (City of Capitola 2016a)	This project is located approximately 1,950 feet southeast of the closest known occurrence area. It is also located approximately 800 feet to the northwest of the nearest stream. This project is located in a developed and built-up residential area with little to no vegetation or direct access to a stream or other still waters. Therefore, this project is unlikely to potentially result in the disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: City of Capitola Planning Permit List, November 2016  Status: Current Status Unknown  Date of Publication: December, 2016



TABLE B-9:  
PROJECTS LOCATED IN THE WESTERN POND TURTLE RSA

Project No.	Project Name / Street Address	Project Description	Western Pond Turtle Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-17	New Library, Clares Street and Wharf Road	The existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Although this project is near Soquel Creek, it is located on a developed lot with little vegetation and is separated from the creek by Wharf Road. Therefore, this project is unlikely to potentially result in direct impact to WPT habitat, but may have indirect effects, such as construction noise or potential for releases of sediment.	Not Available	N	Document Title: Santa Cruz Public Libraries Facilities Master Plan 2014-2023  Status: Expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park (2004 Wharf Road)	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Due to the close proximity to a stream, this project may have potential to result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
<b>Santa Cruz County</b>						
SCo-6	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	This project is located along approximately 5 miles west from the closest known occurrence area for WPT. The project is also located next to a stream. Due to the close proximity to a stream, this project may have potential to result in disturbance of WPT or adverse impacts to WPT habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	This project could potentially result in disturbance of WPT or adverse impacts to WPT habitat.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	This project could potentially result in disturbance of WPT or adverse impacts to WPT habitat.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report  Status: Current Status Unknown

TABLE B-9:  
PROJECTS LOCATED IN THE WESTERN POND TURTLE RSA

Project No.	Project Name / Street Address	Project Description	Western Pond Turtle Potential Impacts	Mitigation	Environmental Document?	Information Source
						Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (County of Santa Cruz 2016g).	The environmental document does not include a discussion of WPT. Therefore, it is assumed that there is no potential impact to WPT habitats.	Not discussed in ED	Y	Document Title: Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration Status: Approved Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	WPT could be impacted during construction of drainage crossings and construction in/adjacent to slough areas.	Preconstruction surveys and relocation of any identified WPT individuals by an approved biologist.	Y	Document Title: Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Ave.	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	The environmental document does not include a discussion of WPT. Therefore, it is assumed that there is no potential impact to WPT habitats.	Not discussed in ED	Y	Document Title: Nigh Property Notice of Environmental Review Period Status: Current Status Unknown Date of Publication: September, 2008
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells (Soquel Creek Water District 2016).	The environmental document does not include a discussion of WPT. It does list all biological resource issues as being potentially significant impacts.	All mitigation measures will be addressed in the EIR that will be prepared for the Pure Water Soquel project.	Y	Document Title: PUREWater Soquel Notice of Preparation/Initial Study Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	This project could potentially result in disturbance of WPT or adverse impacts to WPT habitat.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-10:  
PROJECTS LOCATED IN THE RIPARIAN FOREST RSA

Table B-10: Projects Located in the Riparian Forest RSA

Project No.	Project Name / Street Address	Project Description	Riparian Forest Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	Due to the adjacency of a creek, riparian forest habitat may exist on the property; however, the positive identification of riparian forest habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as riparian forest habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application under 3rd Party Review: Historic Date of Publication: November, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	No riparian forest exists within the project area. Therefore, there is no potential impact to riparian forest resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting Date of Publication: November, 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	Due to the adjacency of a creek, riparian forest habitat may exist on the property; however, the positive identification of riparian forest habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as riparian forest habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application under 3rd Party Review: Stormwater Date of Publication: November, 2016
Cap-07	2205 Wharf Rd	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	No riparian forest exists within the project area. Therefore, there is no potential impact to riparian forest resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application Incomplete Date of Publication: November, 2016
Cap-17	New Library	The existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Due to the adjacency of a creek, riparian forest habitat may exist on the property; however, the positive identification of riparian forest habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as riparian forest habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i> Status: Expected construction completion for June 2018 Date of Publication: March 28, 2013

TABLE B-10:  
PROJECTS LOCATED IN THE RIPARIAN FOREST RSA

Project No.	Project Name / Street Address	Project Description	Riparian Forest Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Due to the adjacency of a creek, riparian forest habitat may exist on the property; however, the positive identification of riparian forest habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as riparian forest habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
NA	NA					
Santa Cruz County						
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species occurring in aquatic habitats (including riparian habitats), either directly or through habitat modification. Impacts would be less than significant with mitigation.	All projects occurring within/adjacent to aquatic habitats (including riparian habitats) shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species.  All vehicle maintenance/ fueling/ staging shall occur not less than 100 feet from any riparian habitat. Suitable containment procedures shall be implemented to prevent spills.  Impacts to riparian habitat shall be mitigated at a minimum ratio of 2:1 (acres of habitat restored to acres impacted),  Where economically feasible and available, construction on riparian forest shall be avoided.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-10:  
PROJECTS LOCATED IN THE RIPARIAN FOREST RSA

Project No.	Project Name / Street Address	Project Description	Riparian Forest Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species occurring in aquatic habitats (including riparian habitats), either directly or through habitat modification. Impacts would be less than significant with mitigation.	All projects occurring within/adjacent to aquatic habitats (including riparian habitats) shall be completed between April 1 and October 31, if feasible, to avoid impacts to sensitive aquatic species.  All vehicle maintenance/ fueling/ staging shall occur not less than 100 feet from any riparian habitat. Suitable containment procedures shall be implemented to prevent spills.  Impacts to riparian habitat shall be mitigated at a minimum ratio of 2:1 (acres of habitat restored to acres impacted),  Where economically feasible and available, construction on riparian forest shall be avoided.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	The proposed project could cross riparian forest habitat. Disturbances associated with the construction and operation of these facilities may impact riparian forest. These impacts would be determined on a site by site basis. Any impacts are expected to be less than significant.	The project shall ensure that, where economically feasible and available, construction on riparian forest should be avoided. Where necessary, a mitigation plan shall be prepared and submitted to NMFS, USFWS, CDFW, and USACE for review and approval.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	The impacts to riparian habitat resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, under Project Number SCo-21, above.	The mitigation of impacts to riparian habitat resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, for Project Number SCo-21, above.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Some riparian forest may exist along the project corridors; the property; however, the positive identification of riparian forest habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as riparian forest habitat.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016



TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Table B-11: Projects Located in the Cooper’s Hawk RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-01	105 Sacramento Ave / Same	Demolition of existing and new single-family home (City of Capitola 2016a)	This project is located over 5 miles from the closest known occurrence area for Cooper’s hawk. It is also located in an urban, residential area close to the coast with minimal forestry or woodland habitat at or near the project area. The nearest deciduous riparian area is approximately 1,500 feet to the northwest of the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16  Date of Publication: December, 2016. Application approved without side yard variance at 11/3/16 PC. Decision appealed to tentatively scheduled 1/12/17 CC.
Cap-02	114 Grand Ave / Same	Historic Review (City of Capitola 2016a)	This project is located over 5 miles from the closest known occurrence area for Cooper’s hawk. It is also located in an urban, residential area close to the coast with minimal forestry or woodland habitat at or near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-03	115 Saxon Ave / Same	Remodel and addition (City of Capitola 2016a)	This project is located over 5 miles from the closest known occurrence area for Cooper’s hawk. It is also located in an urban, residential area close to the coast with minimal forestry or woodland habitat at or near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd / Same	Historic Review (City of Capitola 2016a)	This project is in a suburban residential area, adjacent to a creek that is lined with a deciduous riparian habitat with moderate density of trees. It is located close to the edge of woodland habitat where the stream begins to reach closer to the coast. Based on this limited information, the project may have potential to result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave / Same	Upgrade to façade and addition of living space (City of Capitola 2016a)	This project is located over 5 miles from the closest known occurrence area for Cooper’s hawk. It is also located in an urban, residential area close to the coast with minimal tree cover at or near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd / Same	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	This project is located along a deciduous riparian habitat with moderate to high density of tree stands or woodland habitat. It is also located close to the edge of the woodland habitat where the stream begins to reach closer to the coast. Based on this limited information, the project may have potential to result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd / Same	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	This project is located along a deciduous riparian habitat with moderate to high density of tree stands or woodland habitat. It is also located close to the edge of the woodland habitat where the stream begins to reach closer to the coast. Based on this limited information, the project may have potential to result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave / Same	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	This project is located in an urbanized area with minimal tree cover. The project is unlikely to affect Cooper’s hawk. Therefore, it is assumed that there is no potential impact to Cooper’s hawk habitats.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Application approved at 11/3/16 Planning Commission mtg  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd / Same	Exterior remodel of "Sears" creating 2 new tenant spaces (City of Capitola 2016a)	While this project is located approximately .5 mile to the east and to the west of a deciduous riparian habitat, it is also located in an urban, residential area with very little forestry or woodland habitat at or near the project area. Although located close to habitats that could potentially contain Cooper’s hawk populations, it appears unlikely that they would establish nests near the project area due to the lack of tall trees. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Approved 12/01/16  Date of Publication: December, 2016
Cap-10	4025 Brommer St / Same	Conceptual Review of 3-story proposal (City of Capitola 2016a)	While this project is located approximately .5 mile to the east and to the west of a deciduous riparian habitat, it is also located in an urban, residential area with very little forestry or woodland habitat at or near the project area. Although located close to habitats that could potentially contain Cooper’s hawk populations, it appears unlikely that they would establish nests near the project area due to the lack of tall trees. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Approved 11/03/16  Date of Publication: December, 2016

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-11	407 El Salto Dr / Same	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	This project is located over 5 miles from the closest known occurrence area for Cooper’s hawk. It is also located in an urban, residential area close to the coast with minimal forestry or woodland habitat at or near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016Application Incomplete
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species, including nesting birds either directly or through habitat modification.	Pre-construction surveys for nesting birds shall be conducted. If nests are found, buffer zones shall be established.  A Worker Environmental Awareness Program training shall be required for all personnel associated with project construction.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy (MTP/SCS) Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St / Same	Remodel and addition to residence (City of Capitola 2016a)	Although this project is located approximately 1,500 feet to the west of a deciduous riparian habitat, it is also located in an urban, heavily residential area with very little to no forestry or woodland habitat at or near the project area. Although located close to habitats that could potentially contain Cooper’s hawk populations, it appears unlikely that they would establish nests near the project area due to the lack of tall trees. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St / Same	Create condo map for new duplex (City of Capitola 2016a)	Although this project is located approximately 800 feet to the west of a deciduous riparian habitat, it is also located in an urban, heavily residential area with very little to no forestry or woodland habitat at or near the project area. Although located close to a habitat that could potentially contain Cooper’s hawk populations, it appears unlikely that they would establish nests near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Status Unknown  Date of Publication: December, 2016

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	While this project is located approximately 1,000 feet to the east and to the west of a deciduous riparian habitat, it is also located in an urban, built-up area with very little forestry or woodland habitat at or near the project area. Although located close to habitats that could potentially contain Cooper’s hawk populations, it appears unlikely that they would establish nests near the project area due to the lack of tall trees. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i>  Status: Current Status Unknown  Date of Publication: August, 2013
Cap-16	Capitola Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	While this project is located approximately .5 mile to the east and to the west of a deciduous riparian habitat, it is also located in an urban, residential area with very little forestry or woodland habitat at or near the project area. Although located close to habitats that could potentially contain Cooper’s hawk populations, it appears unlikely that they would establish nests near the project area due to the lack of tall trees. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library Intersection of Clares Street and Wharf Road	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community’s needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	The project is located across Wharf Road from Soquel Creek, which is lined with riparian forest habitat. Due to the proximity of riparian forest, including tall trees, there may be potential for the project to result in impacts to Cooper’s hawk.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site’s cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion’s significant contribution to Capitola’s history.	Due to the proximity of a stream and presence of tall trees, the project may have potential to result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
SCi-01	131 Bixby St. / Same	Duplex (City of Santa Cruz 2016a)	This project is not located near any known occurrence area for Cooper’s hawk, nor is it near a riparian habitat. There are very little trees near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-03	135 Vista Branciforte / Same	Minor Land Division to create three lots from two (City of Santa Cruz 2016a)	This project is located approximately 600 feet to the east of a deciduous riparian habitat that lies along a stream with a high density of trees and forest land. In addition, the project itself is surrounded by tall trees. Based on this limited information, the project may have potential to result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-13	301 Beach St. / Same	Add 5 rooms to an existing hotel (City of Santa Cruz 2016a)	This project is located directly along the coast, with little to no trees near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott) / Same	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms. (City of Santa Cruz 2016a)	This project is located in an urbanized area, with little to no trees near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper’s hawk or adverse impacts to Cooper’s hawk habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016



**TABLE B-11:**  
**PROJECTS LOCATED IN THE COOPER'S HAWK RSA**

Project No.	Project Name / Street Address	Project Description	Cooper's Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
SCI-15	350 Ocean / Same	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail (City of Santa Cruz 2016a)	This project is not located near any known occurrence area for Cooper's hawk, nor is it near a riparian habitat. There are very little trees near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper's hawk or adverse impacts to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCI-16	407 Broadway (Hyatt) / Same	106-room hotel (City of Santa Cruz 2016a) (City of Santa Cruz 2016a)	This project is not located near any known occurrence area for Cooper's hawk, nor is it near a riparian habitat. There are very little trees near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper's hawk or adverse impacts to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCI-18	430 South Branciforte / Same	Lot split (City of Santa Cruz 2016a)	This project is located approximately 1,300 feet southeast from Carbonera Creek, which can be considered a deciduous riparian habitat. This project is also located in a heavily urban, residential area with minimal tree coverage. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper's hawk or adverse impacts to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCI-19	514 Frederick / Same	4 townhome units (City of Santa Cruz 2016a)	This project is located approximately .5-mile from a deciduous riparian habitat. There is also a high density of trees approximately 500 feet to the east of the project area. The project site has a very low density of trees and is built-up land. It appears unlikely that any Cooper's hawk nests would be found here, based on this limited information, there may be potential for project to result in disturbance to Cooper's hawk because of its close proximity to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCI-21	618 Windsor St. / Same	5 apartments (City of Santa Cruz 2016a)	This project is located approximately .5-mile east of Carbonera Creek and .6-mile west of another stream that leads into Woods Lagoon. The project area is located in a heavily urban, residential area with little tree coverage. Based on this information, it is unlikely that this project could potentially result in disturbance of Cooper's hawk or adverse impacts to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCI-22	710 Emeline Ave / Same	Demolish single-family residence and construct triplex (City of Santa Cruz 2016a)	This project lies approximately 650 feet to the west of Carbonera Creek. Along this creek is deciduous riparian habitat with a high density of tall trees. Based on this limited information, the project may have potential to result in disturbance to Cooper's hawk because of its close proximity to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
SCi-23	716 Darwin / Same	15 apartments (City of Santa Cruz 2016a)	This project is located within a heavily urban, residential area with little to no tree coverage. There are no known occurrence sites within a 5-mile radius, and deciduous riparian habitats are approximately .5-mile away towards both west and east of the project area. Based on this information, it is unlikely that this project could potentially result in disturbance to Cooper’s hawk because of the distance to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCi-24	716-724 Seabright (Seabright Breakers) / Same	11 townhouses (City of Santa Cruz 2016a)	This project is located within a heavily urban, residential neighborhood with little to no tall trees that appear to be adequate enough for Copper’s hawk nests. Based on this information, it is unlikely that this project could potentially result in disturbance to Cooper’s hawk.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCi-25	738 Pacheco / Same	Three lot subdivision (City of Santa Cruz 2016a)	This project is located in a residential area, but is adjacent to forestland and tall trees. This project may have potential to result in disturbance to Cooper’s hawk because of its close proximity to forestland and tall trees.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-27	800 Soquel / Same	Two units above 2,600 square feet commercial space (City of Santa Cruz 2016a)	This project is located approximately 900 feet to the east of Carbonera Creek. Although there is a moderate density of tall trees along this creek, the portion close to the project area consists of urban and built-up land with a man-made canal to hold the water that travels towards the coast. In addition, this canal travels through residential land. Based on this information, it is unlikely that this project could potentially result in disturbance to Cooper’s hawk because of its close proximity to Cooper’s hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017. Included in Regional Transportation Plan (AMBAG 2014)
SCi-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave (City of Santa Cruz 2016a).	This project is located in an area with very little tree density. The project area is also an urban, built-up area. Based on this information, it is unlikely that this project could potentially result in disturbance to Cooper’s hawk.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016

**TABLE B-11:**  
**PROJECTS LOCATED IN THE COOPER'S HAWK RSA**

Project No.	Project Name / Street Address	Project Description	Cooper's Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
SCI-34	Murray Street Bridge (Glenn E. Coolidge Memorial Bridge) Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	This project is located near Woods Lagoon with light to moderate tree density on both sides of the project area, including tall trees. Based on this information, the project may have potential to result in disturbance to Cooper's hawk because of its close proximity to tall trees and riparian habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCI-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	The environmental document does not identify impacts to Cooper's hawk, although it notes that Section 3503 of the California Fish and Game Code protects all native nesting birds in California.	Preconstruction surveys will be conducted for nesting birds and buffers will be established around active nest sites.	Y	Document Title: Monterey Bay Sanctuary Scenic Trail Network Master Plan FEIR (County of Santa Cruz 2013)  Status: Current Status Unknown  Date of Publication: August, 2016
SCI-39	San Lorenzo River Lagoon Interim Management Program /	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-ft. horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean (City of Santa Cruz 2015).	The environmental document does not include a discussion of Cooper's Hawk. Therefore, it is assumed that there is no potential impact to Cooper's hawk habitats.	Not discussed in ED	Y	Document Title: <i>San Lorenzo River Lagoon Interim Management Program IS/MND.</i>  Status: Project approved  Date of Publication: 2016.
SCI-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	This project is located within a heavily urban and developed area with very little population of trees. As a result, it is unlikely that this project could potentially result in disturbance to Cooper's hawk because of its close proximity to Cooper's hawk habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown  Date of Publication: 2016
SCI-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beulah Park undercrossing.	The environmental document determines that there are no sensitive species or habitats of concern within the project area. As a result, the environmental document does not include a discussion of Cooper's hawk.	Not discussed in ED	Y	Document Title: <i>Santa Cruz 17 Sediment Control: Initial Study with Proposed Mitigated Negative Declaration</i>  Status: PSE/ROW  Date of Publication: March, 2014

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
<b>City of Scotts Valley</b>						
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	This project is located in a heavily wooded, mountainous area with an abundance of tall trees. It also runs by Carobonera Creek, which is home to a deciduous riparian habitat. Based on this information, the project may have potential to result in disturbance to Cooper’s hawk because of its close proximity to riparian forest.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  PID
<b>Santa Cruz County</b>						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	This project is located approximately 800 feet to the southeast of a deciduous riparian habitat along a stream or river. There is also a moderate density of smaller trees located to the east of the project area. However, the project area itself is within a heavily developed, urban location with minimal tree coverage. Based on this information, it is unlikely that this project could potentially result in disturbance to Cooper’s hawk.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016.  Date of Publication: August 12, 2016
SCo-02	San Andreas Rd. and Seascapes Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	This project is located adjacent to a deciduous riparian habitat along a stream or river to the west. Tree density in this area is very high. Based on this information, the project may have potential to result in disturbance to Cooper’s hawk because of its close proximity to riparian forest.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children’s play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	The NOD identified potentially significant impacts to roosting bats and nesting birds as a result of restoration plan work.	In order to avoid impacts to raptors and migratory songbirds, tree removal activities shall be limited to the months between September 1 and February 1, if feasible. If construction occurs outside that window of time, pre-construction surveys will be conducted and buffers established around any active nests.	Y	Document Title: <i>“The Farm Neighborhood Park and Community Center” Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-05	1240 Chanticleer Ave. / Same	2-lot Minor Land Division (County of Santa Cruz 2015h).	The environmental document includes no discussion of Cooper’s Hawk, or any other nesting bird species. Therefore, it is assumed that there is no potential impact to Cooper’s hawk habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown  Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter) (County of Santa Cruz 2016a).	Although Cooper’s hawk is not specifically mentioned, there is potential for adverse effects and habitat modifications of roosting and nesting special-status birds during breeding periods. The Monterey cypress trees on the property could provide these roosting and nesting sites.	Tree removal activities shall be limited to the months between September 1 and February 1, if feasible. If construction occurs outside that window of time, pre-construction surveys will be conducted and buffers established around any active nests.	Y	Document Title: <i>E. Cliff Dr. “Road House” Site Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Current Status Unknown  Date Published: October 24, 2016



**TABLE B-11:**  
**PROJECTS LOCATED IN THE COOPER'S HAWK RSA**

Project No.	Project Name / Street Address	Project Description	Cooper's Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	Implementation of proposed transportation improvements and land use scenario may result in substantial adverse impacts to animal species, either directly or through habitat modification.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone. This zone shall be a minimum of 150 feet from raptor species of interest.  Worker Environmental Awareness Program would be held as training before initiation of construction.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading /	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development. (County of Santa Cruz 2014c).	There is potential to affect nesting birds.	Tree removal activities shall be limited to the months between September 1 and February 1, if feasible. If construction occurs outside that window of time, pre-construction surveys will be conducted and buffers established around any active nests.	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i>  Status: Current Status Unknown  Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	This project is located approximately 125 feet to the west of a stream or river that runs through a deciduous riparian habitat. Tree density along this stream is high, with adequate tree height that appears to be adequate for nesting. Based on this information, the project may have potential to result in disturbance to Cooper's hawk because of its close proximity to riparian forest.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Drive, Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	The environmental document includes no discussion of Cooper's Hawk. Therefore, it is assumed that there is no potential impact to Cooper's Hawk habitats.	Not discussed in ED	Y	Planning application approved; building application complete; lacking info on building permit approval.
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area County of Santa Cruz 2015c).	The environmental document includes no discussion of Cooper's Hawk. Therefore, it is assumed that there is no potential impact to Cooper's Hawk habitats.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i>  Status: Current Status Unknown  Date of Publication: July, 2015
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well (Santa Cruz County 2016k).	The environmental document does not include a discussion of Cooper's Hawk. Therefore, it is assumed that there is no potential impact to Cooper's Hawk habitats.	Not discussed in ED	Y	Mitigated Negative Declaration approved. No building permit in Application Status and Permit History.



TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	Implementation of proposed transportation improvements and land use scenario may result in substantial adverse impacts to animal species, either directly or through habitat modification.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone. This zone shall be a minimum of 150 feet from raptor species of interest.  Worker Environmental Awareness Program would be held as training before initiation of construction.  If it is determined that a tree(s) must be removed, then the project sponsor shall procure all necessary tree removal permits and a tree replacement plan shall be developed.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project /	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (Santa Cruz County 2016g).	The environmental document does not include a discussion of Cooper’s Hawk. Therefore, it is assumed that there is no potential impact to Cooper’s Hawk habitats.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Approved  Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	Implementation of the proposed MBSST Network could result in impacts to special status animal species and mitigation would be required.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone. This zone shall be a minimum of 150 feet from raptor species of interest.  Worker Environmental Awareness Program would be held as training before initiation of construction.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	The environmental document includes no discussion of Cooper’s Hawk. Therefore, it is assumed that there is no potential impact to Cooper’s Hawk habitats.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i>  Status: Current Status Unknown  Date of Publication: September, 2008

TABLE B-11:  
PROJECTS LOCATED IN THE COOPER’S HAWK RSA

Project No.	Project Name / Street Address	Project Description	Cooper’s Hawk Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	Implementation of proposed transportation improvements and land use scenario may result in substantial adverse impacts to animal species, either directly or through habitat modification.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone. This zone shall be a minimum of 150 feet from raptor species of interest.  Worker Environmental Awareness Program would be held as training before initiation of construction.  If it is determined that a tree(s) must be removed, then the project sponsor shall procure all necessary tree removal permits and a tree replacement plan shall be developed.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development /	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium (County of Santa Cruz 2015e).	The environmental document does not include a discussion of Cooper’s Hawk. Therefore, it is assumed that there is no potential impact to Cooper’s Hawk habitats.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development</i>  Status: Planning application approved; lacking information on building permits.  Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa’s Village Rd.	This project corridors cross some streams that include deciduous riparian habitat. Based on the limited available information, the potential to result in disturbance to Cooper’s hawk cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016

TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Table B-12: Projects Located in the Tricolored Blackbird RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
City of Capitola						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-02	114 Grand Ave.	Historic Review.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application under 3rd Party Review: Historic Date of Publication: 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application complete as of 10/27/16. Scheduled for 12/1/16 PC Date of Publication: 2016

TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application Incomplete  Date of Publication: 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd.	Exterior remodel of "Sears" creating 2 new tenant spaces.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-10	4025 Brommer St.	Conceptual Review of 3-story proposal.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-12	41st Ave. Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	The EIR for the Metropolitan Transportation Plan/ Sustainable Communities Strategy lists Tricolored Blackbird as a “Special Status Animal Species Known to Occur or with Potential to Occur within Monterey, San Benito, and Santa Cruz Counties.” Future environmental review of the project would consider the potential for the project to result in impacts to tri-colored blackbird.	The EIR requires biological screening and mitigation for special status species. Anticipated mitigation for impacts to bird species includes preconstruction surveys for nesting birds and establishment and maintenance of buffer around any identified nesting sites.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St.	Remodel and addition to residence.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>City of Capitola Planning Permit List, November 2016</i> Status: Application Incomplete Date of Publication: December, 2016
Cap-14	502 Pine St.	Create condo map for new duplex.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application Status Unknown Date of Publication: December, 2016
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	The EIR for the Metropolitan Transportation Plan/ Sustainable Communities Strategy lists Tricolored Blackbird as a “Special Status Animal Species Known to Occur or with Potential to Occur within Monterey, San Benito, and Santa Cruz Counties.” Future environmental review of the project would consider the potential for the project to result in impacts to tri-colored blackbird.	The EIR requires biological screening and mitigation for special status species. Anticipated mitigation for impacts to bird species includes preconstruction surveys for nesting birds and establishment and maintenance of buffer around any identified nesting sites.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017



TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	No tri-colored blackbird habitat exists within the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library, Wharf Road and Clares Street	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	No tri-colored blackbird habitat exists in the project area. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Tri-colored blackbird habitat may exist in the project area; however, the positive identification of tri-colored blackbird habitat would need to be performed on-site by a qualified biologist. Any disturbance that occurs may have potential to impact tri-colored blackbird habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016

TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
City of Santa Cruz						
SCi-16	407 Broadway (Hyatt)	106-room hotel.	Due to the location, developed nature, and small size of the parcel, it is unlikely that tri-colored blackbird habitat exists in the project area.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>Capitola City Hall Site Reuse Study</i>  Status: Current Status Unknown  Date of Publication: January 28, 2010
County of Santa Cruz						
SCo-02	San Andreas Rd. and Seascaple Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	Tri-colored blackbird habitat may exist on the property; however, the positive identification of tri-colored blackbird habitat would need to be performed on-site by a qualified biologist. Any disturbance that occurs may have potential to impact tri-colored blackbird habitat.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	Tri-colored blackbird habitat may occur on the site but are not expected to breed there. Project would not affect breeding success. Project may temporarily reduce habitat but suitable habitat is readily available locally. Impact is less than significant.	No mitigation for tri-colored blackbird. Preconstruction nesting surveys will be conducted for nesting raptors and songbirds, and exclusionary buffers will be established if active nests are identified.	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-05	1240 Chanticleer Ave.	2-lot Minor Land Division.	The environmental document does not identify impacts to tri-colored blackbird or other bird species. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown  Date Published: December 7, 2015
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The EIR for the Metropolitan Transportation Plan/ Sustainable Communities Strategy lists Tricolored Blackbird as a "Special Status Animal Species Known to Occur or with Potential to Occur within Monterey, San Benito, and Santa Cruz Counties." Future environmental review of the project would consider the potential for the project to result in impacts to tri-colored blackbird.	The EIR requires biological screening and mitigation for special status species. Anticipated mitigation for impacts to bird species includes preconstruction surveys for nesting birds and establishment and maintenance of buffer around any identified nesting sites.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-11	Chaminade Lane Grading	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development.	The environmental document does not discuss tri-colored blackbird. There are potential impacts to nesting raptors and songbirds. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	No mitigation for tri-colored blackbird. Preconstruction nesting surveys will be conducted for nesting raptors and songbirds, and exclusionary buffers will be established if active nests are identified.	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i> Status: Current Status Unknown Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	Tri-colored blackbird habitat may exist on the project; however, the positive identification of tri-colored blackbird habitat would need to be performed on-site by a qualified biologist. Any disturbance that occurs may have potential to impact tri-colored blackbird habitat.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth and the CNDDDB Database Document Title: <i>City of Santa Cruz Status of Projects</i> Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area.	No discussion of tri-colored blackbird in the environmental document. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i> Status: Current Status Unknown Date of Publication: July, 2015
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well.	No discussion of tri-colored blackbird in the environmental document. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration Notice of Public Review and Comment Period</i> Status: Unknown Date of Publication: September 20, 2016.
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The EIR for the Metropolitan Transportation Plan/ Sustainable Communities Strategy lists Tricolored Blackbird as a “Special Status Animal Species Known to Occur or with Potential to Occur within Monterey, San Benito, and Santa Cruz Counties.” Future environmental review of the project would consider the potential for the project to result in impacts to tri-colored blackbird.	The EIR requires biological screening and mitigation for special status species. Anticipated mitigation for impacts to bird species includes preconstruction surveys for nesting birds and establishment and maintenance of buffer around any identified nesting sites.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material.	No discussion of tri-colored blackbird in the environmental document. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Approved Publication Date: March, 2016

TABLE B-12:  
PROJECTS LOCATED IN THE TRICOLORED BLACKBIRD RSA

Project No.	Project Name / Street Address	Project Description	Tri-Colored Blackbird Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The proposed project could cross several landscapes that provide habitat to tri-colored blackbird. Construction of the project could impact tri-colored blackbird as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis by a qualified biologist.	For construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC and the MBTA (including, tricolored blackbird) shall be conducted by a qualified biologist no more than 14 days prior to initiation of construction activities for each segment, including construction staging and vegetation removal.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Ave.	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1.	No discussion of tri-colored blackbird in the environmental document. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i> Status: Current Status Unknown Date of Publication: September, 2008document circulated 2008
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells.	The EIR will evaluate potential effects to special-status species.	The EIR will identify necessary mitigation measures.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i> Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The EIR for the Metropolitan Transportation Plan/ Sustainable Communities Strategy lists Tricolored Blackbird as a “Special Status Animal Species Known to Occur or with Potential to Occur within Monterey, San Benito, and Santa Cruz Counties.” Future environmental review of the project would consider the potential for the project to result in impacts to tri-colored blackbird.	The EIR requires biological screening and mitigation for special status species. Anticipated mitigation for impacts to bird species includes preconstruction surveys for nesting birds and establishment and maintenance of buffer around any identified nesting sites.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium.	No discussion of tri-colored blackbird in the environmental document. Therefore, it can be assumed that there is no potential impact to tri-colored blackbird habitats.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development Initial Study</i> Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa’s Village Rd.	Although the existing transportation use has resulted in disturbance, the project corridors may be adjacent to some areas of tricolored blackbird habitat. Based on the limited available information about the project, the potential to affect tricolored blackbird habitat cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda. Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016

TABLE B-13:  
PROJECTS LOCATED IN THE SHORT-EARED OWL RSA

Table B-13: Projects Located in the Short-Eared Owl RSA

Project No.	Project Name / Street Address	Project Description	Short-eared Owl Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Information Source
City of Capitola						
N/A	N/A					
City of Santa Cruz						
N/A	N/A					
Santa Cruz County						
SCo-02	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	This project is located in a heavily wooded, mountainous area. There is open, undeveloped grassland approximately 1,300 feet to the east of the project area. However, this habitat is located on the other side of a woodland habitat. Based on this information, it is unlikely that that this project could potentially result in disturbance to short-eared owl because of the distance to short-eared owl habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	Implementation of proposed transportation improvements and land use scenario may result in substantial adverse impacts to animal species, either directly or through habitat modification.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone.  Worker Environmental Awareness Program would be held as training before initiation of construction.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	Implementation of proposed transportation improvements and land use scenario may result in substantial adverse impacts to animal species, either directly or through habitat modification.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone.  Worker Environmental Awareness Program would be held as training before initiation of construction.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	The environmental document does not include a discussion about the Short-Eared Owl. But it does identify that there is potential for the project to impact nesting birds.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone.  Worker Environmental Awareness Program would be held as training before initiation of construction.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013



TABLE B-13:  
PROJECTS LOCATED IN THE SHORT-EARED OWL RSA

Project No.	Project Name / Street Address	Project Description	Short-eared Owl Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Information Source
SCo-28	Pure Water Soquel /	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells (Soquel Creek Water District 2016).	The environmental document does not include a discussion about the Short-Eared Owl. But it does list all biological resource issues as being potentially significant impacts.	All mitigation measures will be addressed in the EIR.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i> Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	Implementation of proposed transportation improvements and land use scenario may result in substantial adverse impacts to animal species, either directly or through habitat modification.	Preconstruction surveys would be conducted for nesting birds. If active nests are located, all construction work shall be conducted outside of a buffer zone.  Worker Environmental Awareness Program would be held as training before initiation of construction.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Due to the heavy transportation use of the corridor, and disturbed nature of adjacent open areas, impacts to short-eared owl appear unlikely.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda. Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Table B-14: Projects Located in the White-tailed Kite RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
City of Capitola						
Cap-01	105 Sacramento Ave / Same	Demolition of existing and new single-family home (City of Capitola 2016a)	This project is located directly along the coast with little to no deciduous trees around for roosting. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-02	114 Grand Ave / Same	Historic Review (City of Capitola 2016a)	This project is located along a coastal lowland with a low density of deciduous trees surrounding the project site. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-03	115 Saxon Ave / Same	Remodel and addition (City of Capitola 2016a)	This project is located approximately 300 feet inland from a coastal lowland, but there is also a low density of deciduous trees surrounding the project site. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved November 29, 2016  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd / Same	Historic Review (City of Capitola 2016a)	This project is located along the bank of Soquel Creek. There is a high density of deciduous trees surrounding the project site. Along the western side of the project are residential housing units. There are no agricultural areas nearby. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave / Same	Upgrade to façade and addition of living space (City of Capitola 2016a)	This project is located approximately 450 feet inland from a coastal lowland and within a developed residential area. There is a limited number of trees spread throughout the project site area. There are no agricultural areas near the project site. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd / Same	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	This project is located along the bank of Soquel Creek. There is a high density of deciduous trees surrounding the project site. Along the western side of the project are residential housing units. There are no agricultural areas nearby. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd / Same	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	This project is located approximately 350 feet from the bank of Soquel Creek. There is a high density of deciduous trees surrounding the project site. Along the western side of the project are residential housing units. There are no agricultural areas nearby. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave / Same	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	This project is located approximately 750 feet inland from a coastal lowland in a residential neighborhood. Forest density is limited to a handful of trees spread out throughout the project site area. There are no agricultural areas or open grasslands near the site. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd / Same	Exterior remodel of "Sears" creating 2 new tenant spaces (City of Capitola 2016a)	This project is located in an area that is heavily developed for commercial business. There are little to no trees surrounding the project site. There are also no agricultural areas or open grasslands nearby. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-10	4025 Brommer St / Same	Conceptual Review of 3-story proposal (City of Capitola 2016a)	This project is located in a developed, residential neighborhood. The site is also surrounded by existing roadways with little to no trees or open grasslands. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-11	407 El Salto Dr / Same	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	This project is located approximately 250 feet inland from a coastal lowland and within a developed residential area. There is a limited number of trees spread throughout the project site area. There are no agricultural areas near the project site. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species, either directly or through habitat modification. Mitigation would be required for nesting bird species, such as CWTK.	On a project-by-project basis, a preliminary biological resource screening shall be performed during project-level environmental review to determine whether the project has may impact biological resources, and a qualified biologist shall conduct a biological resources assessment to determine the potential impacts to those resources.  Preconstruction surveys for nesting birds covered by the California Fish and Game Code and Migratory Bird Treaty Act shall be conducted for construction activities occurring during the nesting season, and active nests shall be avoided.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St / Same	Remodel and addition to residence (City of Capitola 2016a)	This project is located in a developed, residential neighborhood. The site is also surrounded by existing roadways with little to no trees or open grasslands. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-14	502 Pine St / Same	Create condo map for new duplex (City of Capitola 2016a)	This project is located approximately 760 feet northwest of an unidentified stream or river that is lined with deciduous trees that could be used for nesting. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Status Unknown  Date of Publication: December, 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	This project is located approximately 900 feet to the west of an unidentified stream or river that is lined with deciduous trees that could be used for nesting. However, the project site is surrounded by existing roadways and heavily developed commercial land. Based on limited available information, the potential for disturbance of CWTk habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i>  Status: Current Status Unknown  Date of Publication: August, 2013
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	This project is located in an urban, built-up area and is surrounded by commercial buildings and existing roadways with a low density of trees. Based on limited available information, the potential for disturbance of CWTk habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	This project is located directly adjacent to Soquel Creek. There is a high density of deciduous trees lined along the creek bank. Based on limited available information, the potential for disturbance of CWTk habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013



TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	This project is located directly along Soquel Creek. There is a high density of deciduous trees lined along the creek bank. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
<b>City of Santa Cruz</b>						
SCi-01	131 Bixby / Same	Duplex (City of Santa Cruz 2016a)	This project is located in a heavily developed, residential neighborhood. There are deciduous trees and open grassland at Ocean View Park located approximately 850 feet to the east of the project site. However, the project site has a limited number of trees, which appear unsuitable for CWTK nesting. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-03	135 Vista Branciforte / Same	Minor Land Division to create three lots from two (City of Santa Cruz 2016a)	This project is located approximately 600 feet south of open grasslands with a high density of deciduous trees. In addition, the project itself is surrounded by deciduous trees as well. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-13	301 Beach / Same	Add 5 rooms to an existing hotel (City of Santa Cruz 2016a)	This project is located along the coast in an area that is heavily developed and built-up. Neary's Lagoon, located approximately 1,800 feet to the west of the project site, consists of open grassland and deciduous trees. However, the project site appears to be unsuitable for CWTK nests. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: November 30, 2016
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott) / Same	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms. (City of Santa Cruz 2016a)	This project is located along the San Lorenzo River in an area that is heavily developed and built-up. There are no trees on or near the project site that appear to be suitable for CWTK nests. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCi-15	350 Ocean / Same	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail (City of Santa Cruz 2016a)	This project is located in a heavily developed, residential area with some deciduous trees and open grassland directly to the east of the project site. Based on limited available information and the close proximity of the project to these trees and grasslands, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-16	407 Broadway (Hyatt) / Same	106-room hotel (City of Santa Cruz 2016a) (City of Santa Cruz 2016a)	This project is located in a developed, residential neighborhood. The site is also surrounded by existing roadways with little to no trees or open grasslands. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-18	430 South Branciforte / Same	Lot split (City of Santa Cruz 2016a)	This project is located in a residential neighborhood and is surrounded by housing units with a low density of trees. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-19	514 Frederick / Same	4 townhome units (City of Santa Cruz 2016a)	This project is located along the eastern side of Frederick Street and is surrounded by a parking lot to the north and east, and residential housing units to the south. There is open grassland and deciduous trees approximately 480 feet to the east of the project site. However, nesting activity is unlikely to occur on or near the project itself. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-21	618 Windsor / Same	5 apartments (City of Santa Cruz 2016a)	This project is located in a residential neighborhood and is surrounded by housing units with a medium density of trees to the south of the project site. There are no open grasslands near the project site. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-22	710 Emeline / Same	Demolish single-family residence and construct triplex (City of Santa Cruz 2016a)	This project is located approximately 400 feet to the west of Carbonera Creek. There is a high density of deciduous trees that lines the creek bank and open grassland further east of the project site. Surrounding the project are more deciduous trees that may be suitable for CWTK nesting habitats. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCi-23	716 Darwin / Same	15 apartments (City of Santa Cruz 2016a)	This project is located in a residential neighborhood and is surrounded by housing units with a low density of trees. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-24	716-724 Seabright (Seabright Breakers) / Same	11 townhouses (City of Santa Cruz 2016a)	This project is located in a residential neighborhood. The trees that are on or near the project site are fairly spread out and appear unsuitable for CWTK nesting. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-27	800 Soquel / Same	Two units above 2,600 square feet commercial space (City of Santa Cruz 2016a)	This project is located in an urban, built-up area and is surrounded by commercial buildings and existing roadways with a low density of trees. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Approved
SCi-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave (City of Santa Cruz 2016a).	This project is located directly adjacent to open grassland with a low to medium density of deciduous trees. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	This project is located next to a high density of deciduous trees that run along the western side of Wood's Lagoon. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	Nesting opportunities are available for white-tailed kites, particularly in the southern portion of the reach where the proposed MBSST Network transitions from urban developed areas to agriculturally developed areas that provide ample foraging opportunities. Impacts to white-tailed kites might occur during construction if kites are nesting near construction areas and/or trees need to be removed or trimmed. The impact could be substantial if a rookery is located near the proposed Network. These impacts would only occur during the nesting season; however, removal of a nest site outside of the nesting season could be significant as white-tailed kites tend to return to the same nest sites during subsequent years. However, it is not anticipated that large numbers of trees in any given area would need to be removed as the majority of the trail would be constructed on an existing railroad corridor or on surface streets.	Preconstruction surveys will be conducted for nesting birds and buffers will be established around active nest sites.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCi-39	San Lorenzo River Lagoon Interim Management Program /	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-ft. horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean (City of Santa Cruz 2015).	The environmental document does not include a discussion of CWTK. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	Document Title: <i>San Lorenzo River Lagoon Interim Management Program IS/MND</i> .  Status: Project approved  Date of Publication: 2016.
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	This project is located along an existing roadway in a heavily developed area. Tree density is minimal. Based on limited available information, the potential for disturbance of CWTK habitat is unlikely and can be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown  Date of Publication: 2016
SCi-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beulah Park undercrossing.	The environmental document does not include a discussion of CWTK. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	Document Title: <i>Santa Cruz 17 Sediment Control: Initial Study with Proposed Mitigated Negative Declaration</i>  Status: PSE/ROW  Date of Publication: March, 2014

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Santa Cruz County						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	This project is located on open grassland with deciduous trees to the west of the project site. Based on limited available information, the potential for disturbance of CWTk habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016.  Date of Publication: August 12, 2016
SCo-02	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	California White-Tailed Kite habitat may exist on the property; however, the positive identification of California White-Tailed Kite habitat would need to be performed on-site by a qualified biologist. Any disturbance that occurs may have potential to impact California White-Tailed Kite habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	The environmental document does not include a discussion of CWTk. Therefore, it can be assumed that there is no potential impact to CWTk habitats.	Not discussed in ED	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-05	1240 Chanticleer Ave. / Same	2-lot Minor Land Division (County of Santa Cruz 2015h).	The environmental document does not include a discussion of CWTk. Therefore, it can be assumed that there is no potential impact to CWTk habitats.	Not Available	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown  Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter) (County of Santa Cruz 2016a).	While the environmental document does not explicitly discuss any impacts to CWTk, it does identify the potential impacts of on-site tree removal to nesting raptors.	In order to avoid impacts to raptors and migratory songbirds, tree removal activities shall be limited to the months between September 1 and February 1, if feasible.  A qualified biologist shall conduct preconstruction surveys. If active raptor or migratory bird nests are found in trees to be retained, buffers shall be established and maintained and exclusionary measures shall be implemented after consultation with CDFW.	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Current Status Unknown  Date Published: October 24, 2016



TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	White tailed-kite habitat may occur in areas affected by the program of improvements described in the Metropolitan Transportation Plan and Sustainable Communities Strategy. White-tailed kite is a fully-protected species under State law, and therefore future environmental review of the project would need to avoid impacts white-tailed kite.	N/A – Impact to white-tailed kite must be avoided.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading /	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development. (County of Santa Cruz 2014c).	Removal of oak trees may affect nesting birds.	In order to avoid impacts to raptors and migratory songbirds, tree removal activities shall be limited to the months between September 1 and February 1, if feasible.  A qualified biologist shall conduct preconstruction surveys for raptor or migratory songbird nests.  If active raptor or migratory bird nests are found, buffers shall be established and maintained and exclusionary measures shall be implemented only after consultation with CDFG.	y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i>  Status: Current Status Unknown  Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane— MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	This project is located in open grassland with deciduous trees on all sides of the project site. Based on limited available information, the potential for disturbance of CWTk habitat cannot be ruled out.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Drive, Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	Removal of oak trees may affect nesting birds.	<p>In order to avoid impacts to raptors and migratory songbirds, tree removal activities shall be limited to the months between September 1 and February 1, if feasible.</p> <ul style="list-style-type: none"><li>• If trees must be removed outside of the timeframe above, a qualified biologist shall conduct preconstruction surveys for raptor or migratory songbird nests.</li><li>• If active raptor or migratory bird nests are found, buffers from active nests shall be maintained during construction activities, and exclusionary measures shall be implemented after consultation with CDFW.</li></ul>	Y	<p>Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i></p> <p>Status: Current Status Unknown</p> <p>Date of Publication: February, 2014</p>
SCo-16	Johnson Grading	Construct a 2,270-foot-long driveway and single-family dwelling. Includes approximately 2,100 cubic yards of excavation and 1,500 cubic yards of fill and the removal and replacement of an existing ephemeral stream crossing.	The environmental document does not discuss aviary species, including California White-Tailed Kite. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	<p>Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration Notice of Public Review and Comment Period</i></p> <p>Status: Permit approved.</p> <p>Date of Publication: August 20, 2014</p>
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area County of Santa Cruz 2015c).	The environmental document does not include a discussion of CWTK. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	<p>Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i></p> <p>Status: Current Status Unknown</p> <p>Date of Publication: July, 2015</p>
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well (Santa Cruz County 2016k).	The environmental document does not include a discussion of CWTK. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	<p>Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration, Lilly Agricultural Well</i></p> <p>Status: Mitigated Negative Declaration approved. No building permit in Application Status and Permit History.</p>

**TABLE B-14:**  
**PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA**

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	White tailed-kite habitat may occur in areas affected by the program of improvements described in the Metropolitan Transportation Plan and Sustainable Communities Strategy. White-tailed kite is a fully-protected species under State law, and therefore future environmental review of the project would need to avoid impacts white-tailed kite.	N/A – Impact to white-tailed kite must be avoided.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project /	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (Santa Cruz County 2016g).	Although this environmental document does not explicitly mention CWTK in its impact analysis, it does list one general recommendation regarding nesting birds: <ul style="list-style-type: none"> <li>Prior to pruning, confirm with a biologist that there are no raptors nesting in the vicinity.</li> </ul>	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Approved Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The proposed project could cross several landscapes that provide habitat to California White-Tailed Kite. Construction of the project could impact California White Tailed Kite as a result of development which could alter or degrade habitat. These impacts, including tree removal or nest disturbance, would be determined on a site by site basis by a qualified biologist.	For construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC and the MBTA (including California White-Tailed Kite) shall be conducted by a qualified biologist no more than 14 days prior to initiation of construction activities for each segment, including construction staging and vegetation removal.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	The environmental document does not include a discussion of CWTK. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i> Status: Current Status Unknown Date of Publication: September, 2008
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	White tailed-kite habitat may occur in areas affected by the program of improvements described in the Metropolitan Transportation Plan and Sustainable Communities Strategy. White-tailed kite is a fully-protected species under State law, and therefore future environmental review of the project would need to avoid impacts white-tailed kite.	No specific California White-Tailed Kite mitigation measures are discussed. However, the EIR requires biological screening and mitigation for special status species. If State listed species are found during special status surveys, then the project shall be re-designed to avoid impacting these species, if feasible. Mitigation would occur on a project-by-project basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development /	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium (County of Santa Cruz 2015e).	The environmental document does not include a discussion of CWTK. Therefore, it can be assumed that there is no potential impact to CWTK habitats.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development Initial Study</i> Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015

TABLE B-14:  
PROJECTS LOCATED IN THE WHITE-TAILED KITE RSA

Project No.	Project Name / Street Address	Project Description	California White-Tailed Kite Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	This project spans a study area of over 16 miles, traveling through different types of land. There are portions of this project that could pass through areas of dense forestry and open grassland. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016
<b>City of Scott's Valley</b>						
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	This project is located in an area of dense forestry and open grassland. Based on limited available information, the potential for disturbance of CWTK habitat cannot be ruled out.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Project Initiation Document

TABLE B-15:  
PROJECTS LOCATED IN THE LEAST BELL’S VIREO AND SOUTHWESTERN WILLOW FLYCATCHER RSA

Table B-15: Projects Located in the Least Bell’s Vireo and Southwestern Willow Flycatcher RSA

Project No.	Project Name / Street Address	Project Description	Least Bell's Vireo Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
City of Capitola						
Cap-04	1810 Wharf Rd	Historic Review (City of Capitola 2016a)	Least Bell's Vireo and Southwestern Willow Flycatcher (SWWF) habitat may exist on or adjacent to the project; however, the positive identification of habitat would need to be performed on-site by a qualified biologist. Any disturbance of brush or trees may have potential to impact Least Bell's Vireo and SWWF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	Due to the location, developed nature, and small size of the project, it is unlikely that Least Bell's Vireo and SWWF habitat exists in the project area.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	Least Bell's Vireo and SWWF habitat may exist on or adjacent to the project; however, the positive identification of habitat would need to be performed on-site by a qualified biologist. Any disturbance of brush or trees may have potential to impact Least Bell's Vireo and SWWF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	Due to the location, developed nature, and small size of the project, it is unlikely that Least Bell's Vireo and SWWF habitat exists in the project area.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016



TABLE B-15:  
PROJECTS LOCATED IN THE LEAST BELL’S VIREO AND SOUTHWESTERN WILLOW FLYCATCHER RSA

Project No.	Project Name / Street Address	Project Description	Least Bell's Vireo Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	Due to the location, developed nature, and small size of the project, it is unlikely that Least Bell's Vireo and SWWF habitat exists in the project area.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Least Bell's Vireo and SWWF habitat may exist on or adjacent to the project; however, the positive identification of habitat would need to be performed on-site by a qualified biologist. Any disturbance of brush or trees may have potential to impact Least Bell's Vireo and SWWF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Least Bell's Vireo and SWWF habitat may exist on or adjacent to the project; however, the positive identification of habitat would need to be performed on-site by a qualified biologist. Any disturbance of brush or trees may have potential to impact Least Bell's Vireo and SWWF habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
NA	NA					
County of Santa Cruz						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	Least Bell's Vireo and SWWF habitat may exist on or adjacent to the project; however, the positive identification of habitat would need to be performed on-site by a qualified biologist. Any disturbance of brush or trees may have potential to impact Least Bell's Vireo and SWWF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016.  Date of Publication: August 12, 2016

TABLE B-15:  
PROJECTS LOCATED IN THE LEAST BELL’S VIREO AND SOUTHWESTERN WILLOW FLYCATCHER RSA

Project No.	Project Name / Street Address	Project Description	Least Bell's Vireo Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	No specific mention of Least Bell's Vireo or SWWF occurs outside of its inclusion as a potential species within the project's scope. Therefore, Least Bell's Vireo and SWWF habitat may exist on the project site and may be impacted by any disturbance or development on the project site. A qualified biologist would be required to conduct site-by-site analysis to assess impacts.	On a project-by-project basis, a preliminary biological resource screening shall be performed to determine whether the project has any potential to Least Bell's Vireo and SWF. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct an assessment to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. Projects shall, if practical, avoid all impacts to special status species.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	Least Bell's Vireo and SWWF habitat may exist on or adjacent to the project; however, the positive identification of habitat would need to be performed on-site by a qualified biologist. Any disturbance of brush or trees may have potential to impact Least Bell's Vireo and SWWF habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	No specific mention of Least Bell's Vireo or SWWF occurs outside of its inclusion as a potential species within the project's scope. Therefore, Least Bell's Vireo and SWWF habitat may exist on the project site and may be impacted by any disturbance or development on the project site. A qualified biologist would be required to conduct site-by-site analysis to assess impacts.	On a project-by-project basis, a preliminary biological resource screening shall be performed to determine whether the project has any potential to Least Bell's Vireo and SWF. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct an assessment to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. Projects shall, if practical, avoid all impacts to special status species	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	Least Bell's Vireo is mentioned in the environment document. However, no specific impacts or habitat are discussed. Therefore, Least Bell's Vireo and SWWF habitat may exist on the project site and may be impacted by any disturbance or development on the project site. A qualified biologist would be required to conduct site-by-site analysis to assess impacts.	No specific mention of Least Bell's Vireo or SWF habitat mitigation occurs.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013

TABLE B-15:  
PROJECTS LOCATED IN THE LEAST BELL’S VIREO AND SOUTHWESTERN WILLOW FLYCATCHER RSA

Project No.	Project Name / Street Address	Project Description	Least Bell’s Vireo Potential Impacts	Mitigation Measures	Environmental Document?	Information Source
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells.	The environmental document does not include a discussion on Least Bell’s Vireo. However, it does list all biological resource issues as being potentially significant impacts.	All mitigation measures will be addressed in the EIR.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i>  Status: Current Status Unknown  Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	No specific mention of Least Bell’s Vireo or SWWF occurs outside of its inclusion as a potential species within the project’s scope. Therefore, Least Bell’s Vireo and SWWF habitat may exist on the project site and may be impacted by any disturbance or development on the project site. A qualified biologist would be required to conduct site-by-site analysis to assess impacts.	On a project-by-project basis, a preliminary biological resource screening shall be performed to determine whether the project has any potential to impact Least Bell’s Vireo and SWF. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct an assessment to document the existing biological resources within the project footprint plus a buffer and to determine the potential impacts to those resources. Projects shall, if practical, avoid all impacts to special status species	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa’s Village Rd.	Although the existing transportation use has resulted in disturbance, the project corridors may be adjacent to some areas of least Bell’s vireo and SWWF habitat. Based on the limited available information about the project, the potential to affect least Bell’s vireo and SWWF habitat cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Table B-16: Projects Located in the American Badger RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
City of Capitola						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-02	114 Grand Ave.	Historic Review.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16 Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting Date of Publication: December, 2016

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd.	Exterior remodel of "Sears" creating 2 new tenant spaces.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-10	4025 Brommer St.	Conceptual Review of 3-story proposal.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-11	407 El Salto Dr.	Front yard fence and wall in public right-of-way.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016



TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	No discussion of American badger habitat occurs within the environmental document. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St.	Remodel and addition to residence.	No American badger habitat occurs within the project area. Therefore, there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Capitola Planning Permit List, November 2016</i> Status: Application Incomplete Date of Publication: December, 2016
Cap-14	502 Pine St.	Create condo map for new duplex.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application Status Unknown Date of Publication: December, 2016
Cap-15	Bay Ave./Capitola Ave. Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i> Status: Current Status Unknown Date of Publication: August, 2013

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	American badger habitat may exist within the project area. However, a qualified biologist would need to conduct an on-site assessment in order to confirm whether or not American badger habitat does exist. If so, any development could result in impact to American badger.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
City of Santa Cruz						
SCi-01	131 Bixby	Duplex.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-03	135 Vista Branciforte	Minor Land Division to create three lots from two.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date: November, 2016
SCi-13	301 Beach	Add 5 rooms to an existing hotel.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date: November, 2016
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott)	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-15	350 Ocean	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCi-16	407 Broadway (Hyatt)	106-room hotel.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCi-18	430 South Branciforte	Lot split.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Approved Date of Publication: December, 2016
SCi-19	514 Frederick	4 townhome units.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-21	618 Windsor	5 apartments.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-22	710 Emeline	Demolish single-family residence and construct triplex.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-23	716 Darwin	15 apartments.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016
SCi-24	716-724 Seabright (Seabright Breakers)	11 townhouses.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: December, 2016

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCI-25	738 Pacheco	Three lot subdivision.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCI-27	800 Soquel	Two units above 2,600 square feet commercial space.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016
SCI-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave.	American badger habitat may exist within the project area. However, a qualified biologist would need to conduct an on-site assessment in order to confirm whether or not American badger habitat does exist. If so, any development could result in impact to American badger.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Branciforte Creek Bridge &amp; Multi-Use Path Project Information Form</i>  Status: Project approved  Date of Publication: September, 2012
SCI-34	Murray Street Bridge Seismic Retrofit Project / Murray St.	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCI-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave.)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	The environmental document does not discuss American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013



TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCI-39	San Lorenzo River Lagoon Interim Management Program	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-ft. horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>San Lorenzo River Lagoon Interim Management Program IS/MND</i> . Status: Project approved Date of Publication: 2016.
SCI-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	No areas of drier open stages of shrub, forest, or herbaceous habitats were observable within the project area. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i> Status: Current Status Unknown Date of Publication: 2016
SCI-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beaulah Park undercrossing.	No discussion of American badger habitat occurs in the environmental document. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Santa Cruz 17 Sediment Control: Initial Study with Proposed Mitigated Negative Declaration</i> Status: PSE/ROW  Date of Publication: March, 2014
City of Scotts Valley						
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	American badger habitat may exist within or adjacent to the project area. However, a qualified biologist would need to conduct an on-site assessment in order to confirm whether or not American badger habitat does exist. If so, any development could result in impact to American badger.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Transportation Concept Report: State Route 17</i> Status: PID Date: November, 2015
Santa Cruz County						
SCo-01	7th Ave./Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	American badger habitat may exist within the project area. However, a qualified biologist would need to conduct an on-site assessment in order to confirm whether or not American badger habitat does exist. If so, any development could result in impact to American badger.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i> Status: RFQ was submitted with request for qualifications due by August 12, 2016. Date of Publication: August 12, 2016

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-02	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	American badger habitat may exist within the project area. However, a qualified biologist would need to conduct an on-site assessment in order to confirm whether or not American badger habitat does exist. If so, any development could result in impact to American badger.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	No discussion of impacts on American badger occur in the environmental document. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-05	1240 Chanticleer Ave.	2-lot Minor Land Division.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i>  Status: Current Status Unknown  Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Dr.	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter).	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Current Status Unknown  Date Published: October 24, 2016
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion.	The proposed project could cross several waterways that provide habitat to American badger. Thus, it is possible that the project would involve construction or alteration of American badger habitat. These impacts would be determined on a site by site basis by a qualified biologist.	Pre-construction surveys shall be conducted. American badger habitat shall be avoided, if possible. If suitable habitat for American badger cannot be avoided, mitigation shall occur. This includes possible trapping and moving of American badger. Additional mitigation will occur on a site-by-site basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i>  Status: Current Status Unknown  Date of Publication: February, 2014

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1.	American badger habitat may exist within the project area. However, a qualified biologist would need to conduct an on-site assessment in order to confirm whether or not American badger habitat does exist. If so, any development could result in impact to American badger.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Dr., Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration</i>  Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez St.	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i>  Status: Current Status Unknown Date of Publication: July, 2015
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Mitigated Negative Declaration, Lilly Agricultural Well</i>  Status: Mitigated Negative Declaration approved. No building permit in Application Status and Permit History.
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas.	The proposed project could cross several waterways that provide habitat to American badger. Thus, it is possible that the project would involve construction or alteration of American badger habitat. These impacts would be determined on a site by site basis by a qualified biologist.	Pre-construction surveys shall be conducted. American badger habitat shall be avoided, if possible. If suitable habitat for American badger cannot be avoided, mitigation shall occur. This includes possible trapping and moving of American badger. Additional mitigation will occur on a site-by-site basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i>  Status: Approved Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: November 7, 2013

TABLE B-16:  
PROJECTS LOCATED IN THE AMERICAN BADGER RSA

Project No.	Project Name / Street Address	Project Description	American Badger Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-26	Nigh Property / 5940 Soquel Ave.	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	No discussion of American badger habitat mitigation occurs.	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i> Status: Current Status Unknown Date of Publication: September, 2008
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions.	The proposed project could cross several waterways that provide habitat to American badger. Thus, it is possible that the project would involve construction or alteration of American badger habitat. These impacts would be determined on a site by site basis by a qualified biologist.	Pre-construction surveys shall be conducted. American badger habitat shall be avoided, if possible. If suitable habitat for American badger cannot be avoided, mitigation shall occur. This includes possible trapping and moving of American badger. Additional mitigation will occur on a site-by-site basis.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium.	The environmental document does not include a discussion of American badger. Therefore, it is assumed that there is no potential impact to American Badger habitats.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development Initial Study</i> Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Portions of the project corridor cross waterways with tree cover. Although the natural areas along the corridor include substantial disturbance, based on the limited information about the project, the potential for disturbance of American badger cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda. Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016

TABLE B-17:  
PROJECTS LOCATED IN THE OAK WOODLAND RSA

Table B-17: Projects Located in the Oak Woodland RSA

Project No.	Project Name / Street Address	Project Description	Oak Woodland Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	Although a group of oak trees appears to exist on this single-family residential property in a residential neighborhood, due to the suburban character of the area, it does not appear to be oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	No oak woodland exists within the project area. Therefore, there is no potential impact to oak woodland resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application complete as of 10/27/16; Scheduled for 12/1/16 PC  Date of Publication: 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	Although oak trees appear to exist on these single-family residential properties, they are located in a residential neighborhood. Due to the suburban character of the area and small lot size, it does not appear to be oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application under 3rd Party Review: Stormwater.  Date of Publication: 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	Although oak trees appear to exist on this single-family residential property, it is located in a residential neighborhood. Due to the suburban character of the area, it does not appear to be oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application Incomplete  Date of Publication: 2016
Cap-17	New Library	The existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Although oak trees appear to exist on this property, it is located in a residential/ commercial neighborhood. Due to the suburban character of the area and small lot size, it does not appear to be oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013



TABLE B-17:  
PROJECTS LOCATED IN THE OAK WOODLAND RSA

Project No.	Project Name / Street Address	Project Description	Oak Woodland Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	No discussion of oak woodland impacts occurs within the environmental document. Therefore, it is assumed that there is no potential impact to oak woodland resources.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
SCI-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	Although oak trees appear to exist on this property, it is located in a residential/ commercial neighborhood. Due to the suburban character of the area and small lot size, it does not appear to be oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January 2015
Santa Cruz County						
SCo-02	San Andreas Rd. and Seascaple Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	Oak woodland habitat may exist on the property; however, the positive identification of oak woodland habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	This programmatic EIR found that projects included in the MTP/SCS may potentially involve impacts to oak woodland, which will be analyzed specifically in future project-level environmental documents for specific projects	A tree protection and replacement plan shall be developed and include restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for replacement and maintenance of trees.  If protected trees will be removed, replacement tree of like species will be planted per local agency standards, with a minimum ratio of 2:1.  If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-17:  
PROJECTS LOCATED IN THE OAK WOODLAND RSA

Project No.	Project Name / Street Address	Project Description	Oak Woodland Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	Oak woodland habitat may exist on the property; however, the positive identification of oak woodland habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees in any areas that may be identified as oak woodland habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold.  Date of Publication: November 30, 2016
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	This programmatic EIR found that projects included in the MTP/SCS may potentially involve impacts to oak woodland, which will be analyzed specifically in future project-level environmental documents for specific projects	A tree protection and replacement plan shall be developed and include restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for replacement and maintenance of trees.  If protected trees will be removed, replacement tree of like species will be planted per local agency standards, with a minimum ratio of 2:1.  If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	The proposed project could cross oak woodland. Construction of the project could impact oak woodland as a result of development which could alter or degrade habitat. These impacts would be determined on a site by site basis.	If it is determined that construction may impact trees protected by local agencies, the project sponsor shall procure all necessary tree removal permits. A tree protection and replacement plan shall be developed by a certified arborist as appropriate. The plan shall include, but would not be limited to, an inventory of trees to within the construction site, setbacks from trees and protective fencing, restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for replacement and maintenance of trees.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013

TABLE B-17:  
PROJECTS LOCATED IN THE OAK WOODLAND RSA

Project No.	Project Name / Street Address	Project Description	Oak Woodland Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	This programmatic EIR found that projects included in the MTP/SCS may potentially involve impacts to oak woodland, which will be analyzed specifically in future project-level environmental documents for specific projects	<p>A tree protection and replacement plan shall be developed and include restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for replacement and maintenance of trees.</p> <p>If protected trees will be removed, replacement tree of like species will be planted per local agency standards, with a minimum ratio of 2:1.</p> <p>If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches</p>	Y	<p>Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i></p> <p>Status: Current Status Unknown</p> <p>Date of Publication: June 11, 2014; Amended: January 11, 2017</p>
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Some areas of oak woodland habitat were identified the Route 1 corridor within the biological study area for the Route 1 HOV/TSM Tier I/Tier II Project. Google Earth imagery indicates potential for occurrences in other portions of the worker safety project corridors; however, the positive identification of oak woodland habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts, such as land disturbance or removal of trees if worker safety project activities may occur in areas that may be identified as oak woodland habitat.	Not Available	N	<p>Discussion of potential impacts was based on the following sources: Google Earth, and the Natural Environment Study for the Route 1 HOV/TSM Tier I/Tier II project (Caltrans 2015b)</p> <p>Document Title: Interagency Technical Advisory Committee Agenda.</p> <p>Status: Plans, Specifications, and Estimates/Right of Way</p> <p>Date of Publication: February 2016</p>

TABLE B-18:  
PROJECTS LOCATED IN THE MONARCH BUTTERFLY RSA

Table B-18: Projects Located in the Monarch Butterfly RSA

Project No.	Project Name / Street Address	Project Description	Monarch Butterfly Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	The project is located approximately 260 feet south of a known occurrence area. The surrounding environmental setting consists of large trees, with an increased density along the bank of Soquel Creek. The project is also located approximately .3 mile inland from the Soquel Cove coast. Based on this information, there may be potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	The project is located approximately .3 mile from two known occurrences areas, one to the northeast and the other to the northwest. The surrounding environmental setting is urban with built-up land. As a result, there are no dense trees near the project. Therefore, impacts to monarch butterfly habitat appear unlikely.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application complete as of 10/27/16. Scheduled for 12/1/16 PC  Date of Publication: December, 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	The project is located within a known occurrence area for monarch butterfly. In addition, the project site is adjacent to a large density of trees located along the bank of Soquel Creek. As a result, there is potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application under 3rd Party Review: Stormwater.  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	The project is located approximately 160 feet to the northwest from a known occurrence area. Near the project area is a dense area of tall trees and shrubs along Wharf Road as well as along the bank of Soquel Creek. As a result, there may be potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-18:  
PROJECTS LOCATED IN THE MONARCH BUTTERFLY RSA

Project No.	Project Name / Street Address	Project Description	Monarch Butterfly Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	The project is located within a buffer area surrounding a known occurrence. There are large trees along Wharf Road from the project site. The project is also located .3 mile north of the coast. Based on this information, there may be potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Due to the presence of large trees and proximity to the coast, there may be potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
SCI-34	Murray St. Bridge Seismic Retrofit Project / Murray St.	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	This project is located approximately 0.2 mile northeast of a known occurrence area. The bridge crosses over the Woods Lagoon that leads into the Santa Cruz Small Craft Harbor. Tree density is moderate along the edges of the lagoon, with the presence of Monterey Pine and Eucalyptus. Based on this limited information, monarch butterfly overwintering populations cannot be ruled out, and there may be potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015



TABLE B-18:  
PROJECTS LOCATED IN THE MONARCH BUTTERFLY RSA

Project No.	Project Name / Street Address	Project Description	Monarch Butterfly Potential Impacts	Mitigation	Environmental Document?	Information Source
<b>Santa Cruz County</b>						
SCo-6	San Andreas Rd. and Seascape Blvd. / Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	The project is not located within or near a known occurrence area. The closest of these areas is located approximately .65 mile south of the project site. The project is approximately .75 miles from the coast and is surrounded by a very high density of medium to large-size trees. This project is located along the same river that travels through the closest known occurrence area. Based on this information, there may be potential for disturbance of monarch butterflies or adverse impacts to monarch butterfly habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	This project could potentially result in disturbance of monarchs or adverse impacts to monarch habitat.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	The project is located approximately .75 mile to the north of the coast as well as a known occurrence area. The eastern boundary of the project site is next to an unidentified river body with a heavily dense tree population along its banks. Based on this information, it is possible that overwintering populations of monarch butterflies could be present here and potential impacts may occur due to the project.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects</i>  Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	This project could potentially result in disturbance of monarchs or adverse impacts to monarch habitat.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (County of Santa Cruz RTC 2013).	This project could potentially result in disturbance of monarchs or adverse impacts to monarch habitat.	Mitigation measures may include worker education, assessment of potential impacts to monarchs prior to design completion, monarch surveys, avoidance of monarch roosting sites, and/or planting additional roosting trees.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Certified November, 2013 Date of Publication: November 2013

TABLE B-18:  
PROJECTS LOCATED IN THE MONARCH BUTTERFLY RSA

Project No.	Project Name / Street Address	Project Description	Monarch Butterfly Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	This project could potentially result in disturbance of monarchs or adverse impacts to monarch habitat.	A preliminary biological screening will be completed for this project and, if necessary, a biological assessment will be conducted that could result in additional studies, agency consultations, or design alterations.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Due to the presence of large trees along the project corridors, and the proximity to the coast, monarch butterfly habitat could potentially be present. The potential for impacts cannot be ruled out based on available information.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016

TABLE B-19:  
PROJECTS LOCATED IN THE COASTAL SCRUB RSA

Table B-19: Projects Located in the Coastal Scrub RSA

Project No.	Project Name / Street Address	Project Description	Coastal Scrub Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	No coastal scrub vegetation is apparent within the project area. Therefore, there is no potential impact to coastal scrub resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application under 3rd Party Review: Historic Date of Publication: 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	No coastal scrub vegetation is apparent within the project area. Therefore, there is no potential impact to coastal scrub resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application complete as of 10/27/16. Scheduled for 12/1/16 PC Date of Publication: 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	No coastal scrub vegetation is apparent within the project area. Therefore, there is no potential impact to coastal scrub resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application under 3rd Party Review: Stormwater Date of Publication: 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	No coastal scrub vegetation is apparent within the project area. There is no potential impact to coastal scrub resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola</i> Status: Application Incomplete Date of Publication: 2016
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	No coastal scrub vegetation is apparent within the project area. Therefore, there is no potential impact to coastal scrub resources.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i> Status: Pre-construction phase, expected construction completion for June 2018 Date of Publication: March 28, 2013

TABLE B-19:  
PROJECTS LOCATED IN THE COASTAL SCRUB RSA

Project No.	Project Name / Street Address	Project Description	Coastal Scrub Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	No coastal scrub vegetation is apparent within the project area. Therefore, there is no potential impact to coastal scrub resources.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016
City of Santa Cruz						
NA	N/A					
Santa Cruz County						
SCo-02	San Andreas Rd. and Seascapes Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	Coastal scrub habitat may exist on the property; however, the positive identification of coastal scrub habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts if land disturbance occurs in any areas that may be identified as coastal scrub habitat.	Not Available	N	Discussion of potential impacts was based on the following source: Google Earth  Document Title: <i>Report on the Property Located at the Corner of McGregor and Sea Ridge Drives. Seacliff Area</i>  Status: Current Status Unknown  Date of Publication: December 2, 1988
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	No discussion of coastal scrub potential impacts in the environmental document. Therefore, it is assumed that there is no potential impact to coastal scrub resources.	Not discussed in ED	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	No discussion of coastal scrub potential impacts in the environmental document. Therefore, it is assumed that there is no potential impact to coastal scrub resources.	Not discussed in ED	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	No discussion of coastal scrub potential impacts in the environmental document. Therefore, it is assumed that there is no potential impact to coastal scrub resources.	Not discussed in ED	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013

TABLE B-19:  
PROJECTS LOCATED IN THE COASTAL SCRUB RSA

Project No.	Project Name / Street Address	Project Description	Coastal Scrub Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells (Soquel Creek Water District 2016).	No discussion of coastal scrub potential impacts in the environmental document. Therefore, it is assumed that there is no potential impact to coastal scrub resources.	Not discussed in ED	Y	Document Title: <b><i>PUREWater Soquel Notice of Preparation/Initial Study</i></b> Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	No discussion of coastal scrub potential impacts in the environmental document. Therefore, it is assumed that there is no potential impact to coastal scrub resources.	Not discussed in ED	Y	Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Some areas of coastal scrub habitat were identified the Route 1 corridor within the biological study area for the Route 1 HOV/TSM Tier I/Tier II Project. Google Earth imagery indicates potential for occurrences in other portions of the worker safety project corridors; however, the positive identification of oak woodland habitat would need to be performed on-site by a qualified biologist. There may be potential for impacts such as land disturbance if worker safety project activities may occur in areas that may be identified as coastal scrub habitat.	Not Available	N	Discussion of potential impacts was based on the following sources: Google Earth, and the Natural Environment Study for the Route 1 HOV/TSM Tier I/Tier II project (Caltrans 2015b) Document Title: Interagency Technical Advisory Committee Agenda. Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016



TABLE B-20:  
PROJECTS LOCATED IN THE VISUAL RSA

Table B-20: Projects Located in the Visual RSA

Project No.	Project Name/ Street Address	Project Description	Visual Potential Impact	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	Proposed development on this existing residential property may be visible from the public right-of-way and has potential to contribute to an increase in urbanized character of the area.	Not Available	N	Source of information for potential visual impacts: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	The proposed project is anticipated to have minor impacts on the visual character of the nearby area.	Not Available	N	Source of information for potential visual impacts: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application complete as of 10/27/16. Scheduled for 12/1/16 PC  Date of Publication: December, 2016
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	Given that the project site borders an area of denser residential development, the proposed project is anticipated to have little visual impact.	Not Available	N	Source of information for potential visual impacts: Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	The construction of a new home is anticipated to be consistent with the residential character of the surrounding area. The loss of one or more mature trees has potential to contribute to an increase in urbanized character of the area, especially during the years required for replacement trees develop to maturity.	Not Available	N	Source of information for potential visual impacts: Google Earth  Document Title: <i>List of Planning Projects, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-20:  
PROJECTS LOCATED IN THE VISUAL RSA

Project No.	Project Name/ Street Address	Project Description	Visual Potential Impact	Mitigation	Environmental Document?	Information Source
Cap-12	41st Ave. Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	<p>The proposed transportation improvement and development projects under the 2035 MTP/SCS may affect public views along designated scenic corridors,</p> <p>adjacent landscaping, and other highways or roadways considered to have high scenic qualities. This would be a Class II, significant but mitigable impact.</p> <p>Development of proposed transportation improvement projects under the 2035 MTP/SCS, as well as the land use patterns envisioned by the 2035 MTP/SCS would contribute to the alteration of the Monterey Bay area's aesthetic character, degrading the region's existing visual character or quality. This would be a Class I, significant and unavoidable impact.</p>	<p>Provide a smooth and gradual transition between modified landforms and existing grade.</p> <p>Install landscaping to restore natural features along corridors where possible.</p> <p>Projects in a scenic view corridor shall have the minimum possible impact upon foliage, existing lands, and natural scenic views.</p> <p>Discourage the use of sound walls/other features that could block views. Where sound walls are necessary, incorporate offsets, accents, landscaping, and colors that are complementary with surrounding natural features.</p> <p>Avoid removing mature trees to the extent possible. Replace removed trees at a 2:1 ratio.</p> <p>Minimize roadway lighting to the extent possible, and do not exceed the minimum height requirements of the local jurisdiction.</p> <p>Design bus shelters/ other ancillary features per architectural review requirements of local jurisdiction and local transit requirements. Incorporate colors and wood materials that complement natural surroundings.</p>	Y	<p>Document Title: Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</p> <p>Status: Current Status Unknown</p> <p>Date of Publication: June 11, 2014; Amended: January 11, 2017</p>

TABLE B-20:  
PROJECTS LOCATED IN THE VISUAL RSA

Project No.	Project Name/ Street Address	Project Description	Visual Potential Impact	Mitigation	Environmental Document?	Information Source
Cap-15	Bay Ave./Capitola Ave. Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	The construction of transportation improvements in the existing transportation corridor is anticipated to be consistent with the character of the surrounding area. If any mature trees would be removed, that could have potential to contribute to an increase in urbanized character of the area, especially during the years required for replacement trees develop to maturity. The proposal to use the center of the roundabout as an entry gate to Capitola Village has potential to enhance the visual environment.	Not Available	N	Source of information for potential visual impacts: Google Earth  Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i>  Status: Current Status Unknown  Date of Publication: August, 2013
City of Santa Cruz						
NA	NA					
Santa Cruz County						
SCo-049	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	No discussion of visual or aesthetic impacts is included in the environmental document. Therefore, it assumed that there is no potential impact to visual or aesthetic resources.	Not discussed in ED	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	The aesthetic impacts resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, under Project Number Cap-12, above.	The mitigation of aesthetic impacts resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, for Project Number Cap-12, above.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	The aesthetic impacts resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, under Project Number Cap-12, above.	The mitigation of aesthetic impacts resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, for Project Number Cap-12, above.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-20:  
PROJECTS LOCATED IN THE VISUAL RSA

Project No.	Project Name/ Street Address	Project Description	Visual Potential Impact	Mitigation	Environmental Document?	Information Source
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	The proposed project could impact visual resources. These impacts would be determined on a site by site basis.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, impacts on visual resources be avoided.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-28	PUREWater Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells (Soquel Creek Water District 2016).	Construction activities associated with the proposed project, along with the construction of new above-ground water treatment facilities have the potential to result in impacts to scenic resources and the visual character of sites related to the project and their surroundings. Furthermore, light and glare effects may result from construction and operational activities	Due to the potentially significant level of impacts associated with the proposed project on visual/aesthetics, an EIR will be developed in order to analyze these potential effects. No further information on mitigation measures is provided in the Initial Study	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i>  Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	The aesthetic impacts resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, under Project Number Cap-12, above.	The mitigation of aesthetic impacts resulting from the implementation of this and the other projects included in the 2035 MTP/SCS are described, at a programmatic level, for Project Number Cap-12, above.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	The implementation of roadside safety improvements in the existing transportation corridors is anticipated to be consistent with the character of the surrounding area. If any mature trees would be removed, that could have potential to contribute to an increase in urbanized character of the area, especially during the years required for replacement trees develop to maturity.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way Date of Publication: February 2016

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Table B-21: Projects Located in the Water Quality and Stormwater RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
City of Capitola						
Cap-01	105 Sacramento Ave.	Demolition of existing and new single-family home (City of Capitola 2016a)	Any disturbance of soil that occurs could increase erosion and sediment entering nearby Monterey Bay.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16  Date of Publication: December, 2016
Cap-02	114 Grand Ave	Historic Review (City of Capitola 2016a)	If any disturbance of soil occurs, there is potential to enter the storm drain system, which may drain to Soquel Creek.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-03	115 Saxon Ave.	Remodel and addition (City of Capitola 2016a)	Any disturbance of soil that occurs could increase erosion and sediment entering nearby Monterey Bay. Any increase in impervious surfaces could lead to an increase in peak runoff flows and pollutant transport from the site.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd.	Historic Review (City of Capitola 2016a)	If any disturbance of soil occurs as part of this work it could contribute sediment to the adjacent Soquel Creek.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave.	Upgrade to façade and addition of living space (City of Capitola 2016a)	Based on the project description, this project may not result in soil disturbance. Any construction-related debris has the potential to wash into nearby Soquel Creek.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016



TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-06	2091 and 2097 Wharf Rd.	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	Land disturbance during construction has the potential to increase erosion and sediment runoff into nearby Soquel Creek.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd.	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	Land disturbance during construction has the potential to increase erosion and sediment runoff into nearby Soquel Creek.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave.	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	Any land disturbance during construction activities may increase erosion and sediment runoff into local waterways.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd.	Exterior remodel of "Sears" creating 2 new tenant spaces (City of Capitola 2016a)	If any disturbance of soil occurs as part of this work it could contribute sediment to nearby waterways. The exterior remodel of the existing structure is not expected to increase peak runoff rates.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Approved 12/01/16  Date of Publication: December, 2016
Cap-10	4025 Brommer St.	Conceptual Review of 3-story proposal (City of Capitola 2016a)	Any construction related disturbance could lead to increased erosion and sediment entering nearby waterways. Any increase in impervious surface area on the site could lead to larger peak runoff flows from the site.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Approved 11/03/16  Date of Publication: December, 2016
Cap-11	407 El Salto Dr.	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	While located roughly 100 yards from Monterey Bay, given the nature of this project, it is not expected to have a major impact on water quality or stormwater.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr.)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	Implementation of proposed transportation improvements and future projects facilitated by the land use scenario envisioned in the 2035 MTP/SCS would incrementally increase water above and beyond existing use in the Monterey Bay region, potentially requiring new or expanded water supplies, entitlements, or facilities. Such impacts would be Class II, <i>significant but mitigable</i> .	<p>The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, reclaimed and/or desalinated water is used for dust suppression during construction activities. This measure shall be noted on construction plans and shall be</p> <p>spot checked by the local jurisdiction. (Implementing agencies: RTPAs, transportation project sponsor agencies, cities and counties for land use projects)</p> <p>The sponsor of a 2035 MTP/SCS project shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality.</p>	Y	<p>Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i></p> <p>Status: Current Status Unknown</p> <p>Date of Publication: June 11, 2014; Amended: January 11, 2017</p>
Cap-13	4530 Garnet St.	Remodel and addition to residence (City of Capitola 2016a)	Due to the scale of the project and onsite vegetation, any impacts to water quality and stormwater are anticipated to be minor.	Not Available	N	<p>Information on Impacts Derived From: Google Earth</p> <p>Project Description From: <i>City of Capitola Planning Permit List, November 2016</i></p> <p>Status: Application Incomplete</p> <p>Date of Publication: December, 2016</p>
Cap-14	502 Pine St.	Create condo map for new duplex (City of Capitola 2016a)	Any land disturbance during construction activities may increase erosion and sediment runoff into local waterways.	Not Available	N	<p>Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i></p> <p>Status: Application Status Unknown</p> <p>Date of Publication: December, 2016</p>

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	Land disturbance during construction activities may increase erosion and sediment runoff into local waterways. Any increase in impervious surface area on the site could lead to larger peak runoff flows from the site.	Not Available	N	Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i> Status: Current Status Unknown Date of Publication: August, 2013
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	Any disturbance of soil that occurs as part of realizing this plan could increase erosion and sediment entering nearby Rodeo Creek Gulch. Given current conditions, an increase in impervious surface area at this site is unlikely to result from redevelopment.	Not Available	N	Information on Impacts Derived From: Google Earth Project Description From: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i> Status: Current Status Unknown Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	Land disturbance during construction activities may increase erosion and sediment runoff into local waterways. Any increase in impervious surface area on the site could lead to larger peak runoff flows from the site.	Not Available	N	Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i> Status: Pre-construction phase, expected construction completion for June 2018 Date of Publication: March 28, 2013

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
Cap-18	Rispin Mansion Property Park	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	Land disturbance during construction activities may increase erosion and sediment runoff into local waterways. Any increase in impervious surface area on the site could lead to larger peak runoff flows from the site.	Not Available	N	Information on Impacts Derived From: Google Earth Project Description From: City of Capitola Planning Permit List, November 2016 Status: Conceptual project scope considered on May 28, 2015 Date of Publication: December, 2016
City of Santa Cruz						
SCi-16	407 Broadway (Hyatt)	106-room hotel (City of Santa Cruz 2016a) (City of Santa Cruz 2016a)	The project is proposed on a previously developed site. Disturbance associated with these activities could contribute sediment to nearby waterways. The redevelopment of a previously developed site can help to reduce stormwater and water quality impacts compared with comparable development on a previously undeveloped site. Nevertheless, any increase in impervious surface area on the site could lead to larger peak runoff flows from the site.	Not Available	N	Information on Impacts Derived From: Google Earth Project Description From: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-19	514 Frederick	4 townhome units (City of Santa Cruz 2016a)	The lot was previously occupied by a single-family residence and yard. The project may increase the imperviousness of the site and increase peak stormwater runoff flows. Disturbance associated with clearing this site prior to construction has the potential to increase erosion and sediment entering nearby waterways.	Not Available	N	Information on Impacts Derived From: Google Earth Project Description From: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-23	716 Darwin	15 apartments (City of Santa Cruz 2016a)	Disturbance associated with this project has the potential to temporarily increase sediment entering nearby waterways. Any increase in impervious surface area on the site from the construction of could lead to higher peak stormwater flows which could increase erosion and/or flooding downstream.	Not Available	N	Information on Impacts Derived From: Google Earth Project Description From: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016
SCi-24	716-724 Seabright (Seabright Breakers)	11 townhouses (City of Santa Cruz 2016a)	Disturbance associated with this project has the potential to temporarily increase erosion and sediment entering nearby waterways. Construction of the project has potential to lead to higher peak stormwater flows from the site.	Not Available	N	Information on Impacts Derived From: Google Earth Project Description From: <i>City of Santa Cruz Status of Projects, November 2016</i> Status: Under construction Date of Publication: November 30, 2016

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
SCi-25	738 Pacheco	Three lot subdivision (City of Santa Cruz 2016a)	Any disturbance of soil that occurs could increase erosion and sediment entering nearby waterways. Any increase in impervious surfaces could lead to an increase in peak runoff flows from the site.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: November 30, 2016
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	Disturbance associated with the construction of the project may release sediment to receiving waters (NOAA 2015)	The Environmental Assessment prepared by the National Oceanic and Atmospheric Agency (NOAA 2015) identified the following mitigation measure to limit the amount of sediment entering surrounding waters	N	Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon "Y". Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	Construction of the MBSST Network project would increase stormwater runoff due to the increase in impervious surface in the project area, which could also degrade water quality.	The proposed Master Plan includes design standards to maintain historic run-off volumes. In addition, compliance with federal, state, and local regulations would ensure historic runoff volumes are maintained and water quality standards are met. Impact would be less than significant without mitigation.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: November 7, 2013
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	Any disturbance of soil that occurs during these modifications could increase erosion and sediment entering nearby waterways. The corridor is already comprised of mostly impervious surfaces, making an increase in imperviousness unlikely.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown  Date of Publication: 2016
<b>Santa Cruz County</b>						
SCo-01	7th Avenue/Brommer Street Community Commercial Development (8.3-acre site)	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	Disturbance of this site during development could result in increased soil erosion and sediment transport into the adjacent lagoon.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016.  Date of Publication: August 12, 2016
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	Impervious surfaces would increase; however, the proposed project's inclusion of a detention basin would avoid significant impacts.	None	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011



TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-05	1240 Chanticleer Ave.	2-lot Minor Land Division (County of Santa Cruz 2015h).	Runoff from the project may contain small amounts of chemicals and other contaminants. Discharge runoff from new impervious surface would occur after the proposed 25-year storm storage has reached capacity, and would release stormwater at a mitigated flow rate of a 2-year release rate. Potential siltation from the proposed project would be addressed through implementing erosion control BMPs as part of the project (County of Santa Cruz 2015h).	The environmental document prepared for the project does not include mitigation measures for stormwater and water quality impacts.	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i> Status: Current Status Unknown Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter) (County of Santa Cruz 2016a).	Runoff from this project may contain small amounts of chemicals and other household contaminants. No commercial or industrial activities are proposed that would contribute contaminants. Potential siltation from the proposed project would be addressed through implementation of erosion control best management practices (BMPs).	The environmental document prepared for the project does not include mitigation measures for stormwater and water quality impacts.	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Current Status Unknown Date Published: October 24, 2016
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	Implementation of proposed transportation improvements and future projects facilitated by the land use scenario envisioned in the 2035 MTP/SCS would incrementally increase water above and beyond existing use in the Monterey Bay region, potentially requiring new or expanded water supplies, entitlements, or facilities. Such impacts would be Class II, <i>significant but mitigable</i> .	<p>The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, reclaimed and/or desalinated water is used for dust suppression during construction activities. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. (Implementing agencies: RTPAs, transportation project sponsor agencies, cities and counties for land use projects)</p> <p>The sponsor of a 2035 MTP/SCS project shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality.</p>	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-11	Chaminade Lane Grading	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development. (County of Santa Cruz 2014c).	Less than significant potential for degrading water quality.  Less than significant potential to create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff.	A stormwater management maintenance agreement is required by the DPW Drainage staff to maintain the drainage system. In addition, potential siltation from the proposed project would be addressed through implementation of erosion control BMPs.  The proposed stormwater management system would be sufficient to control flows from the proposed development. The runoff rate from the property would be controlled by flow restrictor discharge pipes, a detention system, infiltration trenches and landscaping.	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i> Status: Current Status Unknown Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	This project is likely to involve disturbance of previously undeveloped land and could result in increased erosion and sediment runoff into nearby waterways. Increased impervious surface area may increase peak flows and erosion downstream.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: <i>City of Santa Cruz Status of Projects</i> Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area County of Santa Cruz 2015c).	No water quality and stormwater impacts identified in environmental or planning document. Therefore, it is assumed that there is no potential impact to water quality and stormwater resources.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i> Status: Current Status Unknown Date of Publication: July, 2015
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	Implementation of proposed transportation improvements and future projects facilitated by the land use scenario envisioned in the 2035 MTP/SCS would incrementally increase water above and beyond existing use in the Monterey Bay region, potentially requiring new or expanded water supplies, entitlements, or facilities. Such impacts would be Class II, <i>significant but mitigable</i> .	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, reclaimed and/or desalinated water is used for dust suppression during construction activities. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. (Implementing agencies: RTPAs, transportation project sponsor agencies, cities and counties for land use projects)  The sponsor of a 2035 MTP/SCS project shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-22	Lode Street Wet Weather Retention Basin Project	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (County of Santa Cruz 2016g).	The project would not discharge runoff either directly or indirectly into a public or private water supply. However, no commercial or industrial activities are proposed that would generate a substantial amount of contaminants. Potential siltation from the proposed project would be addressed through implementation of erosion control best management practices (BMPs). No water quality standards or waste discharge requirements would be violated. Impacts would be less than significant.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Approved Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	Disturbance associated with the construction of these facilities may increase erosion and sediment entering nearby waterways along the project route.  Implementation of proposed transportation improvements and future projects facilitated by the land use scenario envisioned in the 2035 MTP/SCS would incrementally increase water consumption above and beyond existing use in the Monterey Bay region, potentially requiring new or expanded water supplies, entitlements, or facilities. Such impacts would be Class II, significant but mitigable.	The sponsor of a 2035 MTP/SCS project shall ensure that, where economically feasible and available, reclaimed and/or desalinated water is used for dust suppression during construction activities. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction. (Implementing agencies: RTPAs, transportation project sponsor agencies, cities and counties for land use projects)  The sponsor of a 2035 MTP/SCS project shall ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site while improving water quality.	Y	Document Title: Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report  Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	1) Degrade a public or private water supply. (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion).  2) Alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that could result in flooding, erosion, or siltation on or off-site.  3) Create or contribute runoff that would exceed the capacity of existing or planned storm water drainage systems, or create additional source(s) of polluted runoff.  4) Otherwise substantially degrade water supply or quality.	Implement an Erosion Control Plan. Detain runoff from disturbed areas or filter with berms, vegetated filter strips, catch basins, or other means. All project runoff in excess of predevelopment levels for a 10-year storm event shall be detained on the site. All runoff from parking and driveway areas shall go through water quality treatment prior to discharge from the site. Silt and grease traps will be required. A SWPPP will also be required.	Y	Document Title: Nigh Property Notice of Environmental Review Period Status: Current Status Unknown Date of Publication: September, 2008

TABLE B-21:  
PROJECTS LOCATED IN THE WATER QUALITY AND STORMWATER RSA

Project No.	Project Name / Street Address	Project Description	Water Quality and Stormwater Potential Impacts	Mitigation	Environmental Document?	Information Source
SCo-28	Pure Water Soquel	Advanced purified groundwater replenishment project is proposed to supplement natural recharge of the Santa Cruz Mid-County Groundwater Basin with purified water. Proposed facilities include: water treatment facilities; pump stations and pipelines for conveyance of source water, purified water, and brine concentrate; and injection and monitoring wells (Soquel Creek Water District 2016).	The potential for construction and operational activities associated with the proposed Project resulting in on-site erosion or potential release of hazardous materials that could impact water quality (surface and groundwater) are being considered. Water quality studies are also being conducted to assess changes in water quality associated with: groundwater injection, changes in saline water intrusion patterns, or other water quality effects. The potential for the mobilization of existing contaminant plumes or minerals in the aquifer geology will also be studied.	Impacts associated with water quality were determined to be potentially significant. Mitigation measures were not studied in the Initial Study. The project impacts associated with water quality will be analyzed and included in the EIR that is to be published.	Y	Document Title: <i>PUREWater Soquel Notice of Preparation/Initial Study</i> Status: Current Status Unknown Date of Publication: November, 2016
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	Disturbance associated with the construction of these facilities may increase erosion and sediment entering nearby waterways along the project route.	Bestmanagement practices will be implemented.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium (County of Santa Cruz 2015e).	The project would not discharge runoff directly into a public or private water supply or into any watercourse or stream. Further, no commercial or industrial activities are proposed on the site that would generate a substantial amount of contaminants. However, upon project completion, urban pollutants such as oil, grease, heavy metals, sediments and debris could be carried off-site in runoff from project parking areas, resulting in potential pollution of downstream water bodies, and ultimately groundwater supplies.	The off-site transport of these non-point source pollutants would be minimized by the required installation of silt and grease traps for each of the two drainage catchment areas as described in I-5, and the implementation of a silt and grease trap maintenance agreement to assure annual maintenance of the silt and grease traps by the property owner would minimize the effects of urban pollutants and ensure that impacts water quality would be less than significant.	Y	Document Title: <i>The Lumberyard Mixed Use Development</i> Status: Planning application approved; lacking information on building permits. Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Land disturbance during construction activities may increase erosion and sediment runoff into local waterways.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda. Status: Plans, Specifications, and Estimates/Right of WayDate of Publication: February 2016

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Table B-22: Projects in Pallid Bat, Hoary Bat, and Townnsend’s Big-eared Bat RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
City of Capitola						
Cap-01	105 Sacramento Ave / Same	Demolition of existing and new single-family home (City of Capitola 2016a)	This project is located directly along the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is an urban, residential neighborhood with no open habitat. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Administratively approved 11/29/16  Date of Publication: December, 2016
Cap-02	114 Grand Ave / Same	Historic Review (City of Capitola 2016a)	This project is located directly along the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is an urban, residential neighborhood with no open habitat. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-03	115 Saxon Ave / Same	Remodel and addition (City of Capitola 2016a)	This project is located approximately 300 feet from the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is an urban, residential neighborhood with no open habitat. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-04	1810 Wharf Rd / Same	Historic Review (City of Capitola 2016a)	This project is located adjacent to a deciduous riparian habitat along Soquel Creek. The surrounding area is urbanized and built up with no open habitats in the vicinity of the project. While there is a high density of trees for cover, the project site is located in an urban area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Historic  Date of Publication: December, 2016
Cap-05	208 Capitola Ave / Same	Upgrade to façade and addition of living space (City of Capitola 2016a)	This project is located approximately 500 feet from the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is an urban, commercial area with no open habitat. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application complete as of 10/27/16, Scheduled for 12/1/16 Planning Commission meeting  Date of Publication: December, 2016



TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-06	2091 and 2097 Wharf Rd / Same	Existing home with addition and 2 new single-family homes on 3 lot subdivision (City of Capitola 2016a)	This project is located adjacent to a deciduous riparian habitat along Soquel Creek. The surrounding area is urbanized and built up with no open habitats in the vicinity of the project. While there is a high density of trees for cover, the project site is located in an urban area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application under 3rd Party Review: Stormwater  Date of Publication: December, 2016
Cap-07	2205 Wharf Rd / Same	New single-family residence and Tentative Map, Design Permit, Minor Land Division, and Tree Removal permit (City of Capitola 2016a)	This project is located adjacent to a deciduous riparian habitat along Soquel Creek. The surrounding area is urbanized and built up with no open habitats in the vicinity of the project. While there is a high density of trees for cover, the project site is located in an urban area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016
Cap-08	226 Monterey Ave / Same	Remodel, addition, and new secondary dwelling unit (City of Capitola 2016a)	This project is located approximately 800 feet from the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is an urban, residential area with no open habitat. It is also located directly along Montgomery Avenue. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i>  Status: Application Approved November 3, 2016  Date of Publication: December, 2016
Cap-09	4015 Capitola Rd / Same	Exterior remodel of "Sears" creating 2 new tenant spaces (City of Capitola 2016a)	This project is located approximately 0.7-mile from the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is a heavily urban, commercial area with no open habitat. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Approved December 1, 2016  Date of Publication: December, 2016
Cap-10	4025 Brommer St / Same	Conceptual Review of 3-story proposal (City of Capitola 2016a)	This project is located approximately 2,400 feet from the coast with minimal tree coverage and foliage on or near the project area. In addition, the project area is an urban, residential area with no open habitat. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Approved November 3, 2016  Date of Publication: December, 2016
Cap-11	407 El Salto Dr / Same	Front yard fence and wall in public right-of-way (City of Capitola 2016a)	This project is located approximately 300 feet from the coast. The surrounding area is urban residential with very little tree coverage and no open habitat around or rocky surfaces. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Capitola Planning Permit List, November 2016</i>  Status: Application Incomplete  Date of Publication: December, 2016

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-12	41st Ave Improvements Phase 2 (Hwy 1 Interchange to Soquel Dr)	Roadway and roadside improvements including bike lanes, sidewalks, transit turnouts, left turn pockets, merge lanes and intersection improvements.	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species, either directly or through habitat modification. Impacts would be Class II.	If special status bat species may be present or impacted, a qualified biologist shall conduct surveys within 30 days of the start of construction. Acoustic detectors shall be utilized. If populations are found, all construction shall cease and a 500-foot buffer shall be established.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
Cap-13	4530 Garnet St / Same	Remodel and addition to residence (City of Capitola 2016a)	This project is located in a neighborhood area that is heavily urbanized. There are no open habitats nearby, nor are there many trees for roosting. There are also no grasslands or rocky surfaces. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Document Title: <i>City of Capitola Planning Permit List, November 2016</i> Status: Application Incomplete Date of Publication: December, 2016
Cap-14	502 Pine St / Same	Create condo map for new duplex (City of Capitola 2016a)	This project is located in a neighborhood area that is heavily urbanized. There are no open habitats nearby, nor are there many trees for roosting. There are also no grasslands or rocky surfaces. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Document Title: <i>List of Planning Project Permits for the City of Capitola, November 2016</i> Status: Application Status Unknown Date of Publication: December, 2016
Cap-15	Bay Avenue/Capitola Avenue Roundabout Intersection Modification	This project would address peak period demands while improving turning movements, pedestrian access and bicycle access. Due to the skewed geometry along this intersection vehicle, pedestrian, and bicycle movements are difficult. The roundabout will shorten pedestrian crossings to a single lane at a time. The design phase will work to minimize necessary ROW acquisition while achieving the required deflections in the vehicle traveled lanes. A key element for the roundabout design will be to insure adequate turning movements for emergency vehicles, transit buses, and all commercial traffic. Bicycle movements will be blended in with the vehicle movement, which is the accepted practice for slow speed roundabouts. It is anticipated that the center of the roundabout will be used as an entry gate to Capitola Village and will ultimately include some type of art work or other noteworthy feature.	This project is located in a neighborhood area that is heavily urbanized. There are no open habitats nearby, nor are there many trees for roosting. There are also no grasslands or rocky surfaces. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Document Title: <i>2014 RTIP Funding Request for the Bay Avenue/Capitola Avenue Roundabout Intersection Modification</i> Status: Current Status Unknown Date of Publication: August, 2013

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
Cap-16	Mall Redevelopment	Plan area is approximately 150 acres in size. The Re-Visioning Plan envisions that change within the corridor will occur incrementally over the next 20 years. On the Capitola Mall property, the Plan envisions new development on existing surface parking to transform the mall into a more inviting destination for shoppers and residents. 38th Avenue south of Capitola Road is activated with new pedestrian-oriented residential and commercial uses. Capitola Road is enhanced with new sidewalk-oriented commercial uses west of 41st Avenue and a mixture of high-quality commercial, residential, and hotel uses east of 41st Avenue. Pedestrian and bicycle connections are enhanced within the Plan area, and connections to surrounding areas, particularly Capitola Village, are strengthened.	This project is located in an urban, commercial area with no open habitat. There are very little trees in the area and no rocky surfaces. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth  Document Title: <i>41<sup>st</sup> Avenue/Capitola Mall Re-Visioning Plan Final Report</i>  Status: Current Status Unknown  Date of Publication: October 26, 2011
Cap-17	New Library	Our existing 4,320 square foot branch library, housed in a modular temporary building, opened in 1999. The facility is outdated, undersized to serve the community's needs, and is in a state of disrepair. A new modern library could provide many community benefits, including an expanded book selection; additional seating capacity; more public access computers, a homework center; acoustically separated areas for quiet study and reading; and community space for public use.	This project is located across Wharf Road from Soquel Creek, which includes some areas of dense tree cover, but little open land or rocky surfaces. Based on this information, it is unlikely that this project could potentially result in disturbance of pallid bat, although there may be potential to result in impacts to hoary bat habitat.	Not Available	N	Document Title: <i>Santa Cruz Public Libraries Facilities Master Plan 2014-2023</i>  Status: Pre-construction phase, expected construction completion for June 2018  Date of Publication: March 28, 2013
Cap-18	Rispin Mansion Property Park / 2004 Wharf Rd.	In July 2014, the City of Capitola was awarded with a \$383,000 grant from the State of California Department of Housing and Community Development (HCD) to make improvements to the Rispin property. The grant monies, combined with City funds, will be used to restore the Rispin Mansion grounds to create an approximately .86-acre community park that provides primarily passive recreational opportunities with a focus on the site's cultural, historical, and open space resources. The project has been designed to be consistent with the historic architectural style of the mansion and to promote public awareness of the Mansion's significant contribution to Capitola's history.	The project site appears to include some dense tree cover as well as some open land and rocky surfaces. Based on this information, project activities could potentially result in disturbance of pallid bat and hoary bat.	Not Available	N	Information on Impacts Derived From: Google Earth  Project Description From: City of Capitola Planning Permit List, November 2016  Status: Conceptual project scope considered on May 28, 2015  Date of Publication: December, 2016

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
City of Santa Cruz						
SCi-01	131 Bixby / Same	Duplex (City of Santa Cruz 2016a)	This project is located in an urbanized, residential neighborhood with no open habitat or dense foliage near or around the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Approved
SCi-03	135 Vista Branciforte / Same	Minor Land Division to create three lots from two (City of Santa Cruz 2016a)	This project is located in an area surrounded by a small but dense population of trees. However, the surrounding land use for the project is a residential neighborhood with these trees located in backyards. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Approved
SCi-13	301 Beach / Same	Add 5 rooms to an existing hotel (City of Santa Cruz 2016a)	This project is located within a known occurrence area for Hoary Bat. Based on this information, and the presence of nearby open land, there is potential to result in disturbance of hoary bat or pallid bat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Under construction
SCi-14	313-321-325 Riverside Ave (Courtyard Marriott) / Same	151-room hotel with meeting room, pool, exercise room - replace 3 existing motels (64 rooms and manager unit) for net increase in 87 rooms. (City of Santa Cruz 2016a)	This project is located within a known occurrence area for Hoary Bat. Based on this information, the project may have potential to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Under construction
SCi-15	350 Ocean / Same	63 apartments (with demolition of 20 existing apartments & 2 SFD) and 6,800 square feet retail (City of Santa Cruz 2016a)	This project is located approximately 200 feet from a known occurrence area for Hoary Bat. However, the project area itself is heavily developed and the land is utilized for commercial usage. As a result, there are no open habitats or grasslands or forestlands at or near the project site. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Approved
SCi-16	407 Broadway (Hyatt) / Same	106-room hotel (City of Santa Cruz 2016a) (City of Santa Cruz 2016a)	This project is located within a known occurrence area for Hoary Bat. Based on this information, the project may have potential to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-18	430 South Branciforte / Same	Lot split (City of Santa Cruz 2016a)	This project is located approximately 1,350 feet to the east of a known occurrence area for Hoary Bat. The project area is in an urbanized, residential neighborhood with some trees and foliage. Based on this information, the project may have potential to result in disturbance of Hoary bat. Impacts to pallid bat are unlikely, due to a lack of open land.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth Approved

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCi-19	514 Frederick / Same	4 townhome units (City of Santa Cruz 2016a)	This project is located approximately 450 feet from dense tree coverage, although it in an urbanized commercial and residential area. Based on this information, the project may have potential to result in disturbance of Hoary bat or its habitat. Impact to pallid bat appears unlikely due to a lack of suitable open land.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Under construction
SCi-21	618 Windsor / Same	5 apartments (City of Santa Cruz 2016a)	This project is located in an urbanized residential area, approximately 2,500 feet to the northeast of a known occurrence area for Hoary Bat. Due to the lack of nearby dense trees or open land, the project is unlikely to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Under construction
SCi-22	710 Emeline / Same	Demolish single-family residence and construct triplex (City of Santa Cruz 2016a)	This project is located approximately 5,000 feet to the northeast of a known occurrence area for Hoary Bat. It is also located approximately 1,000 feet to the west of open land with surrounding treestands and foliage. However, this project lies adjacent to Highway 1 in a developed, urban area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Under construction
SCi-23	716 Darwin / Same	15 apartments (City of Santa Cruz 2016a)	This project is located approximately 4,000 feet east from a known occurrence area for Hoary Bat. In addition, it is located approximately 2,300 feet to the west of open land with tree coverage and foliage. However, this location is a developed residential area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-24	716-724 Seabright (Seabright Breakers) / Same	11 townhouses (City of Santa Cruz 2016a)	This project is located in an urban, residential neighborhood with minimal trees at or near the project area. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Under construction  Date of Publication: December, 2016
SCi-25	738 Pacheco / Same	Three lot subdivision (City of Santa Cruz 2016a)	This project is located in an urban, residential neighborhood. There are small to medium-size trees located along the roadway. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>City of Santa Cruz Status of Projects, November 2016</i>  Status: Approved  Date of Publication: December, 2016



TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCi-27	800 Soquel / Same	Two units above 2,600 square feet commercial space (City of Santa Cruz 2016a)	This project is located in an urban, heavily developed area with high volumes of traffic. There are no open habitats located near the project site. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Approved
SCi-29	Branciforte Creek Bridge and Multi-Use Path / 137 Dakota Avenue, Santa Cruz, CA	Project will construct a 12-foot wide, Class I, multi-use path along the east side of the San Lorenzo River. The path will extend south from the San Lorenzo Park to connect to an existing river levee path just south of Soquel Ave (City of Santa Cruz 2016a).	This project is located approximately 135 feet from a known occurrence area for Hoary Bat. In addition, the project area is surrounded by open land, trees and foliage to the west. Based on this information, the project may have potential to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Project approved
SCi-34	Murray Street Bridge Seismic Retrofit Project / Murray Street	Seismic retrofit of the Murray Street Bridge, widening of shoulders and replacement and improvement of sidewalks and barrier railings. Construction equipment will include crane, floating barge, trucks, portable storage barge, silt curtains and skiffs. Dewatering is not expected to be achievable; a "wet" pile installation is planned (Caltrans 2015d).	This bridge project is located on a lagoon approximately 2,600 feet from the coastline, with a medium density of trees located on either side of the bridge. There is an area of open land area with trees and foliage approximately 2,000 feet to the east of the project site. The project is also approximately 3,100 feet to the east of a known occurrence area for Hoary Bat. In addition, Pallid Bats have been known to roost under bridges. Based on this information, the project may have potential to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Murray Street Bridge (#36C-0108) Seismic Retrofit Project – Incidental Harassment Authorization Application</i>  Status: Permitting  Date of Publication: January, 2015
SCi-36	Rail Trail: Segment 7 (Natural Bridges to Pacific Ave)	2.4 miles of Monterey Bay Sanctuary Scenic Trail Network (MBSST) Segment 7 (excluding Moore Creek rail trestle bridge and trail to Natural Bridges Drive) along rail line. One water crossing at Neary Lagoon (not a bridge), one rail crossing near Rankin Street and two at the Neary Lagoon “Y”. Retaining structures adjacent to the Wastewater Treatment Facility and fifteen street crossings.	The master plan programmatic FEIR states that the Pallid Bat, and other bats, have a low to moderate potential for impact, predominantly by railroad bridges where they commonly roost. Based on this information, the project may have potential to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Preconstruction surveys will be conducted to determine the presence/absence of bat populations. If present, areas occupied by bat populations will be avoided if feasible. Exclusionary practices, such as the use of netting, will be used as needed to exclude bats from areas such as bridges that cannot be avoided.	Y	Document Title: Monterey Bay Sanctuary Scenic Trail Network Master Plan FEIR (County of Santa Cruz 2013).  Status: Current Status Unknown  Date of Publication: August, 2016
SCi-39	San Lorenzo River Lagoon Interim Management Program /	Install a series of three 4-ft diameter standpipes (risers) that will be partially buried in the lagoon adjacent to San Lorenzo Point and connected to a 450-foot horizontal culvert buried in the beach connecting the lagoon to the ocean. Lagoon water will seep into the porous bottoms of the risers, feeding flows into the horizontal culvert. The culvert will be fitted with a gate valve to control the rate at which water is discharged from the lagoon to the Pacific Ocean (City of Santa Cruz 2015).	The environmental document does not include a discussion about the Pallid Bat or Hoary Bat. Therefore, it is assumed that there is no potential impact to either Pallid Bat or Hoary Bat habitats.	Not discussed in ED	Y	Document Title: <i>San Lorenzo River Lagoon Interim Management Program IS/MND</i> .  Status: Project approved  Date of Publication: 2016.

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCi-43	Soquel Ave Corridor Widening (Branciforte-Morrissey)	Minor widening and signal modifications along Soquel Ave corridor from Branciforte to Morrissey Blvd to widen sidewalks, transit improvements, improve pedestrian and bicycle detection and crossings, add a travel lane, maintain some commercial parking and improve existing bike lanes. Replacing the split phasing with protected left-turns at Branciforte to reduce delays for all modes of travel and GHG.	This project is located on an existing roadway that is heavily developed. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Draft 2040 Regional Transportation Plan Project List</i>  Status: Current Status Unknown  Date of Publication: 2016
SCi-44	SR 17 Storm Water Mitigation (05-0Q600)	Storm water mitigation from 0.7 mile north of the SR 1/SR 17 interchange to Beaulah Park undercrossing.	The environmental document determines that there are no sensitive species or habitats of concern within the project area. As a result, the environmental document does not include a discussion of Pallid bat or Hoary bat.	Not discussed in ED	Y	Document Title: <i>Santa Cruz 17 Sediment Control: Initial Study with Proposed Mitigated Negative Declaration</i>  Status: PSE/ROW  Date of Publication: March, 2014
<b>City of Scotts Valley</b>						
SV-09	SR 17 Pavement Preservation (CAPM) (05-1F760)	Pavement preservation (CAPM) from 0.6 mile north of Granite Creek Rd to Santa Clara county line.	This project is located along SR 17 and travels through dense forest land. There are is open land along the way within close proximity to the project area. Based on this information, the project may have potential to result in disturbance of Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  PID
<b>Santa Cruz County</b>						
SCo-01	7th Avenue/Brommer Street Community Commercial Development	To develop a landmark waterfront, infill site owned by the Santa Cruz County Redevelopment Successor Agency (RSA) with lodging, other destination-oriented commercial uses and public open space. Development of this site aims to strengthen the local tax base and enhance economic vitality and quality of life in the County.	This project is located approximately 350 feet to the east of an open area. In addition, the project is adjacent to an open field. However, this field lacks rocky areas and adequate trees for roosting. In addition, the project site is heavily developed and along an existing roadway. Based on this information, it is unlikely that this project could potentially result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth  Document Title: <i>Hospitality Development Opportunity RFQ# 15P1-009</i>  Status: RFQ was submitted with request for qualifications due by August 12, 2016.  Date of Publication: August 12, 2016
SCo-02	San Andreas Rd. and Seascape Blvd. Urban Medium Density Residential Affordable Housing	"Urban Medium Density Residential": development of approximately 3 acres of medium density affordable housing. Development shall comply with Master Plan for entire site and shall include measures for protection of salamander habitat.	This project is surrounded by dense tree lands. Approximately 1,000 feet to the southeast is open land. Based on this information, the project may have potential to result in disturbance of Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDDB data and Google Earth
SCo-04	The Farm Neighborhood Park and Community Center	Development of a 2-story community center, 39 units of housing, 0.75 mile of meandering pathways, a skate feature, 1/2 basketball court, children's play structures, a bocce ball court, nature interpretive signage, a pedestrian bridge, a dog enclosure, community and heritage gardens, oak woodland habitat restoration, turf and picnic areas, landscaping, a restroom, and parking areas.	Potential significant impacts to roosting bats and nesting birds were identified as a result of restoration plan work.	Tree removal activities shall be limited to the months between November 1 to March 1, if feasible. In addition, tree removal should be scheduled outside of the maternal roosting period for special status bats (March 1 to July 3). A qualified biologist shall perform surveys before any trees are removed.	Y	Document Title: <i>"The Farm Neighborhood Park and Community Center" Negative Declaration and Notice of Determination</i>  Status: CEQA approval in 2011. Public meeting held in 2016; staking corners in 2017.  Date of Publication: 2011

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-05	1240 Chanticleer Ave. / Same	2-lot Minor Land Division (County of Santa Cruz 2015h).	The environmental document notes that pallid bat has potential to occur in the vicinity, but it is not known to occur in the project area, and, due to the lack of suitable habitat and disturbed nature of the site there would be no impact to pallid bat. The environmental document does not discuss hoary bat.	Not discussed in ED	Y	Document Title: <i>Notice of Intent to Adopt a Negative Declaration Notice of Public Review and Comment Period</i> Status: Current Status Unknown Date Published: December 7, 2015
SCo-08	8 Townhouses - E. Cliff Dr., "Roadhouse" Site / 2-3905 East Cliff Drive	Subdivide an existing 39,250 square foot parcel into eight residential parcels and construct eight dwelling units. Includes the removal of two significant trees (42 in. diameter and 24.2 in. diameter) (County of Santa Cruz 2016a).	There would be potential impacts on special status bat species located within or around the project area, including wetlands. Note that neither Pallid Bats nor Hoary Bats are explicitly discussed in the document.	Tree removal will be limited to between September 15 and November 1, if feasible, in order to avoid potential impacts to special status bats that roost in the trees. By doing so, this impact is determined to have a less than significant impact. In addition, a qualified biologist shall conduct surveys for these bats 3 to 4 weeks prior to site disturbance. Tree removal will especially avoid the months from March 1 to July 3, which is the maternal roosting period of special status bats.	Y	Document Title: <i>E. Cliff Dr. "Road House" Site Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Current Status Unknown Date Published: October 24, 2016
SCo-09	Bus Rapid Transit	Construct park & ride lots, transit centers and grade-separation where feasible to operate bus rapid transit to reduce congestion (AMBAG 2014)	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species, either directly or through habitat modification. Impacts would be Class II.	If special status bat species may be present or impacted, a qualified biologist shall conduct surveys within 30 days of the start of construction. Acoustic detectors shall be utilized. If populations are found, all construction shall cease and a 500-foot buffer shall be established.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-11	Chaminade Lane Grading /	The project would grade approximately 3,066 cubic yards in order to construct a single-family dwelling and associated driveway access on lot 4 of a four-lot development. (County of Santa Cruz 2014c).	The environmental document does not include a discussion about the Pallid Bat or Hoary Bat. Therefore, it is assumed that there is no potential impact to either Pallid Bat or Hoary Bat habitats.	Not discussed in ED	Y	Document Title: <i>Chaminade Lane Grading Notice of Intent to Adopt a Negative Declaration</i> Status: Current Status Unknown Date of Publication: February, 2014
SCo-13	Erlach Site on Cunnison Lane—MidPen Housing Project / 3250-3420 Cunnison Lane, Soquel, CA	Development of a 102-unit affordable housing project approximately 0.35 mile from Route 1 (County of Santa Cruz 2016j)	This project is located on open land with trees surrounding the perimeter of the property along a stream or river. Based on this information, the project may have potential to result in disturbance of Pallid bat or Hoary bat or adverse impacts to either bat habitat.	Not Available	N	Discussion of potential for impact derived from: CNDDB data and Google Earth Document Title: <i>City of Santa Cruz Status of Projects</i> Status: Permit approved - project on hold. Date of Publication: November 30, 2016
SCo-15	Isbel Drive Minor Land Division / 190 Isbel Drive, Santa Cruz	2-lot Minor Land Division to create two legal parcels, conforming to two existing Assessors' Parcel Numbers; with one parcel (APN: 068-241-11, zoned R- 1-20) in County jurisdiction and the other parcel (APN: 008-491-07, zoned R-1-5) in the City of Santa Cruz.	The environmental document does not include a discussion about the Pallid Bat or Hoary Bat. Therefore, it is assumed that there is no potential impact to either Pallid Bat or Hoary Bat habitats.	Not discussed in ED	Y	Planning application approved; building application complete; lacking info on building permit approval.

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-17	Jose and Rodriguez Subdivision / 1000 Rodriguez Street	Demolish the existing buildings and divide two parcels of approximately 2.88 acres into 20 parcels, with common areas for access, parking, and landscaping, and to construct 20 single family dwellings. Dwellings would be two stories in height with a range of size from 2,200 to 2,800 square feet in floor area County of Santa Cruz 2015c).	There is potential for Pallid Bat on project site. Bat survey performed. Lack of evidence of bat roosting or acoustic activity. Therefore, it was determined that it is highly unlikely that bats are using the existing structures as roosting sites.	Not discussed in ED	Y	Document Title: <i>Mitigated Negative Declaration, Jose &amp; Rodriguez Subdivision</i> Status: Current Status Unknown Date of Publication: July, 2015
SCo-20	Lilly Way Agricultural Well / 77 Lilly Way, La Selva Beach	Agricultural Well (Santa Cruz County 2016k).	The environmental document does not include a discussion about the Pallid Bat or Hoary Bat. Therefore, it is assumed that there is no potential impact to either Pallid Bat or Hoary Bat habitats.	Not discussed in ED	Y	Mitigated Negative Declaration approved. No building permit in Application Status and Permit History.
SCo-21	Local Transit Service Restoration and Expansion	Restore local service to 2001 levels, then expand service 10%, including expanded service within San Lorenzo Valley, City of Santa Cruz and Watsonville, express buses, improved service to industrial areas (AMBAG 2014).	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species, either directly or through habitat modification. Impacts would be Class II.	If special status bat species may be present or impacted, a qualified biologist shall conduct surveys within 30 days of the start of construction. Acoustic detectors shall be utilized. If populations are found, all construction shall cease and a 500-foot buffer shall be established.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-22	Lode Street Wet Weather Retention Basin Project /	Construct a new 100,000-gallon Wet Weather Retention Basin at an existing County of Santa Cruz Sanitation District Facility (D.A. Porath Facility) and excavate approx. 2,200 cubic yards of material (Santa Cruz County 2016g).	While Pallid and Hoary Bats are not explicitly mentioned, the MND does state that the may be the possible presence of two species of bat in the project area. However, no impacts to these two species are to be expected, since no tree removal is expected to occur.	Not discussed in ED	Y	Document Title: <i>Lode Street WWRB Notice of Intent to Adopt a Mitigated Negative Declaration</i> Status: Approved Publication Date: March, 2016
SCo-23	Monterey Bay Sanctuary Scenic Trail Network	Design, environmental clearance and construction of a 50+ mile network of bicycle and pedestrian facilities on or near the coast, with the rail trail as the spine and additional spur trails to connect to key destinations (AMBAG 2014).	Implementation of the proposed MBSST Network project could result in impacts to special status plant and animal species.	Special status bat species surveys shall be conducted no more than two years before initial ground disturbance. If bats are found, these areas will be avoided where feasible. If they cannot be avoided, exclusionary devices shall be installed and monitored.  Establish a buffer around any maternity colonies.  Bat boxes shall be used for roosts that are used by a large number of bats.	Y	Document Title: <i>Monterey Bay Sanctuary Scenic Trail Network Master Plan Final Environmental Impact Report</i> Status: Current Status Unknown Date of Publication: November 7, 2013
SCo-26	Nigh Property / 5940 Soquel Avenue	A proposed 100-unit residential development to be constructed approximately 0.33-mile from Route 1 (County of Santa Cruz 2008).	The environmental document does not include a discussion about the Pallid Bat or Hoary Bat. Therefore, it is assumed that there is no potential impact to either Pallid Bat or Hoary Bat habitats.	Not discussed in ED	Y	Document Title: <i>Nigh Property Notice of Environmental Review Period</i> Status: Current Status Unknown Date of Publication: September, 2008

TABLE B-22:  
PROJECTS IN PALLID BAT, HOARY BAT, AND TOWNSEND’S BIG-EARED BAT RSA

Project No.	Project Name / Street Address	Project Description	Pallid Bat and Hoary Bat Potential Impacts	Mitigation Measures Identified in Environmental or Planning Document	Environmental Document?	Status
SCo-29	Rail Transit: Watsonville-Santa Cruz Corridor	Design, construction, and operation of fixed guideway (rail, light rail, or bus guideway system) public transit between Santa Cruz and Watsonville. May be a joint project with the SCCRTC, SCMTD, and local jurisdictions (AMBAG 2014).	Implementation of transportation improvements proposed and the land use scenario envisioned by the 2035 MTP/SCS may result in substantial adverse impacts to special status plant and animal species, either directly or through habitat modification. Impacts would be Class II.	If special status bat species may be present or impacted, a qualified biologist shall conduct surveys within 30 days of the start of construction. Acoustic detectors shall be utilized. If populations are found, all construction shall cease and a 500-foot buffer shall be established.	Y	Document Title: <i>Moving Forward 2035 Monterey Bay: Metropolitan Transportation Plan and the Sustainable Communities Strategy Final Environmental Impact Report</i>  Status: Current Status Unknown  Date of Publication: June 11, 2014; Amended: January 11, 2017
SCo-34	The Lumberyard Mixed Use Development /	Demolish an existing lumberyard building and construct a 9,600-square foot commercial, retail building with one commercial condominium (County of Santa Cruz 2015e).	Although listed as being in the site vicinity, a survey on Pallid Bats showed no presence of this species nor any echolocation calls. The environmental document does not include discussion about the Hoary Bat.	Not discussed in ED	Y	Document Title: <i>The Lumberyard Mixed Use Development</i>  Status: Planning application approved; lacking information on building permits.  Date of Publication: September, 2015
SCo-35	Santa Cruz Worker Safety (05-1C100)	Roadside safety improvements on SR 1 from Larkin Valley Rd to SR 1/SR 17 interchange and on SR 17 from SR 1/SR 17 interchange to Santa's Village Rd.	Portions of the project corridor are adjacent to dense tree cover, as well as bridges that may provide roosting habitat. Although the natural areas along the corridor include substantial disturbance, based on the limited information about the project, the potential for disturbance of bat species cannot be ruled out.	Not Available	N	Document Title: Interagency Technical Advisory Committee Agenda.  Status: Plans, Specifications, and Estimates/Right of Way  Date of Publication: February 2016



Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis Technical Report

Appendix G

Step 6 Technical Memorandum



# Technical Memorandum

To: Parag Mehta, Kimley Horn

From: Laura Prickett, Michael Lee, and Kelly White

Date: January 5, 2018 (Updated June 29, 2018)

Re: Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis – Step 6

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## 1. Purpose and Organization of this Memorandum

This memorandum documents the findings of Step 6 of Caltrans' eight-step cumulative impact analysis methodology for the Santa Cruz Route 1 Tier I High Occupancy Vehicle (HOV) and Transportation Systems Management (TSM) alternatives for proposed improvements of State Route 1 from approximately 0.4 mile south of the San Andreas-Larkin Valley Road interchange to 0.3 mile north of the Morrissey Boulevard interchange, and the Tier II Auxiliary Lanes from 41st Avenue to Soquel Avenue/Drive and Chanticleer Avenue Pedestrian-Bicycle Overcrossing project (Tier I/Tier II Project).

Step 6 of the cumulative impact analysis involves reviewing and analyzing the information gathered from Steps 2 through 5, and drawing conclusions about the cumulative impacts to resources included in the cumulative impact analysis. This memorandum presents the following information:

- Section 2 introduces the proposed project and the cumulative impact analysis.
- Section 3 presents the methodology used in Step 6 of the cumulative impact analysis.
- Section 4 presents the findings and conclusions of the Step 6 analysis.

## 2. Introduction

The proposed Tier I improvements are being evaluated at a programmatic level, and are anticipated to be implemented incrementally over a period of many years. As funding becomes available for future implementation of Tier I improvements, a series of future Tier II projects would be subject to further environmental evaluation at the project level. The current Tier II project is being evaluated at the project level, and construction may be initiated in 2020 to 2021 upon approval of the environmental document for the current Tier II project and completion of final design and right-of-way acquisition. A complete description of the Tier I and Tier II projects is provided in the Draft Environmental Impact Report/Environmental Assessment (Draft EIR/EA) for the project (Caltrans 2015a).

Cumulative impacts of the proposed improvements are evaluated in the Draft EIR/EA; however, this current analysis is being conducted as a result of public comments on the Draft EIR/EA, which circulated in November 2015. As requested by Caltrans, this analysis uses the eight-step cumulative impact analysis methodology developed by Caltrans in cooperation with the Federal Highway Administration

(Caltrans 2016), to confirm that all cumulative impacts are adequately addressed. This memorandum presents the results of Step 6 of the analysis. The information presented in this memorandum is based primarily on information presented in the Draft EIR/EA and supporting technical studies (Caltrans 2015c), as well as addenda to the technical studies.

### 3. Methodology

The Step 6 analysis is based on information documented in Steps 1 through 5. The analysis addresses the resources identified in Step 1.

The discussion of cumulative impacts for each resource focuses on the geographic extent of the respective RSA that was defined in Step 2. Relevant information from Steps 3 through 5 was summarized for each resource and presented in Table A-1, Reporting of Cumulative Impacts by Resource, which is included in Attachment A. This table also presents the results of the Step 6 analysis, as described in more detail below.

The Step 6 analysis began with a review of the information gathered in Step 3 regarding the historic context and current health of each resource included in the cumulative impact analysis. The information from Step 3 is summarized in the columns of Table A-1 titled “Historic Information” and “Current Information.”

The next Step in this analysis was to review the information gathered in Step 4 regarding the impacts of the Tier I and Tier II projects on the resources included in the cumulative impact analysis. The information from Step 4 is summarized in the column of Table A-1 titled “Impact of Proposed Action.”

Next the project team reviewed information gathered in Step 5 regarding the impacts of reasonably foreseeable future projects on the resources included in the cumulative impact assessment. The information from Step 5 is summarized in the column of Table A-1 titled “Impacts from Future Actions.”

The next Step was to assess, for each resource, whether cumulative impacts exist, and whether the identified cumulative impacts could be considered beneficial or adverse. This assessment was based on the information regarding the historic context, current health, the anticipated impact of the proposed project, and the impacts anticipated from reasonably foreseeable actions, as summarized in Table A-1. In general, an adverse cumulative impact was considered to exist for resources in which the trend of resource health was found to be declining, the proposed project would have an adverse impact (even if the impact would be less than significant), and one or more other projects would have an adverse impact (even if the impact would be less than significant). Additionally, an adverse cumulative impact was generally considered to exist for resources in which the trend is improving or remaining stable, but the resource was found to be in poor health, and both the proposed project and at least one other project would have an adverse impact, even if the impact would be less than significant. The considerations and conclusions regarding the presence or absence of cumulative impacts were documented in Table A-1, in the column titled, “Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects.”

After cumulative impacts were identified, the project team assessed whether the proposed project would have a considerable contribution to the cumulative impact. For each resource found to have an adverse cumulative impact, this included a consideration of the current health and trend of the resource, the sensitivity of the resource, whether the project’s impact to the resource is proposed to be fully mitigated

(no net contribution), and any available information regarding the abundance of the resource. The considerations and conclusions regarding the proposed project's contribution to identified cumulative impacts were documented in Table A-1, in the column titled, "Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects."

#### 4. Findings and Conclusions

The findings and conclusions of the Step 6 assessment of cumulative impacts are organized based on the considerations of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). Separate discussions are provided, due to the differences that the two laws have in terms of the definitions of cumulative impacts and the determination of the significance of impacts.

##### 4.1 NEPA Considerations for Cumulative Impacts

The NEPA definition of cumulative impacts provided in the Code of Federal Regulations (40 CFR §1508.7) is presented below:

"...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time."

Based on the analysis presented in Table A-1 in Attachment A, the proposed project is anticipated to contribute to an adverse cumulative impact to the following resources, when added to other past, present, and reasonably foreseeable future actions:

- Riverine/freshwater marsh
- Wetlands and other waters
- Tidewater goby
- Central California coast steelhead
- California tiger salamander
- Santa Cruz long-toed salamander
- California red-legged frog
- Foothill yellow-legged frog
- Western pond turtle
- Riparian forest
- Cooper's hawk
- Tri-colored blackbird
- Short-eared owl
- White-tailed kite
- Least Bell's vireo
- Southwestern willow flycatcher
- American badger
- Oak woodland
- Monarch butterfly
- Coastal scrub
- Visual resources



- Water quality and stormwater
- Pallid bat
- Hoary bat
- Townsend's big-eared bat

Under NEPA, significance is used to determine whether an environmental impact statement (EIS), or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Therefore, when making a determination of significance, a project's cumulative impact is considered together with the individual impacts of the project. The impact of the project as a whole is considered based on the context of the project and the intensity of the anticipated impacts, in order to determine significance. The Federal Highway Administration will make this determination based on the information presented in the proposed project's Final Environmental Impact Report/Environmental Assessment (EIR/EA), which will incorporate the 8-Step Cumulative Impact Analysis. Based on currently available information, a Finding of No Significant Impact is anticipated.

#### 4.2 CEQA Considerations for Cumulative Impacts

The approach to determining significance is a major difference between CEQA and NEPA. Under CEQA, each "significant effect on the environment" must be considered, as well as ways to mitigate each significant effect. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. Therefore, a resource-by-resource consideration of the potential for significant cumulative impact is provided below, following a discussion of the CEQA definition of cumulative impacts and requirements for determining the significance of cumulative impacts.

##### ***CEQA Definition of Cumulative Impacts***

The CEQA definition of cumulative impacts is provided in Section 15355 of the CEQA Guidelines, which is presented as follows:

"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.

(a) The individual effects may be changes resulting from a single project or a number of separate projects.

(b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

##### ***CEQA Requirements for Determining the Significance of Cumulative Impacts***

Under CEQA, an impact that is "cumulatively considerable" is considered significant, as stated in Section 15065(a)(3) of the CEQA Guidelines and presented as follows:

"'Cumulatively considerable' means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

The CEQA Guidelines also identify how a project's contribution to a significant cumulative impact may be rendered less than cumulatively considerable and therefore not significant, as stated in Section 15130(3) of the CEQA Guidelines, and presented as follows:

“An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact. The lead agency shall identify facts and analysis supporting its conclusion that the contribution will be rendered less than cumulatively considerable.”

***Resource-by-Resource Consideration of the Potential for CEQA Cumulative Impact***

Table 4-1 provides an overview, for each resource included in the cumulative impact analysis, of whether there would be a cumulatively considerable impact under CEQA. Attachment A provides a resource-by-resource discussion regarding the identification of cumulative impacts summarized in this table.

<b>Table 4-1: Consideration of Cumulative Impact under CEQA</b>				
<b>Resource</b>	<b>Is an Adverse Cumulative Impact Identified?</b>		<b>Would the Tier I and Tier II Project Have a Considerable Contribution?</b>	
	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>
Riverine/ Freshwater Marsh		✓	✓	
Wetlands and Other Waters		✓	✓	
Tidewater Goby		✓	✓	
Central California Coast Steelhead		✓	✓	
California Tiger Salamander		✓	✓	
Santa Cruz Long-Toed Salamander		✓	✓	
California Red-Legged Frog		✓	✓	
Foothill Yellow-Legged Frog		✓	✓	
Western Pond Turtle		✓	✓	
Riparian Forest		✓	✓	
Cooper's Hawk		✓	✓	
Tri-colored Blackbird		✓	✓	
Short-Eared Owl		✓	✓	
White-Tailed Kite		✓	✓	
Least Bell's Vireo		✓	✓	
Southwestern Willow Flycatcher		✓	✓	
American Badger		✓	✓	

Table 4-1: Consideration of Cumulative Impact under CEQA				
Resource	Is an Adverse Cumulative Impact Identified?		Would the Tier I and Tier II Project Have a Considerable Contribution?	
	No	Yes	No	Yes
Oak Woodland		✓	✓	
Monarch Butterfly		✓	✓	
Coastal Scrub		✓	✓	
Visual Resources		✓		✓
Water Quality and Stormwater		✓	✓	
Pallid Bat		✓	✓	
Hoary Bat		✓	✓	
Townsend's Big-Eared Bat		✓	✓	

## 5. References

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Santa Cruz Route 1 HOV/TSM Tier I/Tier II Project  
Cumulative Impact Analysis – Step **6** Memo

Attachment A:

**Reporting of Cumulative Impacts by Resource**



Table A-1 Reporting of Cumulative Impacts by Resource

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Riverine/ Freshwater Marsh Natural Community	Prior to the 1850's, marshland in the City of Santa Cruz once stretched across the lowland areas near the bay, with wooded streamsid es and redwood-dominated hillsides. Large areas of wetlands were converted to agricultural land, and, as the population grew, urban land uses become more dominant.	Areas of freshwater marsh occur along various streams and lagoons within the City. While there remain areas of riverine and freshwater marsh natural communities along existing water bodies in the RSA, these remaining resources are far reduced from the pre-development condition of the coastal plain, which indicates that the resource is in poor health. Established regulations have helped to stabilize this existing condition of poor health.	<b>Tier I Impacts</b>  HOV Lane Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 1.08 acres</li></ul> TSM Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 0.30 acres</li></ul>	A total of 16 reasonably foreseeable projects within the RSA for riverine/ freshwater marsh were identified to have potential impact to this resource. Of the 16 projects, eight were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining eight projects, which were identified to have potential for riverine/ freshwater marsh impacts based on a desktop analysis using Google Earth imagery and USGS blue-line stream data. Potential impacts include the permanent and temporary loss of riverine/ freshwater marsh, and the potential for indirect impacts such as direct discharges of sediment and other pollutants during construction.	Although the trend for the riverine/ freshwater marsh natural community is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.1 of the Draft EIR/EA, and that the overall scale of riverine/ freshwater marsh would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the riverine/ freshwater marsh natural community would not be considerable.
			<b>Tier II Impacts</b>  Auxiliary Lane Alternative: <ul style="list-style-type: none"><li>Permanent impacts = 0.02 acres</li><li>Temporary impacts = 0.06 acres</li></ul>		

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Wetlands and Other Waters	<p><b>Wetlands:</b> The amount of wetland acreage in the Monterey Bay region has greatly decreased since the 1890s, and wetlands have become more fragmented, due primarily to human impacts, though wetland acreage may have been stable since the late 1970's. There has also been a reduction of undeveloped upland areas adjacent to wetlands that historically have buffered wetlands from human development and activities.</p> <p><b>Other Waters:</b> the use and depletion of groundwater in the RSA has adversely affected some stream flows during the dry season. More recently, starting in the 1970's, federal, state, and local laws and regulations including the Clean Water Act were passed to protect water resources and habitats.</p>	<p><b>Wetlands:</b> In the Arana Creek-Rodeo Creek Gulch watershed, high sediment loads threaten the quality of habitat for the steelhead and other aquatic species. In the Soquel Creek watershed, sedimentation and impairment of important fish habitat have been identified as concerns. In the Aptos Creek-Valencia Creek watershed, excessive sedimentation, low stream flow resulting from over-pumping of groundwater, fish barriers, loss of channel complexity, and poor water quality in the coastal lagoon are resource concerns.</p> <p><b>Other Waters:</b> Santa Cruz County continues to face water resource challenges, including: streamflow and available water supplies that were diminished by the 2012-2015 drought, evidence groundwater overpumping, and diminishment of historic salmon and steelhead populations were by reductions in streamflow, increased erosion and sedimentation, barriers to migration, and removal of large woody material from streams.</p> <p><b>Summary:</b> The conditions described above indicate that wetlands and other waters are in poor health. The efforts at multiple levels of government to protect this resource indicate that the current condition of poor health is stabilizing.</p>	<p><b>Tier I Impacts</b></p> <p>While permanent and temporary impacts would result from similar activities for both Tier I Corridor Alternatives, the impacts would be lesser under the TSM Alternative. Potential acreage Impacts to Wetlands and Other Waters of the U.S. are listed below:</p> <p>HOV Lane Alternative:</p> <ul style="list-style-type: none"><li>USACE wetlands – Permanent = 0.78; Temporary = 0.22</li><li>USACE other waters – Permanent = 0.15; Temporary = 0.10</li><li>Jurisdiction of Local Coastal Plan approved by Coastal Commission – Permanent = 3.22; Temporary = 0.46</li><li>CDFW jurisdiction* – Permanent = 8.98; Temporary = 1.41</li></ul> <p>TSM Alternative:</p> <ul style="list-style-type: none"><li>USACE wetlands – Permanent = 0.23; Temporary = 0.03</li><li>USACE other waters – Permanent = 0.10; Temporary = 0.02</li><li>Jurisdiction of Local Coastal Plan by Coastal Commission – Permanent = 2.20; Temporary = 0.33</li><li>CDFW jurisdiction* – Permanent = 3.58; Temporary = 0.95</li></ul> <p><i>* CDFW jurisdiction includes USACE areas.</i></p> <p><b>Tier II Auxiliary Lane Alternative:</b></p> <ul style="list-style-type: none"><li>USACE wetlands – Permanent = 0.0; Temporary = 0.0</li><li>USACE other waters (ditch adjacent to the Soquel Drive-In) – Permanent = 0.02; Temporary = 0.06</li><li>CDFW jurisdiction* (Rodeo Creek Gulch and ditch adjacent to the Soquel Drive-In) – Permanent = 0.15; Temporary = 0.15</li></ul> <p><i>* CDFW jurisdiction includes USACE areas.</i></p>	<p>A total of 19 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to wetlands and other waters. Ten of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining nine projects, which were identified to have potential for impacts to wetlands and other waters based on a desktop analysis using Google Earth imagery, USGS blue-line stream data, and National Wetlands Inventory (NWI) data. Potential impacts include the permanent and temporary loss of wetlands and other waters.</p>	<p>Although the trend for wetlands and other waters is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.2 of the Draft EIR/EA, and that the overall scale of wetlands and other waters would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to wetlands and other waters would not be considerable.</p>

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Tidewater Goby	The tidewater goby is known to have formerly inhabited at least 135 localities (USFWS 2008). Of these 135 localities, 29 (21 percent) are believed to be extinct (Smith, in litt. 2007, cited in USFWS 2008). The northern limit of the species' range, Tillas Slough, at the mouth of the Smith River in Del Norte County, has not changed. However, the current southern limit, Cocklebur Canyon in San Diego County, is now 9.2 miles farther north from its historically known southern location, Agua Hedionda Lagoon in San Diego County (Swift et al. 1989, cited in USFWS 2008). Factors that have contributed to the absence of tidewater goby in localities where it formerly occurred include habitat loss due to development, the drying up of some small streams during prolonged droughts, water diversions, and estuarine habitat modifications (USFWS 2008).	Data on population dynamics for this species are limited and short-term variability in local populations is common and natural. Though populations have historically declined and threats from climate change, drought, predation, and habitat loss remain, the population is thought to be relatively stable but is considered to be in poor health.	<b>Tier I Impacts</b>  Under either of the Tier I Corridor build alternatives, construction leading to the placement of fill for bridges or other structures within the wetted portions of Arana Creek and its tributaries, Soquel Creek, Rodeo Creek Gulch, or Aptos Creek could result in the permanent loss of tidewater goby habitat.	A total of 15 reasonably foreseeable projects were identified in this RSA. Environmental documents were available for six of these projects. The environmental documents for five of the projects identified potential for impacts to tidewater goby. For projects with no available environmental document, the potential for impact to tidewater goby was identified based on whether the project location is directly adjacent to a stream, using Google Earth imagery, USGS blue line stream data and CNDDDB data. This review identified six projects that have no available environmental documents that may have potential to result in impacts to this species. Potential impacts include disturbance of identified tidewater goby habitat, project-induced runoff to identified habitat, or reduction in streamflow.	Although the trend for tidewater goby is considered to be generally stable condition, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II project, has potential to further degrade the resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.5 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II project to the cumulative impact affecting tidewater goby would not be considerable.
			<b>Tier II Impacts</b>  Under the Tier II Auxiliary Lane Alternative, permanent loss of tidewater goby habitat is anticipated due to placement of fill for bridges or other structures within the wetted portions of streams. Permanent impacts of 0.02 acre of habitat loss and temporary impacts of 0.06 acre of habitat loss are anticipated.		
Central California Coast Steelhead	Many West Coast steelhead stocks have declined substantially from their historic numbers and now are at a fraction of their historical abundance. Destruction, modification and curtailment of the Central California Coast steelhead DPS habitat and range is the result of forestry, agriculture, mining and, most importantly, urbanization. Water storage, withdrawal, conveyance, and	Occurrences of steelhead have been documented in Arana Gulch at Route 1, Aptos Creek and tributaries, and Soquel Creek and tributaries. Steelhead were observed in Aptos Creek, Valencia Creek, and Soquel Creek during California red-legged frog surveys for the Tier I and Tier II projects (Caltrans 2015b). Given historic population declines and loss of habitat, this species is considered to be in poor health.	<b>Tier I Impacts</b>  Under either of the Tier I Corridor build alternatives, construction leading to the placement of fill for bridges or other structures within the wetted portions of Arana Gulch, Aptos Creek, and Soquel Creek and tributaries could result in temporary and/or permanent loss of central California coast steelhead habitat and/or central California coast steelhead critical habitat. Additionally, adverse impacts may result from a loss of vegetation along Arana Gulch, Aptos Creek, and Soquel Creek and tributaries that may reduce shade and adversely affect microhabitat temperature regulation in the channel.	A total of 37 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to central coast California steelhead. Eighteen of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining 19 projects, which were identified to have potential for impacts to central California coast steelhead habitat based on a desktop analysis using	Central California coast steelhead is considered to be in a condition of poor health, with potential for a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing



Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	diversions for agriculture, flood control, domestic, and hydropower purposes have greatly reduced or eliminated historically accessible habitat. Historical damage to habitats remains to be addressed and restoration activities will require decades of work, as certain land use practices continue to pose risks to the survival of steelhead (Titus et al. 2002, cited in NOAA 2011).	Conservation efforts and restoration activities in the area may stabilize steelhead populations; however, based on the documentation to date, the trend of decline appears to be continuing.	<p><b>Tier II Impacts</b></p> <p>No impact.</p>	Google Earth imagery, USGS blue-line stream data and CNDDDB data. Potential impacts include the disturbance of habitat, runoff to habitat, or changed streamflow.	transportation corridor, and would be addressed by avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to central California coast steelhead would not be considerable. The Tier II Project would not contribute to the cumulative impact.
California Tiger Salamander	Although there is limited information about the historic range of the California tiger salamander (CTS – <i>Ambystoma californiense</i> ), current locality and genetic information imply that the species was previously distributed continuously in the vernal pool/grassland habitat that formerly dominated much of the Central Valley (Shaffer and Trenham 2005, cited in CDFG 2010).	The California tiger salamander is listed as threatened under both the federal Endangered Species Act and California Endangered Species Act. Given the high levels of migration between local breeding sites, roads and other infrastructure associated with suburban-type development constitute an important threat to CTS (CDFG 2010). An occurrence of CTS was documented at Ellicott Pond, approximately 3.5 miles southeast of the BSA for the Tier I and Tier II projects (Caltrans 2015b). Given its listing as a threatened species and ongoing threats to reproduction and dispersal, the species is considered to be in poor health with a declining trend in population (IUCN 2017a).	<p><b>Tier I Impacts</b></p> <p>The Tier I Corridor Alternatives will avoid construction activities in Valencia Lagoon and Valencia Channel, as well as areas of upland habitat that may be utilized by California tiger salamander (CTS).</p>	A total of seven reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to CTS. Five of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining two projects, which were identified to have potential for impacts to CTS based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include the disturbance of habitat.	CTS is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that there would be full avoidance of habitat for this species, that the Tier I Project would implement the avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA, and that the Tier II Project area does not include CTS habitat. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to CTS would not be considerable. The Tier II Project would not contribute to the cumulative impact.
			<p><b>Tier II Impacts</b></p> <p>No impact.</p>		
Santa Cruz Long-Toed Salamander	As a result of urbanization and cultivation that have occurred since the mid-19th Century, areas of upland and aquatic habitats suitable for Santa Cruz long-toed salamanders (SCLTS - <i>Ambystoma macrodactylum croceum</i> ) have been removed and altered, and barriers to dispersal have been created, resulting in subpopulations which are isolated from each other (USFWS 2004). The SCLTS was	The SCLTS is listed as endangered under both the federal Endangered Species Act and California Endangered Species Act. It is also a State of California Fully Protected species. While genetic research on the SLTS is preliminary, it provides strong evidence that each of the known metapopulations is isolated, and therefore unable to exchange migrants, resulting in population genetic isolation and	<p><b>Tier I Impacts</b></p> <p>The Tier I Corridor Alternatives will avoid construction activities in Valencia Lagoon and Valencia Channel, as well as areas of upland habitat that may be utilized by Santa Cruz long-toed salamander (SCLTS), due to this species' fully protected status under the California Fish and Game Act.</p>	A total of seven reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to SCLTS. Five of these projects were evaluated in environmental documents that identified potential impacts to this resource; however, because this is a fully-protected species under the California Fish and Game Act, take of this species must be avoided. No environmental document was available for the remaining two projects, which were	SCLTS is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that there would be full avoidance of habitat for this species, that the Tier I Project would

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	originally discovered in 1954 at Valencia Lagoon. In 1955, this breeding pond was reduced in size by roadway construction along Route 1. When Caltrans converted Route 1 to a freeway in 1969, the project eliminated the breeding site. In 1970 Caltrans constructed a temporary lagoon as a mitigation measure for impacts to SCLTS. A second temporary pond was built in 1972, then both temporary features were replaced in 1978 by a larger constructed lagoon (USFWS 1999).	reductions in gene flow. Given this endangered status of this species, it is considered to be in poor health. The threats of habitat fragmentation, drought, and pollution are likely to continue; therefore, this species' population is likely to trend downwards.	<b>Tier II Project</b>  No impact.	identified to have potential for impacts to SCLTS based on a desktop analysis using Google Earth imagery and CNDDDB data.	implement the avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA, and the stormwater and water quality mitigation measures described in Section 2.2.2, and that the Tier II Project area does not include SCLTS habitat. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to SCLTS would not be considerable. The Tier II Project would not contribute to the cumulative impact.
California Red-Legged Frog	The California red-legged frog (CRLF - <i>Rana aurora draytonii</i> ) was once widespread. It is believed that before the arrival of Europeans on the west coast of North America, the California red-legged frog was common in coastal habitats from the vicinity of Point Reyes National Seashore, Marin County, California, and inland from the vicinity of Redding, Shasta County, California, southward to northwestern Baja California, Mexico (Jennings and Hayes 1985, Hayes and Krempels	The California red-legged frog is listed as threatened under the federal Endangered Species Act, and is a California Special Concern Species. It is endemic to California and Baja California, Mexico, and its known elevational range extends from near sea level to elevations of about 1,500 meters (5,200 feet). Currently, the species is found primarily in coastal drainages of central California, from Marin County, California, south to northern Baja California, Mexico, and in isolated	<b>Tier I Impacts</b>  The Tier I build alternatives have potential to impact CRLF, which is known to inhabit wetlands and riverine/freshwater marsh and riparian forest areas. Placement of retaining walls or other highway-related facilities in aquatic or riparian areas or dewatering in these areas could affect habitat for CRLF or result in incidental take if frogs were present in the project vicinity during construction. The Tier I project area does not include designated critical habitat units for California red-legged frog. Impacts to potential habitat for this species are quantified as follows: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 9.96 acres</li><li>Tier I TSM Alternative: 4.88 acres</li></ul>	A total of 21 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to CRLF. Seven of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining 14 projects, which were identified to have potential for impacts to CRLF based on a desktop analysis using Google Earth imagery and CNDDDB data. Potential impacts include the disturbance of habitat.	CRLF is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the project area is an existing transportation corridor, the Tier I and Tier II Projects would implement the avoidance and minimization measures and compensatory

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	1986 – cited in USFWS 2002a). However, the species has been extirpated from 70 percent of its former range (USFWS 2002a).	drainages in the Sierra Nevada, northern Coast, and northern Transverse Ranges (U.S. Fish and Wildlife Service 1996a, cited in USFWS 2002a). Given this species' threatened status and likelihood of continued threats in the form of habitat loss, predation and competition, the CRLF is considered to be in poor health with a declining population trend (IUCN 2017b).	<b>Tier II Impacts</b>  The Tier II Auxiliary Lane Alternative has potential to affect habitat for California red-legged frog, similar to the impacts of the Tier I build alternatives. The Tier II project area does not include designated critical habitat units for California red-legged frog. Impacts to potential habitat for this species are quantified as follows: <ul style="list-style-type: none"><li>Permanent impact: 0.15 acre</li><li>Temporary impact: 0.15 acre</li></ul>		mitigation described in Section 2.3.5 of the Draft EIR/EA, and that the overall scale of riparian forest and riverine/ freshwater marsh habitat would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to CRLF would not be considerable.
Foothill Yellow-Legged Frog (FYLF)	Foothill yellow-legged frog (FYLF, <i>Rana boylei</i> ) originally ranged from northern Oregon west of the Cascades and south along the coast ranges to the San Gabriel Mountains, as well as south along the foothills of the western side of the Sierra Nevada Mountains to the edge of the Tehachapi Mountains, with an isolated population (now possibly extinct) in the San Pedro Martir Mountains of Baja California (Jennings and Hayes 1994). At present, large populations of FYLF appear only in the North Coast ranges from Oregon to Sonoma County, California.	FYLF is known to occur at many localities in coastal drainages north of the Salinas River system in California; however, in these areas, the frog is considered at risk due to exotic predatory aquatic fauna, poorly timed water releases from upstream reservoirs that scour egg masses from their oviposition substrates, and decreased waterflows that can force adult frogs to move into permanent pools where they may be more susceptible to predation. Due to historic population declines and continued threats from exotic species and changes in climate, the health of this resource is considered to be poor with a declining trend going forward.	<b>Tier I Impacts</b>  Impacts to potential habitat for FYLF is quantified as follows:  Riverine/freshwater marsh: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 1.08 acres</li><li>Tier I TSM Alternative: 0.30 acre</li></ul> Riparian forest: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 8.88 acres</li><li>Tier I TSM Alternative: 4.58 acres</li></ul> <b>Tier II Impacts</b>  Under the Tier II Auxiliary Lane Alternative, the placement of retaining walls or other highway-related facilities in riparian or riverine/freshwater marsh areas or dewatering in these areas would potentially affect habitat for these species. Impacts to potential habitat for FYLF is quantified as follows:  Riverine/freshwater marsh impact: <ul style="list-style-type: none"><li>Permanent: 0.02 acre</li><li>Temporary: 0.06 acre</li></ul> Riparian forest impact: <ul style="list-style-type: none"><li>Permanent: 0.13 acre</li><li>Temporary: 0.09 acre</li></ul>	A total of 11 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to FYLF. Five of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining six projects, which were identified to have potential for impacts to FYLF habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream data, NWI data, and California Natural Diversity Database (CNDDB) data. Potential impacts include the permanent and temporary loss of habitat.	FYLF is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA, and that the overall scale of riparian forest and riverine/ freshwater marsh habitat would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to FYLF would not be considerable.

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Western Pond Turtle	Historically, western pond turtle occurred in most Pacific slope drainages from Klickitat County, Washington along the Columbia River to Arroyo Santo Domingo, in northern Baja California, Mexico. Western pond turtles were heavily exploited for food in the Central Valley, and overall numbers of this species represent a fraction of their historic levels. Declines in the population of western pond turtle in many of the coastal drainages along California's central coast have been associated with historic exploitation of this species for food, as well as changes in land and water use, and abusive grazing practices.	Western pond turtle ( <i>Actinemys marmorata</i> ) is a California Species of Special Concern. It is widely distributed along western North America and is capable of exploiting a wide range of freshwater habitats including reservoirs, water treatment ponds, agricultural ponds, rivers, and seasonal creeks. An occurrence of western pond turtle was recorded 5.8 miles east of the BSA of the proposed project. Given historic and recent population declines and existing threats and age trends, the health of this resource is considered to be poor and likely to continue to decline.	<b>Tier I Impacts</b>  Impacts to potential habitat for western pond turtle are quantified as follows:  Riverine/freshwater marsh: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 1.08 acres</li><li>Tier I TSM Alternative: 0.30 acre</li></ul> Riparian forest: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 8.88 acres</li><li>Tier I TSM Alternative: 4.58 acres</li></ul>	A total of 11 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to western pond turtle. Five of these projects were evaluated in environmental documents that identified impacts to this resource. No environmental document was available for the remaining six projects, which were identified to have potential for impacts to western pond turtle habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream and NWI data, and CNDDDB data. Potential impacts include the permanent and temporary loss of habitat.	Western pond turtle is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA, and that the overall scale of riparian forest and riverine/ freshwater marsh habitat would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to western pond turtle would not be considerable.
			<b>Tier II Impacts</b>  Under the Tier II Auxiliary Lane Alternative, the placement of retaining walls or other highway-related facilities in riparian or riverine/freshwater marsh areas or dewatering in these areas would potentially affect habitat for western pond turtle. Impacts to potential habitat for this species are quantified as follows:  Riverine/freshwater marsh impact: <ul style="list-style-type: none"><li>Permanent: 0.02 acre</li><li>Temporary: 0.06 acre</li></ul> Riparian forest impact: <ul style="list-style-type: none"><li>Permanent: 0.13 acre</li><li>Temporary: 0.09 acre</li></ul>		
Riparian Forest	The extent of riparian habitats has decreased significantly within the Santa Cruz region due to the encroachment of agriculture, domestic animal grazing, urban development, roadway crossings, water diversions, and channelization of drainage and flood control. The adoption of the Coastal Act in 1976 included	Most local streams in Santa Cruz have been degraded by human impacts to an extent. Riparian forest habitat is present in many of the creeks and drainages in the RSA. Along Soquel Creek, riparian vegetation consists of a full array of size classes of the major riparian tree species; small trees were found to be numerous and recruitment active. Along	<b>Tier I Impacts</b>  HOV Lane Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 8.88 acres</li></ul> TSM Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 4.58 acres</li></ul>	A total of nine reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to riparian forest. Of the nine projects, four were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining five projects, which were identified to have potential for riparian forest	Although the trend for the riparian forest natural community is considered to be generally stable with a potential for improvement, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	protections of riparian corridors, however its efforts to include entire watersheds of coastal streams in the Coastal Act were unsuccessful.	Aptos Creek and Valencia Creek, numerous species of invasive plants occur and very little old growth remains, although upper Aptos Creek and Valencia Creek support mature coniferous trees that have a high likelihood of contributing large woody material to the creek channels. Given the significant loss of riparian forest that has occurred, this resource appears to be in poor health. Despite the small remaining amount of old growth forest, the presence of mature trees in upper watersheds of Aptos and Valencia creeks, and the full array of tree size classes and active recruitment along Soquel Creek suggest that conditions are remaining stable, with a potential for improvement.	<b>Tier II Impacts</b>  Auxiliary Lane Alternative: <ul style="list-style-type: none"><li>Permanent impacts = 0.13 acres</li><li>Temporary impacts = 0.09 acres</li></ul>	impacts based on a desktop analysis using Google Earth imagery and USGS blue-line stream data. Potential impacts include the permanent and temporary loss of riparian forest, including land disturbance and tree removal within areas of riparian forest habitat.	identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would not introduce new stream crossings in previously undeveloped areas, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.1 of the Draft EIR/EA, and that the overall scale of riparian forest would not be substantially affected. For example, in the Aptos Creek Watershed, the main tributaries comprise approximately 41 miles of creek channel, with an average 64 percent tree canopy coverage for 11 surveyed stream reaches (Coastal Watershed Council 2003). These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the riparian forest natural community would not be considerable.
Cooper's Hawk	As of 1981, it was suggested that a significant decline in breeding pairs of Cooper's hawk had occurred throughout southern California due to the destruction of their principal nest habitat and extensive riparian areas. Nevertheless, there has been no evidence of a decline in migratory populations of Cooper's hawks in the western United States (Grinrod and Walton 2016).	The current population is considered to be at or near carrying capacity in available nesting territories (Grinrod and Walton 2016). In recent years, Cooper's hawk populations have increased and range expansions have been observed, especially the colonizing of urban and suburban areas by breeding pairs (Curtis and Rosenfield 2006, cited in Chiang et al. 2012). An occurrence of Cooper's hawk is documented approximately 0.75 mile east of Henry Cowell Redwoods State Park (Caltrans 2015b). Given recent population trends, the health of this resource is considered to be good and is expected to be either stable or improving.	<b>Tier I Impacts</b>  Under either of the Tier I Corridor build alternatives, the removal of vegetation and/or the removal of nests could directly affect nesting birds and any eggs or young residing in nests.	A total of 25 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to Cooper's hawk. Ten of these projects were evaluated in environmental documents that identified potential impacts to Cooper's hawk, nesting raptors, nesting birds, or unspecified animal species. No environmental document was available for the remaining 15 projects, which were identified to have potential for impacts to Cooper's hawk nesting habitat based on a desktop analysis using Google Earth imagery, USGS blue-line stream and NWI data, and CNDDDB data. Potential impacts include the permanent and temporary loss of nesting habitat.	Cooper's hawk is considered to be in a condition of good health, with a trend that is stable or improving. However, the effect of past, current, and future development, including the proposed Tier I Project, could potentially degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA, and that the overall scale of riparian forest and potential nesting habitat would not be substantially affected. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to Cooper's hawk would not be considerable. The Tier II Project would not contribute to the cumulative impact.
			<b>Tier II Impacts</b>  No impact		



Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Tricolored Blackbird	The tricolored blackbird's known historic breeding range in California included the Sacramento and San Joaquin valleys, the foothills of the Sierra Nevada south to Kern County, the coastal slope from Sonoma County south to the Mexican border, and, sporadically, the Modoc Plateau (Dawson 1923, Neff 1937, Grinnell and Miller 1944, cited in Shuford and Gardali 2008). One of the first systematic surveys of the species' population status and distribution, in 1934, observed 736,500 adults in just eight Central Valley counties (Neff 1937, cited in Shuford and Gardali 2008). Statewide censuses have shown declines in Tricolored Blackbird numbers. Statewide censuses in four late-April surveys from 1994 to 2000 resulted in the following total numbers of adults: 369,359 in 1994, 237,928 in 1997, 104,786 in 1999, and 162,508 in 2000 (Hamilton 2000, cited in Shuford and Gardali 2008).	Tricolored blackbird is listed as a candidate endangered species under the California Endangered Species Act (CDFW 2017b). With the loss of a natural flooding cycle and most native wetland and upland habitats in the Central Valley, the primary foraging habitat for tricolored blackbirds is now artificial habitats, particularly croplands in which shallow flood irrigation, mowing, or grazing keeps the vegetation at a height less than approximately 6 inches. From 2008 to 2011 the number of individuals in this species dropped by 34%, from 395,000 to 258,000 birds statewide (Kyle and Kelsey 2011, cited in Meese 2014). However, from 2011 until 2014, the number dropped by 44%, from 258,000 to 145,000 birds. This species is considered to be in poor health with a declining trend in population.	<b>Tier I Impacts</b>  The removal of vegetation and/or the removal of nests could directly impact tricolored blackbird nests and any eggs or young residing in nests. As birds can be sensitive to noise disturbance, indirect impacts could also result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. All impacts to tricolored blackbird and white-tailed kite will be avoided.	A total of 13 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to tri-colored blackbird. Nine of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the other four projects, which were identified to have potential for impacts to tri-colored blackbird based on a desktop analysis using Google Earth imagery and CNDDB data.	Tri-colored blackbird is considered to be in a condition of poor health, with a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that that the Tier I Project would implement the avoidance and minimization measures described in Section 2.3.5 of the Draft EIR/EA, and that the Tier II Project area does not include tri-colored blackbird habitat. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to tri-colored blackbird would not be considerable. The Tier II Project would not contribute to the cumulative impact.
			<b>Tier II Impacts</b>  No impact.		
Short-Eared Owl	As early as 1944, short-eared owls were described as breeding across the entire length of California west of the southern deserts "in very small numbers." At that time, the primary threats to short-eared owls were identified as shooting, and habitat loss and degradation. A small population of short-eared owls in the Salinas River-Elkhorn Slough area was previously recorded, with summer occurrences documented as early as 1959, and with one or two pairs nesting there most years from 1974 to 1981. This population was apparently extirpated by non-native red foxes in the 1980s, and short-eared owls were not observed in this area again until the 1990s, following the 1990 initiation of predator control for snowy plover and other species (Roberson 2008).	While this species appears to be in good health globally, it is difficult to make a statement about the current health and trend of the species in the RSA or California as a whole, given the cyclical boom-and-bust nature of the species' population and its dependence on prey population and climate cycles (Roberson 2008); however given the observations of short-eared owl to Elkhorn Slough after the initiation of predator control, there appears to be possibility for some stability for the local population.	<b>Tier I Impacts</b>  Under either of the Tier I Corridor build alternatives, the removal of vegetation and/or the removal of nests could directly affect nesting birds and any eggs or young residing in nests.	A total of five reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to short-eared owl. All five of these projects were evaluated in environmental documents that identified impacts to nesting birds or unspecified animal species, although they did not specifically discuss short-eared owl. No environmental document was available for the other two projects, which were identified to have potential for impacts to short-eared owl habitat based on a desktop analysis using Google Earth imagery and CNDDB data. Potential impacts include the permanent and temporary loss of habitat.	The health condition of short-eared owl in the RSA is uncertain, although the population is in good health globally, and there is a possibility that the trend for the local population may be one of stability. Given the uncertainty regarding the health of this resource locally, there is potential for the past, current, and future development, including the proposed Tier I Project, to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures as described in Section 2.3.4 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to short-eared owl would not be considerable. The Tier II Project would not contribute to the cumulative impact.
			<b>Tier II Impacts</b>  No impact.		

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
White-Tailed Kite	At the turn of the 20 <sup>th</sup> Century, the white-tailed kite ( <i>Elanus leucurus</i> ) may have been widespread throughout the lowlands of California, but there was a severe decline in its population in the early 1900s, likely due to habitat loss, shooting, and possible egg collecting (Pickwell 1930, Waian and Stendell 1970 – cited in Moore 2000). During the 1930s, extinction was predicted for this species in California (Pickwell 1930, cited in Moore 2000); however, populations and distribution increased from the 1940s to the 1970s (Fry 1966, Waian and Stendall 1970, Eisenmann 1971 – cited in Moore 2000). The rebounding of the population in that era has been attributed to protections from shooting and an increase in agricultural development, which may have increased rodent habitat (Eisenmann 1971, Small 1994 – cited in Moore 2000). Since the 1980s, white-tailed kite populations have been decreasing in some areas, including the Central Valley, Southern California grasslands and southern Pacific rainforests, although overall numbers in California have continued to increase. These location-specific declines may be due to conversion of agricultural lands to urban areas and clean farming techniques that reduce prey populations, increased nest site competition, and human disturbance at nests (Dunk 1995, cited in Moore 2000).	The white-tailed kite is a State of California Fully Protected species that is generally found in open cultivated and marshy bottomlands with scattered trees, savannahs, agricultural areas with windbreaks, orchards, and roadsides. Nesting and roosting occurs in dense, broad-leaved deciduous groves of trees, with nests located near open foraging areas (Caltrans 2015b). At present, kites primarily inhabit highly managed landscapes (e.g. agriculture and pastureland). Management practices that support abundant prey populations may benefit kites, while practices that reduce prey populations may represent habitat loss to kites. A nesting occurrence of white-tailed kite was documented approximately 3 miles northwest of the Morrissey Boulevard/Route 1 intersection (Caltrans 2015b). This species is considered to be in fair health and have a stable or increasing population trend.	<p><b>Tier I Impacts</b></p> <p>The removal of vegetation and/or the removal of nests could directly impact white-tailed kite nests and any eggs or young residing in nests. As birds can be sensitive to noise disturbance, indirect impacts could also result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. Because of the fully protected status of the white-tailed kite under the California Fish and Game Act, the habitat of this species will be avoided.</p> <p><b>Tier II Impacts</b></p> <p>No impact.</p>	A total of 26 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to white-tailed kite. Ten of these projects were evaluated in environmental documents that identified potential impacts to this resource; however, because this is a fully-protected species under the California Fish and Game Act, take of this species must be avoided. No environmental document was available for the other 16 projects, which were identified to have potential for impacts to white-tailed kite based on a desktop analysis using Google Earth imagery and CNDDB data.	White-tailed kite is considered to be in a condition of fair health, with a stable or improving trend. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Avoidance and minimization measures will avoid all take of white-tailed kite; however, as described in Section 4.3.9 of the NES, birds can be sensitive to noise disturbance, and temporary indirect impacts may result from noise and disturbance associated with construction, which could alter perching, foraging, and/or nesting behaviors. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that there would be full avoidance of habitat for this species, that the Tier I Project would implement the avoidance and minimization measures described in Section 4.3.9 of the NES and Section 2.3.5 of the Draft EIR/EA, and that the Tier II Project area does not include white-tailed kite habitat. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to white-tailed kite would not be considerable. The Tier II Project would not contribute to the cumulative impact.
Least Bell's Vireo	Once widespread and abundant (Cooper 1861; Anthony 1893, 1895; Fisher 1893; Grinnell and Swarth 1913; Grinnell and Storer 1924;	The least Bell's vireo is currently listed as endangered under both the federal Endangered Species Act and California Endangered Species Act. It is a	<p><b>Tier I Impacts</b></p> <p>Least Bell's vireo would only receive impacts from the Tier I project to the extent that impacts would occur under the Tier II Auxiliary Lane Alternative, as described below.</p>	A total of 12 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to least Bell's vireo. Six of these projects were evaluated in	Least Bell's vireo is considered to be in a condition of poor health, Although the trend for this species is one of improvement, the effect of past, current, and future development,

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	Grinnell and Miller 1944 – cited in Kus and Miner 1989), the species underwent a dramatic decline in the post-World War II era (USFWS 1988, cited Kus and Miner 1989). It has been designated as endangered under the federal Endangered Species Act since 1986. The vireo's decline in numbers has been attributed to the loss and degradation of riparian habitat throughout the species' range, as well as to the expansion in range of the brown-headed cowbird ( <i>Molothrus ater</i> ), a nest parasite (USFWS 1988, cited in Kus and Miner 1989).	southwestern subspecies of Bell's vireo and a migratory songbird that inhabits riparian woodlands in southern California and northern Baja California. Since its state and federal listing as an endangered species, the numbers of this species have increased, and the species is expanding into its historic range (Kus 2002; USFWS 2006). Sightings of least Bell's vireo have been reported as far north as Gilroy, in Santa Clara County (Roberson et al. 1997, cited in Kus 2002). The current health of this species is considered poor due to its listing as an endangered species, however the population has been increasing and that is expected to continue.	<b>Tier II Impacts</b>  Although sightings of least Bell's vireo are rare in northern California, there is potential for the species to occur in Rodeo Creek Gulch.	environmental documents that identified potential impacts to this resource. No environmental document was available for the other six projects, which were identified to have potential for impacts to least Bell's vireo based on a desktop analysis using Google Earth imagery and CNDDB data.	including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that that the Tier I and Tier II Project would implement the avoidance and minimization measures described in the Natural Environment Study Addendum, and that a finding of “may affect, not likely to adversely affect” was made for both the Tier I and Tier II projects. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to least Bell's vireo would not be considerable.
Southwestern Willow Flycatcher	Southwestern willow flycatcher (SWWF) is considered a federal and state endangered species. Similar to least Bell's vireo (described below), the SWWF requires dense riparian habitat (Caltrans 2018). This species lives in riparian areas and wetlands in the arid Southwest, including along the southern portions of the California coast. Historically, the SWWF was common in all lower elevation riparian areas of the southern third of California (Wheelock 1912, Willett 1912 and 1933, Grinnell and Miller 1944 – cited in USFWS 2002b). Additionally, historical accounts suggest that willow flycatchers were once abundant in the inland valleys and coastal regions of central and northern California (Bombay et al. 2000, cited in California Coastal Conservancy 2007).	Southwestern willow flycatcher requires microclimatic conditions dictated by local surroundings such as saturated soils, standing water, or nearby stream, pools, etc. Riparian habitat that is suitable for least Bell's vireo would be expected to also be suitable for southwestern willow flycatcher. This species has been documented migrating through San Luis Obispo County; therefore, the presence of infrequent foraging individuals in the RSA for SWWF cannot be dismissed. (Caltrans 2018). The flycatcher's current range is similar to its historic range, but its population has declined because of a decrease in habitat caused by surface water diversion, groundwater pumping, changes in flood and fire regimens, and spread of non-native and invasive plants (Natural Resources Conservation Service 2016). Due to the loss of habitat, the species is considered to be in poor condition. The recovery efforts focused on this species suggest that it may be in a stable condition of poor health.	<b>Tier I Impacts</b>  Southwestern willow flycatcher would only receive impacts from the Tier I project to the extent that impacts would occur under the Tier II Auxiliary Lane Alternative, as described below.	A total of 12 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to SWWF. The RSA for this species is identical to the RSA for least Bell's vireo. Six of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the other six projects, which were identified to have potential for impacts to SWWF based on a desktop analysis using Google Earth imagery and CNDDB data.	SWWF is considered to be in a condition of poor health. Although the trend for this species may be stable, the effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that that the Tier I and Tier II Project would implement the avoidance and minimization measures described in the Natural Environment Study Addendum, and that a finding of “may affect, not likely to adversely affect” was made for both the Tier I and Tier II projects. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to SWWF would not be considerable.
			<b>Tier II Impacts</b>  There is potential for the species to occur in Rodeo Creek Gulch.		

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
American Badger	The species once ranged throughout the rest of California but now survive in low numbers and have been extirpated from many areas of Southern California. By 1937 American badger populations had been reduced throughout California, although they remained numerous in the Central Valley. By 1986 they were found to survive only in low numbers in peripheral parts of the Central Valley and adjacent lowlands in eastern Monterey, San Benito, and San Luis Obispo counties. Agricultural and urban development have been the primary causes of decline and extirpation within California. Other factors include deliberate killing (due to the perception of badgers as a nuisance or due to trapping for their fur), direct or secondary poisoning (i.e. poisoning badgers directly or the poisoning of badgers that results when their prey is poisoned), and elimination of the food on which badgers are dependent (Williams 1986).	Along the coast, from Mendocino County south, American badger has been substantially reduced in numbers (Williams 1986). An occurrence of American badger was documented approximately 2.5 miles west of the Morrissey Boulevard/Route 1 intersection at UC Santa Cruz (Caltrans 2015b). Given historic population declines and continuing threats, the health of this resource is considered to be poor. Given continued threats from habitat loss and human activities the population may continue to decline.	<b>Tier I Impacts</b>  Under either of the Tier I Corridor build alternatives, construction in grassland habitat could result in direct impacts to small mammal burrows. If these burrows contained badger dens, grading and other clearing activities associated with construction could entomb animals, resulting in injury or mortality. No badgers were observed to be using grassland areas within the biological study area during field surveys, and the potential for such impacts is considered low. Impacts to potential habitat for these species are quantified as follows:  Annual grassland: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 4.53 acres</li><li>Tier I TSM Alternative: 0.58 acres</li></ul>	A total of eight reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to American badger. Two of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining six projects, which were identified to have potential for impacts to American badger habitat based on a desktop analysis using Google Earth imagery and CNDDB data. Potential impacts include the permanent and temporary loss of habitat.	American badger is considered to be in a condition of poor health, with potential for a trend of decline. The effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures described in Section 2.3.4 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to American badger would not be considerable. The Tier II Project would not contribute to the cumulative impact.
Oak Woodland	The introduction of domestic grazing animals and accompanying land management practices since the Mission Period (1769 - 1824) brought changes to the herbaceous understory of coast live oak woodlands from perennial species to aggressive, introduced annuals, which may out-compete young oaks for limited supplies of nutrients and moisture. As a result, over time, well-developed oak woodlands have regressed to open woodlands or savannas and eventually to disturbed grasslands.	Coast live oak woodland is present in the project corridor along upper creek bank areas and within undeveloped areas such as along roadsides. Because development, land management practices, and competition from invasive species have reduced the area of Coast Live Oak Woodland in the RSA, this resource appears to be in poor health. Though local laws and regulations may decrease the future impact of development, the health of this resource may continue to decline given the remaining threat of invasive species.	<b>Tier I Impacts</b>  HOV Lane Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 9.45 acres</li></ul> TSM Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 4.89 acres</li></ul>	A total of eight reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to oak woodland. Four of the eight projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining four projects, which were identified to have potential for oak woodland impacts based on a desktop analysis using Google Earth imagery. Potential impacts include the permanent and temporary loss of oak woodland, including land disturbance and tree removal within areas of oak woodland habitat.	Oak woodland is considered to be in a condition of poor health, and the trend for this resource may be in decline, although there is a possibility for improvement. The effect of past, current, and future development, including the proposed Tier I and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.1 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the oak woodland natural community would not be considerable.

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Monarch Butterfly	Historically, western populations of monarch butterfly overwintered in Monterey pine forests; however, urbanization, aging of the trees and environmental stresses have caused a decline of this habitat. The initial introduction of Australian eucalyptus trees in California in the 1850s affected traditional overwintering patterns by providing a tree that is not only well-suited to sheltering Monarch clusters, but also provides the butterflies with a convenient nectar source since it blooms in winter. The numbers of monarchs recorded at the overwintering sites in California have declined since the 1990s.	Given historic habitat loss and recent population declines, the current health of this resource is poor. Monarch populations are impacted by habitat loss and land use practices in the RSA and elsewhere (including other states and countries) due to their migration patterns. Efforts to monitor, protect and improve habitat for this species are underway though threats remain, therefore the health of this resource is expected to remain poor but stabilize.	<b>Tier I Impacts</b>  Removal of eucalyptus and mixed conifer woodland or other suitable roosting trees during monarch butterfly winter roosting season could impact potential winter roosting habitat, and it could directly impact monarch butterflies if they were found to be utilizing eucalyptus trees or mixed conifer woodland habitat onsite as winter roosts. Impacts to potential habitat for this species are quantified as follows:  Eucalyptus Woodland: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 1.02 acres</li><li>Tier I TSM Alternative: 0.28 acres</li></ul> Mixed Conifer Woodland: <ul style="list-style-type: none"><li>Tier I HOV Lane Alternative: 6.08 acres</li><li>Tier I TSM Alternative: 2.03 acres</li></ul> <b>Tier II Impacts</b>  No impact.	A total of 13 reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to monarch butterfly. Four of these projects were evaluated in environmental documents that identified potential impacts to this resource. No environmental document was available for the remaining nine projects, which were identified to have potential for impacts to monarch butterfly overwintering habitat based on a desktop analysis using Google Earth imagery. Potential impacts include the permanent and temporary loss of overwintering habitat.	Although the trend for monarch butterfly is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. The Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I Project to the cumulative impact to monarch butterfly would not be considerable. The Tier II Project would not contribute to the cumulative impact.
Coastal Scrub	Urban development in coastal areas has resulted in large-scale conversion of coastal scrub and other shrubland habitats. Further loss of coastal scrub is visible in more recent aerial photographs as urban development has occurred on former agricultural land as well as former areas of coastal scrub.	Coastal scrub communities typically occur in pockets in the outer and inner southern coastal ranges and in scattered areas along the immediate coast. Because development and agriculture in coastal areas has decreased the area of coastal scrub in the RSA, this resource appears to be in poor health. Local laws and regulations relating to development suggest the health of this resource will be stable, but remain poor.	<b>Tier I Impacts</b>  HOV Lane Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 2.76 acres</li></ul> TSM Alternative: <ul style="list-style-type: none"><li>Permanent and temporary impacts = 0.87 acres</li></ul> <b>Tier II Impacts</b>  Auxiliary Lane Alternative: <ul style="list-style-type: none"><li>Permanent impacts = not present</li><li>Temporary impacts = not present</li></ul>	Two reasonably foreseeable projects in the RSA for this resource were identified to have potential for impacts to coastal scrub. No environmental documents were available for these projects, which were identified as having potential to affect coastal scrub identified based on a desktop analysis using Google Earth imagery. Potential impacts would include the permanent and temporary loss of coastal scrub habitat, including land disturbance and the removal of vegetation.	Although the trend for the coastal scrub natural community is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, would be addressed by avoidance and minimization measures as described in Section 2.3.1 of the Draft EIR/EA, and that the Tier II Project would not affect this resource. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to the coastal scrub natural community would not be considerable. The Tier II Project would not contribute to the cumulative impact.
Visual Resources	The visual RSA is located on a coastal plain where the San Lorenzo River flows into the northern end of Monterey Bay. Aerial photographs from 1931 and 1948 show that the	The current visual RSA is characterized by urban and suburban development, landscape trees and forested land, with rugged coastal mountains inland. The health of the visual environment has	<b>Tier I Permanent Impacts</b> - The Tier I build alternatives would have adverse impact on the visual quality of the corridor, as shown in the shaded area below:	A total of twelve reasonably foreseeable projects in the visual resource study area were identified to have potential for visual impacts to occur. Of these twelve projects, six were evaluated in environmental	Although the trend for visual resources is considered to be generally stable condition, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I



Resource	Historic Information	Current Information	Impact of Proposed Action			Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	Route 1 corridor was mainly agricultural, with scattered residential development occurring throughout the predominant agricultural use. Historically, the RSA was rural in appearance, with agricultural fields interspersed with coastal plains and riparian forest. As development expanded, the population grew from 950 in 1860 to 14,000 in 1930, and to over 60,000 in recent years.	been adversely affected by urban and suburban development that has reduced the rural and scenic character that has historically attracted tourists. There are areas of extensive urban and suburban development filling in areas of former farmland. The public will to protect the visual environment and strengthened policies, even as development continues, suggests that the trend is for conditions to remain in a stable condition of poor health.	Types of Permanent Impacts	Tier I Alternatives		documents that identified potential visual impacts. No environmental document was available for the remaining six projects, which were identified to have potential for visual impacts based on a desktop analysis using Google Earth imagery as part of the for the Cumulative Impacts Analysis. Potential impacts include the removal of trees and the construction of new infrastructure in areas that are undeveloped or sparsely developed.	and Tier II project, has potential to further reduce the visual quality in the resource study area. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II project’s contribution to this cumulative impact was considered, noting the distribution of visual impacts of the Tier I project, including the loss of mature trees, along the project corridor; the length of time required for replacement trees to reach maturity; and the inability to mitigate the visual impacts of the Tier I build alternatives to less than significant even after mitigation, as described in Section 3.2.4 of the Draft EIR/EA. These factors suggest that the incremental contribution of the Tier I and Tier II project to the cumulative visual impact may be considerable.
				HOV	TSM		
			New or widened over/undercrossings (bridges)	15 units	7 units		
			New pedestrian/bicycle bridges (includes ramps)	3 units	3 Units		
			New retaining walls	33,000 linear ft.	16,000 linear ft.		
			New soundwalls	17,800 linear ft.	23,600 linear ft.		
			Ramp metering, includes metering lights, signage	9	9		
			Vegetation removal, including removal of skyline eucalyptus trees	109	61		
			Replanting areas – trees, shrubs, groundcovers	15 acres	10 acres		
			Replanting areas – shrubs and groundcovers	50 acres	13 acres		
			Glare potential	moderate	moderate		
			Local streets widened?	yes	no		
			New concrete median barrier?	yes	yes		
			Tier I Temporary Impacts - The Tier I TSM Alternative would result in the clearing of approximately 61 acres of existing vegetation, with 23 acres of this area available for replanting;				
			The Tier I HOV Lane Alternative would result in the clearing of approximately 109 acres of existing vegetation, with 65 acres of this area available for replanting.				
			Tier II Permanent Impacts - The Tier II Auxiliary Lane Alternative would have adverse impact on the visual quality of the corridor, as described below: <ul style="list-style-type: none"><li>New or widened over/undercrossings (bridges) – 0 Units.</li><li>New pedestrian/bicycle bridge (including ramps) at Chanticleer Ave. – 1 Unit</li><li>Retaining walls – 1,200 linear ft.</li><li>Soundwalls – 310 linear ft.</li><li>Ramp metering, including metering lights and signage - 0 interchanges</li><li>Vegetation removal – 9.3 acres</li><li>Replanting areas – trees, shrubs, groundcovers – 1 acre</li><li>Replanting areas – shrubs and groundcovers – 2 acres</li><li>Glare potential – moderate</li><li>Local streets widened - no</li><li>New concrete median barrier - yes</li></ul>				
			Tier II Temporary Impacts - The Tier II Auxiliary Lane Alternative would result in the clearing of approximately 9.3 acres of existing vegetation, and approximately 3 acres of this area would be available for replanting.				

Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
Water Quality and Stormwater	Through 1964, development along many of the creeks and lagoons were interspersed with agricultural and undeveloped land. By 1977, much of these developed areas had filled in and much of the watersheds were heavily urbanized, similar to current conditions.	Currently, a number of water bodies in the RSA are impaired for various pollutants. Rodeo Creek Gulch and Soquel Creek are identified as impaired for turbidity; Rodeo Creek Gulch is impaired for pH; Soquel Lagoon, Soquel Creek, Noble Gulch, Aptos Creek, Valencia Creek and Trout Gulch are listed as impaired for pathogens; Aptos Creek, Soquel Lagoon, and Valencia Creek are identified as impaired for sedimentation/siltation. Given the extent of impacts that have occurred and the large number of water bodies that remain impaired, the trend appears to be remaining in a stable condition of poor health.	<b>Tier I Permanent Impacts</b> – Both build alternatives would increase the amount of impervious surface area, resulting in an increase in stormwater runoff volumes and velocities, and associated pollutant loading. For the HOV Lane Alternative, the proposed increase in impervious area is 64 total acres within the 8.9-mile project limits. For the TSM Alternative, the proposed increase in impervious area is 22 total acres.	A total of 39 reasonably foreseeable projects within the resource study area (RSA) for water quality and stormwater were identified to have potential impact to this resource. Of the 39 projects, 13 were evaluated in environmental document that identified potential water quality/ stormwater impact. No environmental document was available for the remaining 26 projects, which were identified to have potential for water quality/ stormwater impacts based on a desktop analysis using Google Earth imagery and US Geological Services (USGS) blue-line stream data as part of the Cumulative Impact Analysis. Potential impacts include increases in the amount of impervious surface area, resulting in an increase in stormwater runoff volumes and velocities, and pollutant loading.	Although the trend for water quality and stormwater is considered to be generally stable, this resource is in a condition of poor health, and the effect of past, current, and future development, including the proposed Tier I and Tier II project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II project's contribution to this cumulative impact was considered, noting that the increase in flow due to the proposed increase in impervious surface for the Tier I or Tier II build alternatives would not be substantial in comparison with the overall watershed of the creeks affected by the project (the RSA for this resource), and that the project would address permanent impacts by incorporating stormwater treatment facilities and erosion control measures, and the project's temporary impacts would be addressed with construction best management practices. These factors indicate that the incremental contribution of the Tier I and Tier II project to the cumulative stormwater and water quality impact would not be considerable.
			<b>Tier I Temporary Impacts</b> – The TSM Alternative would result in an estimated disturbed soil area of 101 acres, and the HOV Lane Alternative would have an estimate of 250 acres of disturbed soil area. Construction activities could result in temporary changes in water volume or flow and increased siltation, sedimentation, erosion, and water turbidity. Grading activities and removal of existing vegetation can cause increased erosion. Stormwater runoff from the project site may transport pollutants to nearby creeks and storm drains if Best Management Practices are not properly implemented.		
			<b>Tier II Permanent Impacts</b> – The Tier II Auxiliary Lane Alternative would increase the impervious area by 4.89 acres, with a resultant increase in stormwater runoff volumes and velocities, and associated pollutant loading.		
			<b>Tier II Temporary Impacts</b> – The Tier II Auxiliary Lane Alternative would result in approximately 18.5 acres of disturbed soil area. Within the Tier II project area, the same types of temporary water quality and stormwater impacts would occur as for the Tier I build alternatives.		
Pallid Bat, Hoary Bat, and Townsend's	<b>Pallid Bat:</b> A serious decline in pallid bat populations has been documented in California's South Coast. Patterns observed in the decline led researchers to conclude that the	<b>Pallid Bat:</b> While global populations are believed to be stable, populations in California are thought to have declined in recent decades may face further declines due to continued threats from	<b>Tier I Impacts</b>  Under either Tier I Corridor build alternative, the removal of structures or vegetation used by roosting bats could impact pallid bat, hoary bat and Townsend's big-eared bat.	Eight reasonably foreseeable projects within the RSA for pallid bat, hoary bat, and Townsend's big-eared bat were evaluated in environmental documents and found to have potential for impacts to one or all of these	<b>Pallid bat:</b> Pallid bat is considered to be in a condition of declining health in California, although global populations are stable. The effect of past, current, and future development, including the proposed Tier I

Big-Eared Bat	<p>species appears to be intolerant of urban development (Miner and Stokes 2005). Threats to this species have been identified as including disturbances of roost sites, recreational activities such as rock climbing, reduction in food availability due to pesticides or habitat modification or degradation, and secondary poisoning as a result of eating contaminated prey (CEC 2012).</p> <p><b>Hoary Bat:</b> The hoary bat is the most widespread of all North American bat species. Hoary bat does not have state or federal sensitive status. The CNDDDB's one recorded occurrence of hoary bat in Santa Cruz County dates back to 1940. This occurrence was along Soquel Creek, in the vicinity of Neary Lagoon (CDFW 2017a). Little is known about hoary bat, and, unlike other bat species that frequently roost in buildings, hoary bats do not roost in buildings and structures and are seldom found in urban settings (Bat Conservation International 1995).</p> <p><b>Townsend's Big-Eared Bat:</b> The Townsend's big-eared bat (<i>Corynorhinus townsendii</i>) is found throughout California, but specific details of its distribution are not well-documented (CDFW 2000). Human activities in the late 1800s such as mining and building construction removed areas of old-growth conifers, a known roosting site of Townsend's big-eared bat; however, these activities also created new roosting habitat in mines and building structures (Sherwin et al. 2009 – cited in CDFW 2016). In 1986, <i>P. townsendii</i> was designated a Species of Special Concern in California, based on the limited data that was available at the time, which indicated that the species was declining (Williams 1986, as cited in CDFG 1988). A study conducted in 1987-1988 involved surveying a 15 kilometer radius for each of 12 sites of known maternity colonies in ten counties of California. The survey</p>	<p>development, climate change, and disease (CEC 2012). The pallid bat occurs throughout California, except at the highest elevations of the Sierra Nevada range (California Energy Commission [CEC] 2012). An occurrence of pallid bat was documented at Soquel Creek within the biological study area (BSA) of the Tier I and Tier II project (Caltrans 2015b).</p> <p><b>Hoary Bat:</b> The hoary bat (<i>Lasiurus cinereus</i>) occurs throughout the United States (except for the southern tip of Florida), throughout central and eastern Canada, and in Central Mexico. It generally roosts in the foliage of medium to large trees and loss of roosting habitat due to timber harvest is likely a main threat to this species. Based on the limited available information about this species, it appears to have relatively good health and be in stable condition.</p> <p><b>Townsend's Big-Eared Bat:</b> Townsend's big-eared bat's perceived susceptibility to human disturbance at roost sites is usually cited as a key behavioral characteristic putting the species at conservation risk (Twente 1955, Barbour and Davis 1969, Humphrey and Kunz 1976 – cited in CDFW 2016). While the mortality rate among juveniles is fairly high, females that return to their natal roost after their first winter have approximately a 75 percent chance of survival in each succeeding year, with the average age of an individual being 5 years (Pearson et al. 1952, as cited in CDFG 1988). The California Department of Fish and Wildlife has funded a new statewide survey targeting known and highly-suitable locations for maternity and hibernation roosts (CDFW 2016). Based on the limited available information about this species, it appears to be a condition of poor health, and there is potential that conditions in California are declining.</p>	<p><b>Tier II Impacts</b></p> <p>Under the Tier II Auxiliary Lane Alternative, the removal of vegetation used by roosting bats could impact roosting bats.</p>	<p>species, or to unspecified bat species. An additional 12 reasonably foreseeable future projects were identified that had no available environmental document but may have potential to impact pallid bat and Townsend's big-eared bat, while nine such projects were identified that may have potential to impact hoary bat. A desktop analysis using Google Earth imagery and CNDDDB data was conducted to consider the potential impact to these species that may result from projects for which no environmental document was available</p>	<p>and Tier II Project, has potential to further degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to pallid bat would not be considerable.</p> <p><b>Hoary bat:</b> This species is considered to be in relatively good health and stable condition. However, the effect of past, current, and future development, including the proposed Tier I and Tier II Project, could potentially degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigation as described in Section 2.3.4 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to hoary bat would not be considerable.</p> <p><b>Townsend's Big-Eared Bat:</b> This species is considered to be in poor health and declining condition. The effect of past, current and future development, including the proposed Tier I and Tier II Project, could potentially degrade this resource. Therefore, an adverse cumulative impact was identified. The context and extent of the Tier I and Tier II Project's contribution to this cumulative impact was considered, noting that the impacts would occur in an existing transportation corridor, and would be addressed by avoidance and minimization measures and compensatory mitigations as described in Section 2.3.4 of the Draft EIR/EA. These factors indicate that the incremental contribution of the Tier I and Tier II Project to the cumulative impact to</p>
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Resource	Historic Information	Current Information	Impact of Proposed Action	Impacts from Future Actions	Overall Cumulative Impact from Past, Present, and Reasonably Foreseeable Future Projects
	found that there was a 46.2% decline in the number of colonies for the surveyed areas in the preceding 50 years (CDFW 2018). A 1998 study that summarized surveys of Townsend's big-eared bat maternity colonies and hibernacula throughout much of the species' range in California during the period from 1987 to 1991 inferred that the population of this species had declined over the several decades before the study, compared with original site reports from the period of 1918 to 1974 (Pierson and Rainey 1998 – cited in CDFW 2016).				Townsend's big-eared bat would not be considerable.