Santa Gertrudis Creek Pedestrian/Bicycle Trail Extension and Interconnect

Draft Initial Study with Mitigated Negative Declaration
Temecula, California

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Summary

Project Description

The City of Temecula (the City) proposes to create a new pedestrian/bicycle trail extension that would connect to an existing multi-purpose trail along Santa Gertrudis Creek. The proposed extension would connect to the existing trail network at Ynez Road to the east and at Diaz Road to the west, and complete the loop within the City of Temecula's bike path system to the northeast of the proposed trail. After completion, trail users will be able to access the trail at Ynez Road, Jefferson Avenue, and Winchester Road. These access points make the trail ideal for those commuting to the surrounding businesses or simply using the trail for recreational purposes. Undercrossings will be created at Ynez Road, the Interstate 15 (I-15) Freeway, and Jefferson Avenue. Keeping the path away from the roadway will maintain the trail's designation as a Class I bikeway and will create a safe environment for users to avoid vehicular traffic. Per Caltrans definitions, Class I bikeways provide a completely separate right of way exclusively for bicycle and pedestrian use with minimal cross-flow. To avoid having the trail cross Murrieta Creek on a new bridge, the new trail section will join the existing trail at Diaz Road by adding bike lanes to Winchester Road. Winchester Road will not undergo construction for the new bike lanes, it will only change signing and striping to accommodate a new layout.

One wetland (0.0036-acre; 160 s.f.) within the creek will be impacted as a result of the project. In compliance and coordination with the U.S. Army Corps of Engineers (USACE), the purchase of 0.010-acre of rehabilitation credits (as required, at the 3:1 ratio) will offset the permanent impact. This credit quantity was established by USACE to mitigate for impacts. Permanent and temporary impacts to riverine and riparian habitat under the jurisdictional authority of the San Diego Regional Water Quality Control Board (RWQCB), the Western Riverside County Regional Conservation Authority (RCA) in compliance with the Multi-Species Habitat Conservation Plan (MSHCP), and the California Department of Fish and Wildlife (CDFW) will also occur as the result of the project. These impacts will be offset with the purchase of an additional 0.19 acres of reestablishment credits (to satisfy the RWQCB) and 0.50 acres of preservation credits (to satisfy the RWQCB, RCA, and CDFW).

Determination

This proposed Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public that it is the City's intent to adopt an MND for this project. This proposed MND does not mean that the City's decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

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List of Abbreviated Terms and Acronyms

APE	Area of Potential Effect
AQMP	Air Quality Management Plan
ATP	Active Transportation Plan
BMPs	Best Management Practices
BSA	Biological Study Area
Cal Fire	California Department of Forestry and Fire Protection
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Protection Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CESA	California Endangered Species Act
CFCs	Chlorofluorocarbons
cfs	cubic feet per second
CFR	Code of Federal Regulations
CHP	California Highway Patrol
City	City of Temecula
CWA	Clean Water Act
DBESP	Determination of Biological Equivalent or Superior Preservation
Department	California Department of Transportation
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substances Control
EMT	Emergency Medical Technician
EO	Executive Order
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
Fisheries Service	NOAA's National Marine Fisheries Service
FSTIP	Federal Statewide Transportation Improvement Program
FTIP	Federal Transportation Improvements Program
GHG	Greenhouse Gas
GPS	Global Positioning System
GWP	Global Warming Potential
HCFCs	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HCP	Habitat Conservation Plan
I-15	Interstate 15
IS	Initial Study
JPR	Joint Project Review
MBTA	Migratory Bird Treaty Act
MMRP	Mitigation Monitoring and Reporting Program
MND	Mitigated Negative Determination
MSHCP	Multiple Species Habitat Conservation Plan
MS4	Municipal Separate Storm Sewer System
NEPA	National Environmental Policy Act

List of Abbreviated Terms and Acronyms

NESMI	Natural Environment Study – Minimal Impacts report
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OHWM	Ordinary High Water Mark
PFCs	Perfluorocarbons
PM	Particulate Matter
ppm	parts per million
PRC	Public Resources Code
RCA	Western Riverside County Regional Conservation Authority
RCFC&WCD	Riverside County Flood Control and Water Conservation District
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SBKR	San Bernardino Merriam's Kangaroo Rat
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
VOCs	Volatile Organic Compounds
WDRs	Waste Discharge Requirements
WRC	Western Riverside County

Chapter 1. Proposed Project

1.1. INTRODUCTION

The City of Temecula (the City) is proposing the creation of a new pedestrian/bicycle trail extension and interconnection at Ynez Road to the Murrieta Creek Multi-Purpose Trail at Diaz Road. The proposed location will utilize the existing Riverside County Flood Control and Water Conservation District (RCFC&WCD) maintenance access road along the top of the concrete lined channel containing Santa Gertrudis Creek. The total length of the project is approximately 5,500 linear feet. The vicinity map in Section 1.4 shows the project location. Additional figures are provided in Appendix M.

1.2. PROJECT FUNDING

The project is funded through the California Department of Transportation (the District or Caltrans) Active Transportation Program (ATP) Cycle 3 Augmentation ($3,759,000) and City of Temecula local funding sources ($1,002,000).

1.3. LEAD AGENCY NAME, ADDRESS, AND CONTACT PERSON

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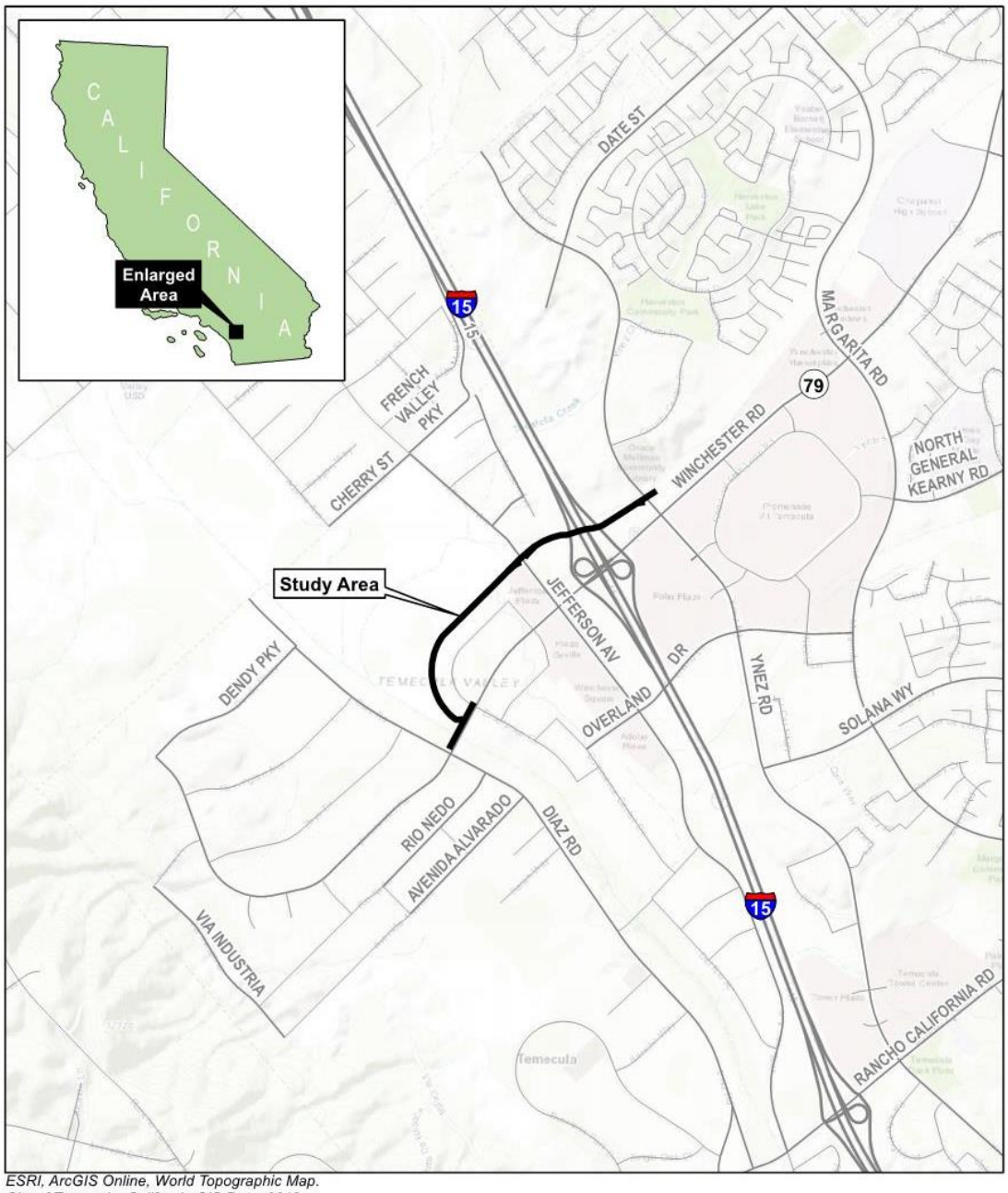
1.4. PROJECT LOCATION AND SETTING

The proposed new pedestrian/bicycle trail extension and interconnection is from Ynez Road to the Murrieta Creek Multi-Purpose Trail at Diaz Road in Temecula, California (see vicinity map below). The proposed location will utilize the existing Riverside County Flood Control and Water Conservation District (RCFC&WCD) maintenance access road along the top of Santa Gertrudis Creek. The total length of the project is approximately 5,500 linear feet.

Exhibit A: Vicinity Map



ESRI, ArcGIS Online, World Topographic Map.
City of Temecula, California GIS Data. 2018

Figure 1
Vicinity

1.5. PURPOSE AND NEED

The purpose of this project is to:

- Encourage recreational bicycle use and provide commuters a connection to surrounding businesses away from vehicular traffic,
- Connect bicycle trail users to the existing trail network at the Ynez Road crossing and offer a different way for pedestrians and bicycle users to access routes along and near Winchester Road,
- Relieve congestion,
- Help reduce emissions from transportation sources, and
- Improve the safety of bicyclists and pedestrians in the local area.

The project is needed because the Murrieta Creek Multi-Purpose Trail is disconnected between Ynez Road and Diaz Road, which forces users to use roads that place them adjacent to or among traffic. Connecting the paths would improve the effectiveness of both path segments while introducing trail access to new areas.

1.6. PROJECT DESCRIPTION

The City of Temecula is proposing the creation of a new pedestrian/bicycle trail extension that would connect a new multi-purpose trail along Santa Gertrudis Creek.

The project was originally designed in 2014, but it did not progress at that time because of lack of funding for construction.

While the majority of the trail is within RCFC&WCD right-of-way, the undercrossing locations will encroach Caltrans (I-15) right-of-way, and City right-of-way at Ynez Road, Jefferson Avenue, and Winchester Road. The project is considered Categorically Exempt from the National Environmental Policy Act (NEPA) and CEQA for the encroachments to Caltrans right – of-way proposed by the project.

The portion of the proposed trail extension that is along Santa Gertrudis Creek can be differentiated as two distinct sections based on the creek's physical characteristics. The first section is Ynez Road to the I-15 Freeway, and the second section is from the I-15 Freeway to Winchester Road. The characteristics that distinguish the two sections from each other are the available width for the trail along the top of the creek and the type of channel characterizing the creek bottom. Visible concrete channel lining occurs from approximately 200 feet upstream of the confluence of Murrieta Creek and Santa Gertrudis Creek and extends to a check dam near the I-15 southbound Winchester Road off-ramp. Upstream of the check dam to the upstream terminus of the project, the concrete channel lining, while present, is obscured by depositional sand and vegetation.

1.7. ALTERNATIVES

1.7.1. No Action Alternative

The No-Build (No Action) Alternative would not extend the trail and would leave the existing RCFC&WCD maintenance access road in place; therefore, the pedestrian/bicycle path would end at Ynez Road and not connect to Winchester Road. Because this alternative does not meet the proposed project's purpose and need, it is not recommended.

1.7.2. Action Alternative

The proposed trail would connect to the existing trail network that is located from Ynez Road to the east and Diaz Road to the west, and complete the loop within the City's bike path system to the northeast of the proposed trail. Trail users will be able to access the trail at Ynez Road, Jefferson Avenue, and Winchester Road. These access points make the trail ideal for those commuting to the surrounding businesses or simply using the trail for recreational purposes. Undercrossings will be provided at Ynez Road, the Interstate 15 (I-15) Freeway and Jefferson Avenue. Keeping the bike path away from the roadway will maintain the trail's designation as a Class I bike lane and will create a safe environment for users to avoid vehicular traffic. Per Caltrans definitions, Class I bikeways provide a completely separate right of way exclusively for bicycle and pedestrian use with minimal cross-flow. To avoid having the trail cross Murrieta Creek, the new trail section will join the existing trail at Diaz Road by adding bike lanes to Winchester Road. Winchester Road will not undergo construction for the new bike lanes, it will only change signing and striping to accommodate a new layout.

1.8. PERMITS AND APPROVALS NEEDED

Table 1 identifies the agencies that the City of Temecula is coordinating with, or will coordinate with, to obtain permits or approvals for the proposed project.

Table 1. Permits and Approvals Needed

Agency	Permit/Approval	Status
U.S. Army Corps of Engineers	Nationwide Permit Application	Received January 30, 2019
California Department of Fish and Wildlife	Notification of Lake or Streambed Alteration (Section 1602)	To be obtained prior to construction
Regional Water Quality Control Board	National Pollutant Discharge Elimination System (NPDES)	To be obtained prior to construction
Regional Water Quality Control Board	CWA Section 401 Water Quality Certification	Letter of Completeness received February 6, 2020 (PIN No. 856464). Certification will be complete upon remaining payment to Water Board.
Western Riverside County Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS)	Multi-Species Habitat Conservation Plan – Compliance Approval (Joint Project Review)	JPR consistency determination received on January 15, 2020 from RCA and concurrence received from CDFW and USFWS on January 30, 2020
City of Temecula	Conditional Use Permit, 17.04.010	To be obtained prior to construction

Chapter 2. Affected Environment; Environmental Consequences; and Avoidance, Minimization, and/or Mitigation Measures

2.1. HUMAN ENVIRONMENT

2.1.1. Aesthetics

2.1.1.1. Regulatory Setting

The Temecula General Plan Community Design Element, Viewsheds section, states:

> *In order to preserve public views of significant natural resources, all new public and private development projects will be reviewed to ensure that they will not obstruct public views of scenic resources such as the hillsides, prominent western and southern ridgelines, scenic roads, or significant open space areas* (Temecula, City of, 2005, Revised 2012).

Goal 5 is "Protection of public views of significant natural features." Policies and Implementation Program Measure CD-6 Viewshed Preservation are to protect hillside areas and open space, particularly on the west, where the proposed trail alignment is (Temecula, City of, 2005, Revised 2012).

I-15 in Riverside County is an "Eligible State Scenic Highway, Not Officially Designated." The California Scenic Highway Mapping System does not list State Highway 70 (Caltrans, 2011).

2.1.1.2. Affected Environment

The topography of the project area is flat except for the creek. There are distant views of the Santa Ana Mountains to the northwest and southwest. The project area is characterized by commercial land uses, transportation infrastructure, and light industry, with little natural vegetation. The creek channel along the trail corridor is characterized by a visible concrete lining up to the check dam with limited naturalized habitat within the upstream segment of the channel.

2.1.1.3. Environmental Consequences

The proposed trail extension would not damage any scenic resource. It would provide scenic vantage points of the Santa Gertrudis and Murrieta creeks. It would enhance viewers' experience of the scenic mountain vistas by enabling bicyclists and pedestrians to access the creek areas.

For safety, lights would be installed at each undercrossing. The light emitted would be visible only in the undercrossing, and therefore would not adversely affect any views. No lights would be installed aboveground. A light installation plan will be created once a contractor is selected.

The proposed project would not have an adverse effect on visual or aesthetic resources.

2.1.1.4. California Environmental Quality Act (CEQA) Considerations

The majority of the proposed trail is on an existing RCFC maintenance road and grades on this existing facility will be minimally altered, therefore, views of and from the road would not change. Other portions of the trail, where more substantive earth work and retaining construction are proposed, are under an existing freeway overpass, with no views and no user expectation of scenic resources. The proposed project would result in no impacts to visual or aesthetic resources.

2.1.1.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.1.2. Agriculture and Forest Resources

2.1.2.1. Regulatory Setting

CEQA requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

The City of Temecula is in "Urban" and portions may be in "Shrub," according to Figure I.5: Forest and Rangelands of California in *California's Forests and Rangelands: 2010 Assessment* (the 2015 assessment is not yet available) (California Department of Forestry and Fire Protection, 2010).

The project area is entirely in Urban and Built-Up Land (California Department of Conservation, 2016). The Farmland Type Description is: "Urban and Built-Up Land is occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. Common examples include residential, industrial, commercial, institutional facilities, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, and water control structures" (California Department of Conservation, 2016).

The proposed trail is zoned Open Space Conservation (OS-C). Adjacent zoning to the north is Service Commercial (SC) and OS-C. The adjacent zoning to the south is Community Commercial (CC), Highway/Tourist Commercial (HT), and Business Park (BP) (Temecula, City of, 2005). There is no land that is zoned as forest land in the City of Temecula, and no land zoned for agricultural use in the City of Temecula.

According to the Department of Conservation, Natural Resources Agency, Riverside County Williamson Act FY 2015/2016 (map) Sheet 1 of 3 (western third of county), the project area is entirely within Urban and Built-Up Land (California Department of Conservation, 2016).

2.1.2.2. Affected Environment

The project area is entirely in an urban, developed area. There is no farmland or forest land and no Forest and Rangeland and no such designated land. There are no parcels under a Williamson Act contract within the project limits.

2.1.2.3. Environmental Consequences

The proposed project would result in no adverse impacts to agricultural or forest land as the project is not located in the aforementioned types of land.

2.1.2.4. CEQA Considerations

The proposed project would result in no adverse impacts to agricultural or forest land as the project is not located in the aforementioned types of land.

2.1.2.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.1.3. Land Use and Planning

2.1.3.1. Wild and Scenic Rivers

There are no nationally designated Wild and Scenic Rivers in Temecula. The closest such designated river is Bautista Creek in the San Bernardino National Forest (U.S. Fish and Wildlife Service, No date).

2.1.3.2. Coastal Zone Management Act

According to Public Resources Code Division 20, California Coastal Act, Chapter 2. Definitions, 30103 (a), the coastal zone extends:

> *inland generally 1,000 yards from the mean high tide line of the sea. In significant coastal estuarine, habitat, and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea, whichever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards.*

The project area is outside the coastal zone.

2.1.3.3. Relocations and Real Property Acquisition

No relocations would occur and no property would be acquired for the proposed project (see Appendix K: Agreement regarding Use of Santa Gertrudis Creek Channel for Recreational Purposes, RCFCWCD and City of Temecula, March 21, 1995).

2.1.3.4. Regulatory Setting

On the Temecula General Plan Figure LU-3 Land Use Policy Map, the proposed trail alignment is designated Open Space (OS). The adjacent designations to the north and east of I-15 are Service Commercial (SC) and OS. Designations to the south and east of I-15 are Industrial Park (IP), SC, and Highway Tourist Commercial (HT). West of the interstate is Community Commercial (CC) (Temecula, City of, 2005, Revised 2012).

The zoning closely matches the general plan designations. The proposed trail is zoned Open Space Conservation (OS-C). Adjacent zoning to the north is Service Commercial (SC) and OS-C. The adjacent zoning to the south is Community Commercial (CC), Highway/Tourist Commercial (HT), and Business Park (BP) (Temecula, City of, 2005).

The Temecula General Plan designation OS is intended for "[p]ublic and private areas of permanent open space for such uses as parks, golf courses, recreation facilities, natural open space, recreation trails, greenbelts, lakes, utility easements, active fault zones, and undevelopable portions of floodplains along waterways." No portion of the project area is within one of the City's designated Specific Plan areas (per Figure LU-4, Specific Plan Areas) (Temecula, City of, 2005, Revised 2012).

Per the Temecula Municipal Code, Title 7, Zoning, the Conservation District (OS-C) "is intended for those lands that should remain in a natural state as much as feasible without intrusions from active recreational uses. Improvements may be made to these areas to allow for safe limited public access or for control of erosion, geologic stability, or other public safety purposes. The construction of buildings or other structures is not permitted" (17.14.020C). Table 17.14.030, Schedule of Permitted Uses, lists "Bicycle paths" as conditionally permitted in OS-C.

The proposed project is consistent with the purpose and uses in the OS and OS-C designations.

The Temecula General Plan Open Space Element Goal 8 is: "Development of a trail system that serves both recreational and transportation needs." Policy 8.1 is: "Provide a citywide recreation system that connects to the County's regional trail system which provides for bicycling, equestrian, hiking and jogging trails with appropriate support facilities." Policy 8.5 is: "Develop trails and sidewalks suitable for multiple uses, including for the physically disabled and for personal transportation alternatives." Implementation Program measure OS-29, Parks and Recreation and Multi-Use Trails and Bikeways Master Plans, implements the master plans.

This project is in the City of Temecula Capital Improvement Program, Fiscal Years 2018–2022, revised by amendment on December 12, 2017. As the Capital Improvement Program states, "…this project satisfies the City's Core Value of Transportation Mobility and Connectivity" (Temecula, City of, 2017).

This project is in the City's infrastructure projects list as "Santa Gertrudis Creek Pedestrian/Bicycle Trail Extension and Interconnect, PW08-04." The description of the project in the list is: "Design, environmental document, and construction of the extension of the existing trail from Ynez Road to the Murrieta Creek Trail. The extension includes access and undercrossing at Ynez Road, Interstate 15 and Jefferson Avenue and a continuous paved trail along Santa Gertrudis Creek to connect to Murrieta Creek trail."

The project area is within the Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area. Development activities within the MSHCP area require review and approval by the City through analysis of compliance with the standards and regulations set forth by the MSHCP. Compliance requires an applicant to prepare a MSHCP Consistency document that, depending on the type of impacts and the resources impacted, may also include a Determination of Biologically Equivalent or Superior Preservation (DBESP).

2.1.3.5. Affected Environment

A baseline project area survey was conducted on April 12, 2018. The proposed trail is in a highly disturbed urban corridor with commercial land uses, transportation infrastructure, and light industry. The existing RCFC maintenance and access road, which will be repurposed for the majority of this trail project, is dirt with gravel entrances from paved city roadways. Minor encroachments of the Santa Gertrudis Creek lined channel associated with undercrossings will occur within highly disturbed and modified habitats.

2.1.3.6. Environmental Consequences

The proposed project is in an established community, which it would connect, not divide. In addition to providing pedestrian and bicycle access to Murrieta Creek, the trail extension would connect the residential and commercial areas east of I-15 to the industrial area west of the creek. The proposed project would have no impact on surrounding land uses or land use designations. The trail is consistent with state and local plans, and the project is programmed in the City's project list. An MSHCP compliance document has been prepared for this proposed project. The project does not conflict with the standards or criteria of the Riverside County Multiple Species Habitat Conservation Plan.

The proposed project is a trail extension, and unlike a roadway or utility extension, would not induce development or population growth either directly or indirectly, because it would not be a destination facility—users likely would be current residents or visitors who are in Temecula for other reasons. Likewise, the project alone would not increase the number of residents or induce growth.

The proposed project also falls within the Guidelines Pertaining to the Urban/Wildlands Interface in Section 6.1.4 of the Western Riverside County (WRC) MSHCP. No impacts from drainage, use of toxics, noise generation, light generation, or invasive species are anticipated. The project lies partially within Criteria Cells 6782 and 6783, each of those within Rough Step Area 5. Conservation within each of these cells will contribute to assembly of Proposed Constrained Linkage 13, as described below for cell 6782:

> *Conservation within this Cell will focus on the existing Murrieta Creek channel and adjacent riparian scrub, woodland, forest and grassland habitat to the extent feasible. Areas conserved within this Cell will be connected to grassland and adjacent habitat proposed for conservation in Cell #6782 to the west and to riparian scrub, woodland and forest habitat proposed for conservation in Cell #6890 to the south. Conservation within this Cell will be approximately 5% of the Cell focusing in the southwestern portion of the Cell.*

…and for cell 6783:

> *Conservation within this Cell will focus on riparian scrub, woodland, forest, and Riversidean alluvial fan sage scrub habitat along Murrieta Creek. Areas conserved within this Cell will be connected to riparian scrub, woodland and forest habitat proposed for conservation in Cell #6783 to the north and to Riversidean alluvial fan sage scrub, riparian scrub, woodland and forest habitat proposed for conservation in Cell #6891 to the east. Conservation within this Cell will range from 10%-20% of the Cell focusing in the northeastern portion of the Cell.*

The project lies outside of criteria cells from the northern terminus of the project to approximately 800 feet downstream of Jefferson Avenue. General Management Measures described in Section 5.2.1 of the WRC MSHCP including prevention of unauthorized public access and general maintenance fall within project BMPs described elsewhere in this document, most thoroughly in Section 2.2.2.

2.1.3.7. CEQA Considerations

The proposed project would result in no adverse impacts to land uses, and is consistent with state and local plans.

2.1.3.8. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.1.4. Public Services and Utilities

2.1.4.1. Regulatory Setting

Not applicable.

2.1.4.2. Affected Environment

Fire

The Temecula Fire Department is composed of one Division Chief, two Battalion Chiefs, and sixty firefighting personnel that serve from four fire stations located within the city limits. The closest station to the project area is at 27415 Enterprise Circle West, south of Winchester Road and east of Diaz Road. The Temecula Fire Department fire engines are all four-person staffed, paramedic assessment engines, which ensures that a minimum of one paramedic and three emergency medical technician (EMT)- level personnel at the scene of all emergencies (Temecula, City of, 2018a).

The California Department of Forestry and Fire Protection (Cal Fire), a state agency is dedicated to the fire protection and stewardship of more than 31 million acres of California's privately owned wildlands. In addition, Cal Fire provides varied emergency services in 36 of the State's 58 counties via contracts with local governments (Cal Fire, 2012). It employs approximately 5,324 permanent workers and 1,783 seasonal workers (Cal Fire, 2018).

Police

The Temecula Police Department employs officers at the rate of about one officer per 1,063 residents. The City Police Department is headquartered in Murrieta, off Highway 79, and has two storefronts– one within Promenade Mall that is staffed with a dedicated sergeant and four full-time officers, and one in Old Town, Temecula. Special teams include six school resource officers, the Traffic Unit, and the Homeless Outreach Team. The Traffic Unit is composed of ten motorcycle enforcement officers and seven accident investigators, including a commercial enforcement officer. The Homeless Outreach Team has one Sergeant and four officers (Temecula, City of, 2018c)

California Highway Patrol (CHP) has a Temecula Station (#685) at 27685 Commerce Center Drive. It has jurisdiction over interstate highways, state highways, unincorporated areas, and state government buildings including employees and visitors. The CHP is also responsible for traffic enforcement and traffic investigation on the state highways.

Emergency Services

The City has identified three evacuation locations: Temecula Valley High School at 31350 Rancho Vista Road, Temecula Middle School at 42075 Meadows Parkway, and Mary Phillips Senior Center at 41845 6th Street. The City is updating its 2012 Local Hazard Mitigation Plan.

Three Hospitals serves the City: Temecula Valley Hospital at 31700 Temecula Parkway, Inland Valley Medical Center at 36485 Inland Valley Drive in Wildomar, and Rancho Springs Medical Center at 25500 Medical Center Drive in Murrieta.

Schools

Temecula Valley Unified School District (the District) serves the project area. All of the District's schools are east of I-15; none are in the project area. In the 2016 to 2017 school year, the District had 27,700 students in 32 schools (Temecula Valley Unified School District, No date)**.** For the 2014 to 2015 school year (the most recent year for which data are available), the District had a higher average class size (28.6) than the county (26.6), or the state (25.4). However, enrollment has been declining since the 2012 to 2013 school year (Education Data Partnership, 2018)**.**

Libraries

The two public libraries in Temecula are part of the Riverside County Library System: Grace Mellman Community Library at 41000 County Center Drive and Ronald H. Roberts Temecula Public Library at 30600 Pauba Road (Riverside County Library System, No date).

2.1.4.3. Environmental Consequences

The City of Temecula ensures that police and fire are staffed at ratios proportionate to the needs of residents—one paramedic and three EMTs for each emergency, and one police officer per 1,063 residents. The proposed project would not generate more need for emergency services, either directly or indirectly, because it would not be a destination facility—users likely would be current residents or visitors who are in Temecula for other reasons. Likewise, the project would not increase the number of residents or induce growth such that the number of school-aged children or library users would increase as a result of the project alone. The project would not affect the adequate provision of public services.

The proposed trail project would not require provision of any electric power, water, wastewater, or solid waste disposal needs. No new water or wastewater facilities would be constructed as part of the project. There may be waste generated by project construction in the short term. Waste disposal would follow all applicable regulations.

No utilities would be relocated as part of the proposed project.

2.1.4.4. CEQA Considerations

The proposed project would result in no adverse impacts to public services and utilities.

2.1.4.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.1.5. Recreation

2.1.5.1. Regulatory Setting

The Park Preservation Act (Public Resources Code [PRC] 5400-5409) prohibits state and local agencies from acquiring any property that is in use as a public park without sufficient compensation. The proposed project would not include acquisition of any public park land.

2.1.5.2. Affected Environment

There are two recreation facilities within one-half mile of the project area. Jefferson Recreation Center at 41375 McCabe Court has classroom space and a large multipurpose area. Harveston Community Park at 28582 Harveston Drive has a children's play area, community building, lighted baseball fields, a lighted football/soccer field, picnic areas, picnic shelters, and restrooms. The City has 97 miles of bike lanes and close to 22 miles of trails (Temecula, City of, No date).

2.1.5.3. Environmental Consequences

The proposed project may have a beneficial impact in providing a pedestrian and bicycle connection from Harveston Community Park to Murrieta Creek, because the park is accessed from Ynez Road, which has bike lanes for most of the distance from the park to Ynez Road.

The proposed trail extension also would connect to existing bike lanes on Jefferson Avenue, an existing hard surface paved trail along Diaz Road, and planned natural surface trails along the creek.

Use of the proposed multi-purpose trail is not expected to increase the use of the park or the recreation center or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

2.1.5.4. CEQA Considerations

The proposed project would result in no adverse impacts to parks or recreational facilities.

2.1.5.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.1.6. Transportation/Traffic

2.1.6.1. Regulatory Setting

Caltrans prepares and manages the Federal Statewide Transportation Improvement Program (FSTIP). The FSTIP is a four year statewide intermodal program of transportation projects that is consistent with the statewide transportation plan and planning processes, the metropolitan plans and the Federal Transportation Improvements Programs (FTIPs). The SCAG FTIP is the Final 2019 FSTIP multi-modal transportation project listing for a six-year period for the SCAG region (Section 6 of the FSTIP). This project is listed as Project ID RIV 140301 and Regional Transportation Plan/Sustainable Communities RTP ID 3NL04 under the Riverside County Project Listing, Local Highway (page 25 of 27) in the SCAG Final 2019 FTIP, Volume III of III – Part A (September 2018). The project listing FTIP page is in Appendix N.

The Temecula General Plan Circulation Element Figure C-4 Multi-Use Trails and Bikeways shows this proposed trail extension as a "Multi-Use Trail." The relevant goals and policies of the Circulation element are:

Non-motorized and Alternative Travel Modes

Goal 5 Safe and efficient alternatives to motorized travel throughout the City.

Policy 5.1 Promote pedestrian and bicycle safety by adhering to uniform trail standards and practices and communicating safety practices to the public.

Policy 5.2 Minimize potential conflicts between off-street bicycle and equestrian trails and automobile cross traffic.

Policy 5.4 Provide a comprehensive network of multi-use trails and bikeways between residential areas and commercial/employment activity centers, public institutions, and recreation areas.

Policy 5.5 Apply appropriate restrictions (including prohibiting) to motorized vehicles and cycles using the City's multi-use trail system.

Traffic Safety

Goal 6 Enhanced traffic safety on City streets.

Policy 6.3 Require that vehicular, pedestrian and bicycle traffic be separated to the maximum extent feasible, especially in areas with high traffic volumes.

Implementation Program – Circulation – C-15, Multi-Use Trails and Bikeways Master Plan

Implement the adopted Multi-Use Trails and Bikeways Master Plan to complete design and construction of a comprehensive alternative transportation network, promote safe use of the trail system, and ensure accessibility of pedestrian facilities to the disabled.

Implementation Program – Circulation – C-17, Roadway and Trail Safety

Allow for safe movement of vehicles, bicycles and pedestrians and minimize accidents throughout the City by implementing the following trail safety measures:

- *Enforce posted speed limits throughout the City.*
- *Properly time and periodically adjust traffic signals located along bike routes and where significant pedestrian activity is present.*
- *Develop safe passage routes and alternatives to crossing busy highways within the City.*
- *Construct separated bicycle and pedestrian crossings over I-15 and arterial roadways with heavy traffic volumes.*
- *Place limitations on motorized vehicle and cycle use of the recreation trail system. Individual electric vehicles of limited size may be allowed on the trail system to provide access for the disabled and to support alternate transportation modes.*

2.1.6.2. Affected Environment

The existing trail network is from Ynez Road to the east and Diaz Road to the west, and the City's bike path loop system is northeast of the proposed trail. Major transportation facilities in the project area are I-15, Ynez Road, Jefferson Avenue, and Winchester Road.

2.1.6.3. Environmental Consequences

The proposed trail extension would have a beneficial long-term impact, because it would provide a critical east-west active transportation connection between two parts of the city (commercial and residential areas east of I-15 and the industrial/employment area west of Diaz Road), as well as recreational access to the creek. Undercrossings at Ynez Road, the I-15 Freeway, and Jefferson Avenue would create a safe environment for users, because they could avoid vehicular traffic. Winchester Road will not undergo construction for the new bike lanes, it will only have changes to signing and striping to accommodate a new layout and improved bicycle and vehicle separation.

Construction of the proposed project is not anticipated to require any short-term street closures.

The proposed project is planned for in the City's General Plan and the City's Multi-Use Trails and Bicycle Master Plan, and is consistent with the City's goals and policies.

2.1.6.4. CEQA Considerations

The proposed project would result in no significant adverse impacts to transportation and traffic.

2.1.6.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required. No transportation management plan to avoid and minimize potential impacts on traffic is anticipated to be needed.

2.2. PHYSICAL ENVIRONMENT

2.2.1. Hydrology and Floodplain

2.2.1.1. Regulatory Setting

The hydraulic and scour study completed for the project in 2019 describes the regulatory setting (Rivertech Inc., 2019).

2.2.1.2. Affected Environment

The existing condition (the maintenance access road) appears to contribute stormwater runoff due to its mostly impervious packed-dirt surface, and some runoff comes from vehicles using the access road. The project design has not been changed since the initial 2014 hydraulic analysis was completed. The analysis used the 100-year peak discharge of 11,300 cubic feet per second (cfs). The majority of the proposed project lies outside of the 100-year floodplain (Rivertech Inc., 2019).

2.2.1.3. Environmental Consequences

The proposed project would result in an increase of impervious area, and therefore could increase the volume and velocity of stormwater runoff to downstream receiving water bodies due to the mostly impervious nature of the existing dirt access road. However, the project is not expected to increase stormwater runoff in significant quantities. Additionally, the project will be pursuing an exemption to being a Priority Development Project under the California Regional Water Quality Control Board, San Diego Region, Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 and Order No. R9-2015-0100. The exemption is allowed under the Order at the discretion of the committee due to its classification of a bicycle/pedestrian trail. To qualify for the exemption, the project will be designed and constructed to: 1.) Direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas; or 2.) To be hydraulically disconnected from adjacent paved streets or roads; or 3.) With permeable pavements or surfaces in accordance with USEPA Green Street guidance.

2.2.1.4. CEQA Considerations

The proposed project would result in less-than-significant impacts on the hydrology and floodplain in the project vicinity.

2.2.1.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required. Project impacts are minimized in that the bicycle/pedestrian trail does not encroach into the creek prism more than design standards require.

2.2.2. Water Quality and Stormwater Runoff

2.2.2.1. Regulatory Setting

Federal

Clean Water Act

In 1972, Congress amended the federal Water Pollution Control Act, making the addition of pollutants to waters of the United States from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit program. The important CWA sections are:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the United States to obtain certification from the state that the discharge will comply with other provisions of the act. This certification is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the United States. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of stormwater from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by the U.S. Army Corps of Engineers (USACE). The goal of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

USACE issues two types of 404 permits: General Permits and Standard Permits. There are two types of General Permits: Regional Permits and Nationwide Permits. Regional Permits are issued for a general category of activities when they are similar and cause minimal environmental effect. Nationwide Permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE's Standard Permits. There are two types of Standard Permits: Individual Permits and Letters of Permission. For Standard Permits, the USACE decision to approve is based on compliance with the EPA Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] § 230), and whether the permit approval is in the public interest. The Section 404 (b)(1) Guidelines were developed by EPA in conjunction with USACE and allow the discharge of

dredged or fill material into the aquatic system (waters of the United States) only if no practicable alternative exists that would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" to the proposed discharge that would have lesser effects to waters of the United States and not cause any other significant adverse environmental consequences.

According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the United States. In addition, every permit from the USACE, even if not subject to the Guidelines, must meet general requirements. See 33 CFR Part 320.4.

State

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Water Quality Control Act (Porter-Cologne Act), enacted in 1969, provides the legal basis for water quality regulation in California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface water and/or groundwater of the state. The act predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the United States, such as groundwater and surface waters, which are not considered waters of the United States. Additionally, the Porter-Cologne Act prohibits discharges of "waste" as defined, and this definition of "waste" is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Board and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA, and for regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, the RWQCBs designate beneficial uses for all water body segments and then set the criteria necessary to protect these uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the State Water Board identifies waters failing to meet standards for specific pollutants. These waters are then state listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and that the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), then the CWA requires establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, nonpoint, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The State Water Board administers water rights, sets water pollution control policy, issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System Program

Municipal Separate Storm Sewer Systems (MS4s)

Section 402(p) of the CWA requires issuance of NPDES permits for five categories of stormwater discharges, including MS4s. The EPA defines an MS4 as a conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over stormwater, that is designed or used for collecting or conveying stormwater. (U.S. Environmental Protection Agency, 2018) California's State Water Resources Control Board (SWRCB) has identified Caltrans as an owner/operator of an MS4 under federal regulations. Caltrans' MS4 Permit covers all Caltrans rights-of-way, properties, facilities, and activities in the state. The State Water Board or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Caltrans' MS4 Permit (Order No. 2012-0011-DWQ) was adopted on September 19, 2012, and became effective on July 1, 2013. The permit has three basic requirements.

1. Caltrans must comply with the requirements of the Construction General Permit (see below);
2. Caltrans must implement a year-round program in all parts of the state to effectively control stormwater and non-stormwater discharges; and
3. Caltrans' stormwater discharges must meet water quality standards through implementation of permanent and temporary (construction) BMPs, to the maximum extent practicable, and other measures the State Water Board determines necessary to meet the water quality standards.

To comply with the permit, Caltrans developed the statewide Storm Water Management Plan (SWMP) to address stormwater pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within Caltrans for implementing stormwater management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices Caltrans uses to reduce pollutants in stormwater and non-stormwater discharges. It outlines procedures and responsibilities for protecting water quality, including selection and

implementation of BMPs. Further, in recent years, hydromodification control requirements and measures to encourage low impact development have been included as a component of new development permit requirements. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest statewide SWMP to address stormwater runoff.

Construction General Permit

Construction General Permit (Order No. 2009-009-DWQ), adopted on September 2, 2009, became effective on July 1, 2010. The Construction General Permit was amended by 2010-0014-DWQ and 2012-0006-DWQ on February 14, 2011, and July 17, 2012, respectively. The permit regulates stormwater discharges from construction sites that result in a disturbed soil area (DSA) of 1 acre or greater and/or are smaller sites that are part of a larger common plan of development. By law, all stormwater discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least 1 acre must comply with the provisions of the Construction General Permit. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The 2009 Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters and whether the receiving water has been designated by the SWRCB as sediment-sensitive. SWPPP requirements vary according to the risk level. For example, a Risk Level 3 (highest risk) project would require compulsory monitoring of stormwater runoff pH and turbidity and certain BMPs, and in some cases, before-construction and after-construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with Caltrans' Standard Specifications, a Water Pollution Control Program rather than a SWPPP is necessary for projects with a DSA of less than 1 acre.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the United States must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering a 401 Certification are CWA Section 404 permits issued by USACE. The 401 Certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required if the USACE issues a Section 404 permit or if there are permanent impacts to jurisdictional waters of the state.

In some cases, the RWQCB may have specific concerns about discharges associated with a project. As a result, the RWQCB may issue a set of requirements, known as Waste Discharge Requirements (WDRs) under the State Water Code (Porter-Cologne Act), that define activities,

such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals, that must be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

2.2.2.2. Affected Environment

An SWPPP will be completed before construction begins, and will describe the affected environment and anticipated impacts in detail.

The project area is within the Santa Margarita (Hydrologic Unit Code 18070302) watershed. This watershed drains to the Pacific Ocean.

2.2.2.3. Environmental Consequences

Pollutant loading could increase as a result of the proposed project. Pollutants resulting from the trail use are not expected to increase significantly, because the trail is intended for non-motorized use only.

Potential Water Quality Impacts

During construction, potential water quality impacts include sediment-laden discharge from DSAs and pollutant-laden discharge from storage or work areas. Temporary impacts could also result from construction near or within water bodies. Permanent impacts on water quality could result from the addition of impervious area; this additional impervious area prevents runoff from infiltrating into the ground, resulting in increased runoff. The additional runoff has the potential to transport an increased amount of sediment and pollutants to waterways and water resources, and create increased scour in drainage ways. The project's drainage systems would be designed to route flows to and from the permanent stormwater treatment BMPs that would be implemented as part of the project.

Suspended Particulates (Turbidity)

Sources of sediment that could result in increases in turbidity in receiving waters include uncovered or improperly covered active and inactive stockpiles, unstabilized slopes and construction staging areas, and construction equipment that is not properly cleaned. Concentrated runoff resulting from the addition of impervious area could result in the direct discharge of sediment-laden flow from the trail to receiving water bodies.

Oil, Grease, and Chemical Pollutants

A temporary rise in pollutants may occur as a result of construction. Permanent impacts are anticipated to be negligible, because the trail is intended for non-motorized vehicles and pedestrians.

2.2.2.4. CEQA Considerations

The proposed project would result in less-than-significant impacts on hydrology and water quality.

2.2.2.5. Avoidance, Minimization, and/or Mitigation Measures

The City of Temecula will implement the following standard measures and meet related permit conditions as part of the project in order to avoid and minimize effects related to hydrology and water quality. Mitigation is also discussed below.

Required Temporary BMPs

The design features to address water quality impacts are a condition of the Caltrans MS4 Permit, Construction General Permit, and other regulatory agency requirements. Potential temporary impacts to water quality can be avoided or minimized by implementing standard BMPs, which will be consistent with the practices required under the Construction General Permit and MS4 Permit, and are intended to achieve compliance with the requirements of the permits. Based on the *Long Form – Storm Water Data Report,* (Caltrans, 2017) the proposed project is a Risk Level 2 project under the Construction General Permit; therefore, the SWPPP will specify minimum erosion and sediment control BMPs and monitoring of turbidity and pH at stormwater discharge points. Compliance with the requirements of these permits and the SWPPP, and adherence to the conditions, would reduce or avoid potentially significant construction-related impacts.

Required Permanent Pollution Prevention Design Measures

The project would involve more than 1 acre of added impervious area, and therefore appropriate treatment BMPs would need to be implemented for areas within Caltrans' right-of-way. The Caltrans MS4 Permit contains provisions to reduce, to the maximum extent practicable, pollutant loadings from the facility, once construction is complete. The permit stipulates that permanent measures that control pollutant discharges must be considered and implemented for all new or reconstructed facilities. Permanent control measures located within Caltrans' right-of-way currently reduce pollutants in stormwater runoff from the roadway along Winchester Road. These measures reduce the suspended particulate loads, and thus the pollutants associated with the particles, that are entering waterways. The measures required by the permit would be incorporated into the final engineering design or landscape design of the project and would take into account expected runoff from the roadway. In addition, the permit also stipulates that an operation and maintenance program be implemented for permanent control measures. This category of water quality control measures can be identified as including both design pollution prevention BMPs and treatment BMPs.

Required Mitigation

A nationwide permit verification (#42, Recreational Facilities was received for the project on January 30, 2019).). A total of 0.010-acre of mitigation bank-provided rehabilitation credit, as agreed upon with the USACE, will be purchased from the San Luis Rey mitigation bank, in

Oceanside, San Diego County. The project shall not infringe upon waters of the U.S. prior to receiving written confirmation from the Corps Regulatory Division as to compliance with this special condition.

A section 401 Water Quality Certification is required for permanent impacts to natural (vegetated and sediment bearing) channel segments within Santa Gertrudis Creek. Permanent impacts will be mitigated with the purchase of reestablishment credits at the San Luis Rey mitigation bank in Oceanside, San Diego County and as well as preservation credits at the Barry Jones (i.e. Skunk Hollow) mitigation bank, located in Temecula, Riverside County.

2.2.3. Soils and Mineral Resources

2.2.3.1. Regulatory Setting

A geotechnical investigation prepared for the project describes the related regulatory setting (Geocon Geotechnical Consultants, 2010).

2.2.3.2. Affected Environment

According to the U.S. Geological Survey *2012-2013 Minerals Yearbook* (the most recent available), common clay is mapped in the Temecula area, with crushed stone (CS), construction sand and gravel (SG), and industrial sand (IS) north of the city (see Figure 3, Soils, Appendix M) (U.S. Geological Survey, 2016, Revised 2017). In Temecula, there is one firm in the mining (non-oil and gas) sector (NAICS code 212) that has five employees (Claritas, LLC, 2018).

The Temecula General Plan does not designate or otherwise identify mineral resource sites (Temecula, City of, 2005, Revised 2012).

2.2.3.3. Environmental Consequences

The 2010 geotechnical investigation found that no soil or geologic conditions were encountered that would preclude development of the property for the proposed use, provided that the trail is developed and designed in accordance with the following recommendations:

- The upper portion of undocumented fill and alluvium are considered unsuitable in their present condition for support of surface improvements and will require remedial grading.
- Groundwater was encountered at depths of 41.4 and 26.6 feet below existing ground surface in borings B 14 and B 15, respectively, during the subsurface investigation. However dependent upon the time of year grading occurs, water flowing in Santa Gertrudis Creek and perched water conditions in the undocumented fill and alluvium may be encountered.
- Liquefaction of the underlying alluvial soil during a seismic event is considered likely and is anticipated to result in approximately 5 inches and 3 inches of total and differential settlement, respectively. Other surface manifestations of liquefaction include sand boils, lateral spreading, and sudden loss of bearing capacity.

Based on the lack of known mineral resources and mining businesses, and the character of the proposed trail, the proposed project would not interfere with availability of known mineral resources.

2.2.3.4. CEQA Considerations

The proposed project would result in no adverse impacts to mineral resources.

2.2.3.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.2.4. Cultural Resources and Paleontology

2.2.4.1. Regulatory Setting

The Phase I Cultural Resources Assessment and the Paleontological Resource and Mitigation Monitoring Assessment describes the related regulatory setting. It is included as Appendix O.

2.2.4.2. Affected Environment

The Phase I Cultural Resources Assessment that was prepared for the proposed project in March 2018 characterizes the Area of Potential Effect (APE) as developed and disturbed. The proposed project is situated along the southern bank of the channelized Santa Gertrudis Creek and is currently entirely covered by decomposing granite, gravel, concrete, and/or asphalt. All of the proposed trail improvement corridor has been disturbed, extensively in some locations, which has likely resulted in the removal or burial of any cultural resources that may have been situated adjacent to the creek. No cultural resources were identified within the project alignment during the focused archaeological survey. This result is consistent with other surveys that have included portions of the APE.

A Paleontological Resource and Mitigation Monitoring Assessment was prepared for the proposed project in March 2018. As that assessment describes, more than 400 fossil localities are known from the Pauba Formation and underlying sedimentary units in the Temecula and Murrieta areas, although no fossil localities have previously been recorded along the project alignment. Based on the geologic formation and because of the abundance of terrestrial vertebrate fossils that have been recorded from the Pauba Formation and underlying units throughout this area, the formations have been assigned a “High” paleontological resource sensitivity.

2.2.4.3. Environmental Consequences

Based upon the archaeological survey and associated research, no cultural resources were identified within the project alignment. Although the area has been previously disturbed and developed, there still remains a possibility for buried cultural resources to be located within the APE. Because of the developed status of the project alignment, an unobstructed view of the

natural ground surface could not be achieved during the survey. Because there is still a possibility of buried cultural resources within the APE, it is recommended that all earthwork required for the project be monitored by a qualified archaeologist and a Native American representative.

2.2.4.4. CEQA Considerations

The proposed project may result in impacts to cultural and paleontological resources, but these impacts will not be significant with implementation of mitigation measures intended to protect, preserve, and avoid these resources as described in section 2.2.4.5.

A Public Resource Code (PRC) Compliance Memo will be prepared by the Caltrans Cultural Studies unit in evaluation of Caltrans properties affected or intersected by the Project. A Caltrans Paleontologist submitted comments on the paleontological technical study submitted on 12/7/18. A revised study addressing the agency comments was resubmitted to Caltrans staff on 12/19/2018 in support of the compliance memo preparation.

2.2.4.5. Avoidance, Minimization, and/or Mitigation Measures

Full-time paleontological monitoring of mass grading and excavation activities, including utility trenching, in areas mapped as areas of paleontological resource sensitivity should be required along the northeastern part of the project alignment, from Jefferson Avenue and northeastward, to mitigate potential impacts to nonrenewable paleontological resources (i.e., fossils). A Mitigation Monitoring and Reporting Program (MMRP) consistent with the provisions of the CEQA, regulations currently implemented by the City of Temecula and the County of Riverside, and proposed guidelines of the Society of Vertebrate Paleontology should be implemented for any grading and excavation activities.

Because only shallow grading and excavation activities are expected southwest of Jefferson Avenue, and because the surficial sediments that are expected to be affected are probably Holocene (modern) in age, paleontological monitoring is not recommended for this part of the project alignment.

The paleontological MMRP is contained in the Paleontological Resource and Mitigation Monitoring Assessment. The buried cultural resources MMRP is contained in the Phase I Cultural Resources Assessment.

2.2.4.5.1. Pechanga Tribe Comments on Cultural Resources Assessment

See Appendix F, Avoidance Minimization and/or Mitigation Summary (Section F.6) for a list of requests from the Pechanga Tribe regarding the language in the Cultural Resources Assessment (Appendix O).

2.2.5. Hazardous Waste/Materials

2.2.5.1. Regulatory Setting

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, created a tax on the chemical and petroleum industries and provided broad federal authority to respond directly to releases or threatened releases of hazardous substances that may endanger public health or the environment. It established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provides for liability, and established a trust fund to provide for cleanup when no responsible party could be identified.

The federal Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste.

The California Hazardous Waste and Substances Sites List (Cortese List) (Government Code Section 65962.5) is a planning resource used by the state, local agencies, and developers to comply with the CEQA requirements in providing information about the location of hazardous materials release sites (California Environmental Protection Agency, 2018).

The Cortese List is composed of five lists:

1. List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) EnviroStor database (discussed below, in the affected environment section)
2. List of Leaking Underground Storage Tank Sites by County and Fiscal Year from the State Water Board's GeoTracker database (discussed below in the affected environment section)
3. List of solid waste disposal sites identified by the State Water Board as having waste constituents above hazardous waste levels outside the waste management unit—This list is of 25 sites, none of which are located in Temecula, that are mostly landfills and military installations.
4. List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC—This list is only two businesses, one in Vernon and the other in Van Nuys.
5. List of "active" Cease and Desist Orders and Cleanup and Abatement Orders from the State Water Board—None of those listed are in Temecula.

2.2.5.2. Affected Environment

The EPA's Envirofacts database lists 150 reporting sites in the project vicinity. Many of these are industrial uses on Winchester Road, west of Diaz Road, in the industrial area, and in the commercial area east of Ynez Road, mostly gas stations, auto body shops, and related uses. The closest Superfund site is the Camp Pendleton Marine base, approximately 20 miles to the southwest (U.S. Environmental Protection Agency, No date).

The California Department of Toxic Substances Control has a data management system (EnviroStor) for tracking its cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further. EnviroStor lists 11 such sites in the City of Temecula. Two sites are inactive, one requires no action, and the remainder are school investigations. There are no state response, voluntary response, or school cleanup sites in the vicinity of the proposed project (California Department of Toxic Substances Control, 2018). According to the State Water Resources Control Board database, there are four leaking underground storage tanks along Jefferson Avenue on both sides of Winchester Road (two gas stations, a car dealership, and a car wash) and two cleanup program sites (a tire store on Winchester Road and a dry cleaner to the south), but cleanup at all six sites has been completed and the cases are closed (California State Water Resources Control Board, 2018).

2.2.5.3. Environmental Consequences

The proposed trail project would neither remove any hazardous waste nor require any hazardous materials for construction. The project would not disturb any known hazardous waste site.

2.2.5.4. CEQA Considerations

No further technical studies are needed. The proposed project is considered "Low Risk".

2.2.5.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.2.6. Air Quality

2.2.6.1. Regulatory Setting

The proposed project is located in the South Coast Air Basin and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SCAQMD is the primary agency responsible for writing the Air Quality Management Plan (AQMP) in cooperation with the Southern California Association of Governments, local governments, and the private sector. The SCAQMD Final 2016 Air Quality Management Plan provides the blueprint for meeting state and federal ambient air quality standards (SCAQMD, 2017).

The Temecula General Plan contains an Air Quality Element. Goal 3 is: "Enhance mobility to minimize air pollutant emissions." Policy 3.4 is: "Establish a convenient and efficient system of bicycle routes and pedestrian walkways" (Temecula, City of, 2005, Revised 2012).

2.2.6.2. Affected Environment

The Temecula General Plan Air Quality Element notes that "Riverside County generates the lowest volume of annual emissions of any county in the South Coast Air Basin. This is due to the Lake Elsinore Convergence Zone, where coastal winds block air pollutants from the rest of the South Coast Air Basin. However, because of topographical and climatological factors, County residents are exposed to greater health risk s from air pollution than other residents in the Basin."

SCAQMD only monitors ozone at the Temecula Valley air quality station. The other criteria pollutants (which are not monitored at the Temecula Valley air quality station) are carbon monoxide, nitrogen dioxide, sulfur dioxide, suspended and fine particulates, lead, and sulfate suspended particulates. In 2016 (the most current data available), ozone levels exceeded the current federal and state 8-hour standard (0.070 parts per million [ppm]) on approximately 20 days (SCAQMD, 2016).

2.2.6.3. Environmental Consequences

The proposed trail project will not increase motorized vehicle capacity. It will have no impact on traffic volumes. The proposed project will not conflict with the AQMP, violate any air quality standard, result in a net increase of any criteria pollutant, or expose sensitive receptors to substantial pollutant concentrations. Impacts will be less than significant.

The proposed project may have a long-term beneficial impact if travelers use the trail for trips on foot or by bike instead of using an automobile.

The proposed project would generate a less than significant amount of pollutants during construction because of the short duration of project construction (140 working days). However, during construction, short-term, localized degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Emissions from construction equipment also are expected and would include carbon monoxide (CO), nitrogen oxides (NOx), volatile organic compounds (VOCs), directly-emitted particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants such as diesel exhaust particulate matter.

2.2.6.4. CEQA Considerations

In review of the project under CEQA consideration for the Caltrans encroachment permit, the agency found that the project is exempt from air quality conformity determination because it qualifies as an exempt project (bicycle and pedestrian facilities) listed in 40CFR 93.126. This exemption is because the project will not generate air quality pollutants. An air quality report is not required.

2.2.6.5. Avoidance, Minimization, and/or Mitigation Measures

Implementation of the following standardized measures will reduce any air quality impacts resulting from construction activities:

- Water or dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emissions or at the right-of-way line, depending on local regulations.
- Soil binder will be spread on any unpaved roads used for construction purposes and on all project construction parking areas.
- Trucks will be washed as they leave the right-of-way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by California Code of Regulations Title 17, Section 93114.
- A dust control plan will be developed that will document sprinkling, temporary paving, speed limits, and timely revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.
- All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust (particulate matter) during transportation.
- Dust and mud that are deposited on paved public roads due to construction activity and traffic will be promptly and regularly removed to decrease particulate matter.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

2.2.7. Noise

2.2.7.1. Regulatory Setting

The City of Temecula Municipal Code standards in Table N-1 (Chapter 9.20, Noise) for the land uses in the project area are: 70 dBA (standard A-weighted frequency response of a sound level meter) maximum exterior noise level for commercial and office, 65 dBA for public/institutional and open space, and 75 dBA for light industrial uses (Temecula, City of, 2018b).

The General Plan Noise Element identifies the main source of noise as transportation activities and stationary sources such as "commercial establishments, machinery, air conditioning systems, compressors, residential and recreational uses, and landscape maintenance equipment." Figure N-1 shows the 2002 baseline roadway noise contours in the project area as 60 and 65 Community Noise Equivalent Level (a noise level that accounts for increased human sensitivity at night), and 75 adjacent to I-15 (Temecula, City of, 2005, Revised 2012).

2.2.7.2. Affected Environment

The project area is in a highly disturbed urban corridor with commercial land uses, transportation infrastructure, and light industry, and is therefore characterized by urban noise levels, including traffic on I-15, Ynez Road, Winchester Avenue, and Jefferson Avenue.

2.2.7.3. Environmental Consequences

The trail extension and its pedestrian and bicyclist users would not generate any noise above the existing baseline level. If travelers shift from auto trips to trips by bicycle or walking, the project may have a beneficial impact by reducing traffic noise. Construction of the trail extension would generate noise temporarily, but it would be limited in duration to 140 working days and would occur only during daytime hours.

2.2.7.4. CEQA Considerations

The proposed project is not a Type I project, and a Noise Study Report is not required. To minimize construction-generated noise, sound control should conform to Standard Special Provision (SSP) 14-8.02.

2.2.7.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

2.3. BIOLOGICAL ENVIRONMENT

Potential biological resource issues associated with the proposed project were identified through review of existing information and field surveys conducted within the environmental study limit (also referred to as the biological study area [BSA]). In addition, the following studies and surveys were conducted to document biological resources in the BSA (see Appendix A) and to identify potential impacts associated with the proposed project:

- General habitat evaluation to determine whether suitable habitat exists for special-status plant and animal species.
- Botanical field surveys to map land cover types, including natural communities, and survey for special-status plant species.
- Jurisdictional determination of waters of the United States and waters of the State and other regulatory body jurisdictions.
- Surveys for nesting migratory birds.
- An assessment of each of the three underpasses for bird and bat roosting habitat.

All of the biological surveys were conducted in one field visit on April 12, 2018. Detailed survey methods can be found in the MSHCP Consistency Analysis and Determination of Biologically Equivalent or Superior Preservation Report (Appendix H).

2.3.1. Natural Communities

This section discusses natural communities of concern and focuses on biological communities, rather than on individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation refers to the action of dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act (FESA) are discussed below in Section 2.3.5, Threatened and Endangered Species 5. Wetlands and other waters are also discussed below in Section 2.3.2. Fish passage is not discussed in this document, because the project does not impact any fish-bearing water bodies.

Land cover consists of three types throughout the BSA: (1) a packed dirt access road with disturbed margins, (2) paved roads and sidewalks, and (3) the partially vegetated creek prism with concrete lining. The dirt portion of the access road and the paved areas have no apparent habitat function. All segments of the Santa Gertrudis Creek channel within the project corridor are subject to semi-regular vegetation and sediment removal by the Flood Control District to maintain conveyance and reduce the risk of flooding. This practice prevents establishment of large statute woody vegetation within the project area. This maintenance is conducted at least annually, and additional maintenance is conducted as needed.

2.3.1.1. Regulatory Setting

The project is located within the jurisdictional boundaries of the Multi-Species Habitat Conservation Plan for Western Riverside County (MSHCP). The project is a conditionally compatible use under the MSHCP (Volume I, Section 7.4.2), because the trail is provided for public use and recreation, and is less than 20 feet wide throughout its length, but because it intersects with Public/Quasi-Public lands, it is subject to conservation and mitigation requirements outlined in the MSHCP.

Public/Quasi-Public [PQP] lands are mapped within Santa Gertrudis Creek and at the confluence with Murrieta Creek, and stop at the Winchester Road crossing over Murrieta Creek. The three overcrossings are not included in PQP mapping, because each is either city or state right-of-way and is not within the PQP domain. As a result of project overlap with jurisdictional areas regulated under the MSHCP a Determination of Biological Equivalent or Superior Preservation (DBESP) was submitted to Western Riverside County Regional Conservation Authority (RCA) along with an MSHCP Consistency Analysis and Joint Project Review (JPR) application on January 2, 2020.

Coordination was initiated with Caltrans to evaluate potential impacts to natural communities to comply with CEQA standards specific to encroachment permitting necessitated by the proposed trail passing through the overpass right-of-ways. Natural resources documentation in the form of a Natural Environment Study – Minimal Impacts report (NESMI) was prepared for the project corridor and submitted to Caltrans on December 21, 2018 (see Section 2.3.2.4). Additionally, project compliance with the Western Riverside County HCP was coordinated with HCP stakeholders (USFWS, RCA, CDFW, USACE, RWQCB) through multi-agency conferences and subsequent phone and electronic communications.

2.3.1.2. Affected Environment

The BSA vicinity is a disturbed corridor with surrounded by commercial land use, transportation infrastructure, and light industry. The stream channel is concrete-lined throughout. The segment from Ynez Road to the west side of I-15, at the southbound ramp, is characterized by heavy sand deposition and braided relict and ephemeral channels. There are transient camps beneath the interstate overpasses.

The baseline survey conducted on April 12, 2018, identified no critical habitat present within the BSA due to the low stature and degraded conditions of the natural environment and vegetation communities. Cosmopolitan and non-native species dominate within the sand reach. There was no flowing water at the time of survey within the sand-dominated stretch of the waterway of Santa Gertrudis Creek. West of the check dam and the southbound off-ramp, there is little to no sediment, and vegetation occurs only within cracks in the concrete. Very small flows enter from stormwater pipes on the north bank of the stream. Standing water begins approximately 1,200 feet west of Jefferson Avenue due to backwater from the larger Murrieta Creek stream system. Black –necked stilts, herons, coots and ducks were observed within this segment of the waterway, and the vegetation is dominated by *Scirpus* species. The primary channel was mapped with a Trimble Global Positioning System (GPS) unit with an accuracy of less than 3 feet.

The access road is paved or gravel throughout the length of the project area, except where city road and interstate overpasses occur. Vegetation along the access road is located on the other side of the fencing from the waterway and is dominated by non-native landscaping cultivars.

Natural vegetation is limited to areas outside of the proposed project work areas, specifically at the west end of the project area.

No special resource protection areas are defined in the project area, because Temecula is not assigned a certified Local Coastal Plan and is not within 100 feet of a potential environmentally sensitive habitat area as defined by the California Coastal Act of 1976.

2.3.1.3. Environmental Consequences

Environmental consequences resulting from the project are expected to be minimal with small areas of permanent and temporary impacts to natural communities. These areas, include frequently disturbed (removed) woody riparian vegetation, sediment dominated stream channel, and non-native herbaceous vegetation communities. The proposed project would result in 0.54-acre of permanent impacts and 0.19-acre of temporary impacts to existing PQP conserved lands as regulated by the MSHCP. Per MSHCP, Section 3.2.1, if permanent impacts to PQP lands alter the land in a way that alters its contribution to Reserve Assembly, replacement at a minimum 1:1 ratio would be required.

The proposed project includes 0.54 acre of permanent impacts and 0.19 acre of temporary impacts to existing Public/Quasi-Public (PQP) conserved lands. Of this total, 0.19 acre of permanent impacts is associated with the top of bank (i.e., existing RCFC & WCD right-of-way access/maintenance road) and is located outside MSHCP riverine resources. This impact is comprised of developed or disturbed habitat based on the MSHCP baseline mapping. Project impacts to 0.19-acre habitat will not constrain the function and values associated with the PQP land in this area. As such, this impact would not be subject to the minimum 1:1 replacement requirement. An additional 0.19 acre of permanent impacts and 0.19 acre of temporary impacts are associated with the Jefferson Avenue crossing and are located within MSHCP riverine (i.e., concrete lined channel). These impacts are comprised of developed or disturbed habitat based on the MSHCP baseline mapping. Project impacts to developed or disturbed habitat will not constrain the function and values associated with the PQP land in this area. As such, this impact would not be subject to the minimum 1:1 replacement requirement. Next, 0.01 acre of permanent impacts is associated with the I-15 crossing and is located outside of mapped MSHCP riparian or riverine resources and within the existing RCFC&WCD right-of-way access/maintenance road. This impact is comprised of developed or disturbed habitat based on the MSHCP baseline mapping. Project impacts to developed or disturbed habitat will not constrain the function and values associated with the PQP land in this area. As such, this impact would not be subject to the minimum 1:1 replacement requirement. Finally, 0.15 acre of permanent impacts are associated with the Ynez Road crossing, of which 0.08 acre is located within MSHCP riparian areas, 0.04 acre is located within MSHCP riverine areas, and 0.02 acre is located outside of mapped MSHCP riparian or riverine resources. These impacts are comprised of developed or disturbed habitat based on the MSHCP baseline mapping. Project impacts to developed or disturbed land

will not constrain the function and values associated with the PQP land in this area. As such, this impact would not be subject to the minimum 1:1 replacement requirement.

The proposed project action, assessment of impacts, and proposed mitigation as discussed above were include in the JPR submittal to RCA (January 2, 2020). The JPR review process was completed for the project by RCA with issuance of finding of consistency with the MSHCP Criteria and Other Plan requirements on January 15, 2020 (JPR 19-02-04-01). On January 30, 2020 the City received an email concurrence statement from CDFW and USFWS agreeing with the findings of the RCA (Appendix P).

2.3.1.4. Avoidance, Minimization, and/or Mitigation Measures

The following applicable construction guidelines taken from Section 6.1.4 and 7.5.3 of the MSHCP will be implemented during construction to minimize impacts and avoid criteria areas, and to ensure that the project will be biologically equivalent or superior to the avoidance alternative as required by the MSHCP. Standard best management practices as provided under Appendix C of the MSHCP shall also be implemented by the project as standard conditions.

- Plans for water pollution and erosion control will be prepared for all Discretionary Projects involving the movement of earth in excess of 50 cubic yards. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. Plans will be reviewed and approved by the County of Riverside and participating jurisdiction prior to construction.
- Timing of construction activities will consider seasonal requirements for breeding birds and migratory non-resident species. Habitat clearing will be avoided during the species' active breeding season, defined as March 1 to June 30.
- Sediment and erosion control measures will be implemented until such time as soils are determined to be successfully stabilized.
- Short-term stream diversions will be accomplished by use of sand bags or other methods that will result in minimal instream impacts. Short-term diversions will consider effects on wildlife.
- Silt fencing or other sediment trapping materials will be installed at the downstream end of construction activities to minimize the transport of sediments off-site.
- No erodible materials will be deposited into water courses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
- The footprint of disturbance will be minimized to the maximum extent feasible. Access to sites will occur on pre-existing access routes to the greatest extent possible.
- Equipment storage, fueling, and staging areas will be sited on non-sensitive upland habitat types with minimal risk of direct discharge into riparian areas or other sensitive habitat types.

- The limits of disturbance, including the upstream, downstream, and lateral extents, will be clearly defined and marked in the field. Monitoring personnel will review the limits of disturbance before construction activities begin.
- During construction, the placement of equipment within the stream or on adjacent banks or adjacent upland habitats occupied by covered species that are outside of the project footprint will be avoided.
- Exotic species removed during construction will be properly handled to prevent sprouting or regrowth.
- Training of construction personnel will be provided.
- Ongoing monitoring and reporting will occur for the duration of the construction activity to ensure implementation of best management practices.
- Active construction areas will be watered regularly to control dust and minimize impacts to adjacent vegetation.
- All equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur in designated areas only within the proposed grading limits of the project site. These designated areas will be clearly marked and located in such a manner as to contain runoff.
- Waste, dirt, rubble, or trash will not be deposited in the Conservation Area or on native habitat.

Additional project-specific measures:

- Staging will take place beyond the top of bank, in the upland area. No off-site impacts are proposed. Equipment will not be stored in the creek bottom, and egress from the creek bottom will be available at all times if it rains. A staging area will be positioned at the trail entrance at Winchester Road.
- Work will not be conducted within the creek during the rainy season (October 1 to April 30). Work will be conducted from the top of bank to the maximum extent practicable.
- Impacts from the path undercrossing at Ynez Road will not extend beyond the outer dimension of the path and retaining wall as designed. Excavation and construction will be conducted from the top of bank or within the footprint of permanent impacts.
- Exclusion fencing will be placed to clearly delineate no-work areas including riparian habitats, wetlands, and flow paths outside of the designated disturbance area.

Mitigation to replace lost function and values of temporarily and permanently lost vegetation cover and riverine function will be secured through purchase of mitigation credits. The proposed mitigation will occur at the Skunk Hollow Vernal Pool Preserve (Mitigation Bank) in Murrieta, CA. The bank is owned and managed in perpetuity by the Center for Natural Lands Management (CNLM). A ratio of 1:1 for temporary impacts and 3.4:1 for permanent impacts will result in a proposed purchase of 0.50 acres of credits from this bank.

2.3.2. Wetlands and Other Waters

2.3.2.1. Regulatory Setting

Federal

At the federal level, the Clean Water Act, or CWA (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. In the absence of adjacent wetlands, the lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM). When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the USACE with oversight by the EPA.

The USACE issues two types of Section 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with EPA's Section 404(b)(1) Guidelines (40 CFR 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines were developed by the EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative that would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" to the proposed discharge that would have lesser effects on waters of the United States and that would not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as the Federal Highway Administration (FHWA), as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. In addition, a Wetlands Only Practicable Alternative Finding must be made.

State

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (or SWRCB), the RWQCBs, and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of, or substantially change the bed or bank of, a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Lake or Streambed Alteration Agreement obtained from the CDFW.

The RWQCBs were established under the Porter-Cologne Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted using WDRs, and these may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities that may result in a discharge to waters of the United States. This certification is most frequently required in tandem with a Section 404 permit request. Please see Section 2.2.2, Water Quality and Stormwater Runoff, for more details.

2.3.2.2. Affected Environment

One water of the United States and one wetland is present within the BSA. Santa Gertrudis Creek is an ephemeral waterway occurring along the north side of the proposed trail. Its width varies from approximately 115 feet to 160 feet within the BSA from Ynez Road to just past the southbound I-15 lanes (in Figure 4, Appendix M, see Waters, National Wetland Inventory Map, and Delineated Wetlands sheets). The creek is vegetated over a sandy bottom for this portion and has approximately 50 percent vegetation cover. Santa Gertrudis Creek is concrete-lining dominated for approximately 2,600 feet. The channel is generally unvegetated for this portion. The creek then returns to a sand and sediment bottom before joining with the larger Murrieta Creek north of the Winchester Road undercrossing. Murrieta Creek is a tributary to the Santa Margarita River, which drains to the Pacific Ocean.

Santa Gertrudis Creek did not display regular OHW marks within the concrete channel, so OHW was determined to occur at the toe of slope of the creek prism and to have very irregular flows. Jurisdiction of the stream channel under RWQCB regulations extends to the top of bank throughout the length of the project.

2.3.2.3. Environmental Consequences

The project will have a less than significant impact on wetlands and other waters, because impacts to these resources will be mitigated with the purchase of mitigation credits, avoidance during construction, and the implementation of minimization measures. The proposed project would result in the potential permanent impacts on 0.0036 acre (160 square feet) of wetland within Santa Gertrudis Creek. These impacts are a result of narrowing the creek at the Jefferson Avenue undercrossing. At this location, the trail will be built into the existing concrete slope of the channel bank; therefore, the lower end of the slope will encroach the creek closer to its center. See Sheet 7, in Appendix B for plans showing the proposed encroachment in the channel. The project will permanently impact 0.54-acre of state waters with 0.10-acre of this total associated with vegetated and natural sediment stream bottom and 0.44-acre associated with alterations to the existing concrete lining of Santa Gertrudis Creek. The project will temporarily impact 0.19-acre of streambed to facilitate construction access and work areas.

2.3.2.4. CEQA Considerations

Specific to Caltrans encroachment permitting – CEQA review – Caltrans submitted comments on the Natural Environment Study—Minimal Impact (NESMI) on December 6, 2018. The revised documented was returned to the agency on December 21, 2018 and the agency subsequently concurred with the findings.

Permanent impacts to aquatic and riparian resources will require a CDFW Stream and Lakebed Alteration Agreement, a determination of compliance with the MSHCP by RCA as discussed in prior sections, and a 401 Water Quality Certification from the RWQCB (San Diego) prior to construction.

2.3.2.5. Avoidance, Minimization, and/or Mitigation Measures

The proposed project would minimize impacts by impacting predominantly unvegetated areas of the concrete-lined channel and maximizing construction access from the top of bank or from within the permanent impact areas where possible. The proposed trail follows the existing access road where practicable and encroaches into the channel as minimally as design standards allow.

In-kind mitigation will be completed to replace the functions lost by permanent and temporary impacts to aquatic resources. Coordination has been completed with the USACE to establish mitigation requirements for wetland impacts using a mitigation ratio of 3:1, yielding a total of 0.01-acres of mitigation. Mitigation for these impacts are being sought through the San Luis Rey mitigation bank in Oceanside, San Diego County. Mitigation to replace lost function and value

for permanent impacts to the 0.10-acre of impacts of natural stream bed to comply with RWQCB regulations would occur at the San Luis Rey Mitigation bank with the purchase of reestablishment credits at a ratio of 2:1 (0.20-acre total) and with the purchase of preservation credits at the Skunk Hollow mitigation bank at a ratio of 5:1 (0.50-acre). Mitigation to satisfy the regulatory requirements for temporary and permanent impacts to riverine and riparian resources through the CDFW Stream and Lakebed Alteration Agreement would be satisfied with the Skunk Hollow credit purchase with a resulting ratio of 3.4:1 for permanent impacts and 1:1 for temporary impacts.

2.3.3. Plant Species

2.3.3.1. Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and CDFW have regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status, in general, is a term for species that are provided varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act, or FESA, and/or the California Endangered Species Act (CESA). See Section 2.3.5, Threatened and Endangered Species, for detailed information about threatened and endangered species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society rare and endangered plants.

The regulatory requirements for FESA can be found at 16 USC Section 1531, et seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. The Department's projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, or CEQA, found at California Public Resources Code, Sections 21000-21177.

2.3.3.2. Affected Environment

Six special-status plant species have potential to occur within the project vicinity based on a review of existing information (U.S. Fish and Wildlife Service, Carlsbad Office, 2018).

No critical habitat is present within the BSA for the four species that have established critical habitat. California orcutt grass (*Orcuttia californica*) and San Diego button-celery (*Eryngium aristulatum* var. *parishii*) have not been designated critical habitats at the time of the baseline survey.

None of the special-status plants were determined to be present during the April 12, 2018 baseline survey.

Common plants found during the survey included:

- Cattail (*Typha latifolia*)
- Cheatgrass (*Bromus tectorum*)
- American vetch (*Vicia americana*)
- Mulefat (*Baccharis salicifolia*)
- Sweetclover (*Melilotus officinalis*)
- Curly dock (*Rumex crispus*)
- Willow species (*Salix sp.*)
- Sedge species (*Carex sp.*)
- Eucalyptus species (*Eucalyptus sp.*)
- Willowherb (*Epilobium sp.*)

These species were found within the creek prism, and are generally hydrophytic and weed species that prefer disturbed or modified areas.

2.3.3.3. Environmental Consequences

The proposed project will not affect special-status plants, because none have been observed or previously documented in the BSA and the impacted habitat is heavily degraded. The project will temporarily and permanently impact vegetation communities found within the channel of Santa Gertrudis Creek within the footprint of undercrossings and access for construction. These impacts will be mitigated with the purchase of mitigation bank credits for reestablishment and preservation as discussed in previous sections pertaining to biotic resources.

2.3.3.4. CEQA Considerations

The proposed project would not result in direct or indirect impacts to special-status plant species. Impacts to riparian and riverine vegetated habitats are subject to compliance with the MSHCP and discussed in prior sections of this document (Sections 2.3, and 2.3.2).

2.3.3.5. Avoidance, Minimization, and/or Mitigation Measures

The proposed project would minimize impacts by impacting predominantly unvegetated areas of the concrete-lined channel. No further mitigation is anticipated outside of mitigation measures discussed in Section 2.3 and 2.3.2.

2.3.4. Animal Species

2.3.4.1. Regulatory Setting

Many state and federal laws regulate impacts to wildlife. USFWS, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and CDFW are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the FESA or CESA. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.3.5, Threatened and Endangered Species, below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act (MBTA)
- Fish and Wildlife Coordination Act

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600–1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

2.3.4.2. Affected Environment

The creek does not appear to support fish populations, because its flow is very irregular. As a result, fish passage is not considered a factor when considering the project impacts.

No special-status birds were observed during the baseline survey, but those listed below fall under MBTA protection. Nesting habitat likely occurs within the waterway among vegetation within the sand substrate for several species, including red-winged blackbird, American coot, and killdeer.

The following birds were observed within the BSA during the survey:

- House finch (*Haemorhous mexicanus*)
- American crow (*Corvus brachyrhynchos*)
- Lesser goldfinch (*Spinus psaltria*)
- Black phoebe (*Sayornis nigricans)*
- Northern mockingbird (*Mimus polyglottos*)
- American pipit (*Anthus rubescens*)
- Red-tailed hawk (*Buteo jamaicensis*)
- Killdeer (*Charadrius vociferous*)

- Black-necked stilt (*Himantopus mexicanus*)
- Mallard (*Anas platyrhynchos*)
- Red-winged blackbird (*Agelaius phoeniceus*)
- American coot (*Fulica Americana)*
- Great egret (*Ardea alba*)
- Black-crowned night heron (*Nycticorax nycticorax*)
- Anna's hummingbird (*Calypte anna*)

2.3.4.3. Environmental Consequences

Impacts to animal habitat are expected to be minimal to negligible. The primary habitat to be impacted is disturbed herbaceous and scrub-shrub community that occurs within the waterway that would be removed for path construction below the overpasses at I-15. The undercrossing at Jefferson Avenue was determined to be fully disturbed and to have no significant habitat value as it is concrete lined.

No tree removal is anticipated for this project.

2.3.4.4. Avoidance, Minimization, and/or Mitigation Measures

Remove Vegetation during the Non-Breeding Season and Conduct Preconstruction Surveys for Nesting Migratory Birds

The proposed project will require very little vegetation removal. If an active nest is found during preconstruction surveys (described below) in a tree (or other vegetation) that would be removed by project construction, the tree (or other vegetation) cannot be removed until the end of the nesting season, which could delay construction. If vegetation cannot be removed between October and January, or if ground cover re-establishes in areas where vegetation has been removed, the affected area must be surveyed for nesting birds, as discussed below.

If construction activities are expected to begin during the nesting season for birds (generally February 1 through September 30), the City will retain a qualified wildlife biologist with knowledge of the relevant species to conduct a nesting survey before the start of construction. A preconstruction survey will be conducted for migratory birds, including raptors. The survey will include a search of ground vegetation, and all trees and shrubs that provide suitable nesting habitat in the project area. In addition, a 500-foot radius around the project area will be surveyed for nesting raptors. If no active nests are detected during the preconstruction survey, no additional measures are required. The predominant nesting habitat for this project occurs under bridges.

If an active nest is found in the survey area, a no-disturbance buffer area will be established around the nest site to avoid disturbance or destruction of the nest until the end of the breeding season (September 30) or until after a qualified wildlife biologist determines that the young have

fledged and moved out of the project area (this timing varies by species). The extent of each buffer area will be determined by the biologist in coordination with USFWS and CDFW, and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.

Implement Measures to Deter Swallow and Phoebe Nesting Prior to the Nesting Season

Swallows and black phoebes, may be present in the area and may nest under the overpasses. To avoid impacts to swallows and black phoebes nesting under the overpasses, the City of Temecula will implement the following measures prior to the start of the nesting period:

- The City of Temecula will have a qualified wildlife biologist inspect overpasses during the non-breeding season (September 1 through February 28). If nests are found and are abandoned, they may be removed. To avoid damaging active nests on these structures, nests must be removed before the breeding season begins (March 1).
- After nests are removed, a qualified contractor will cover the undersides of the bridge and box culverts with suitable material to prevent nesting. Installation of the material will occur before March 1 and will be monitored by a qualified biologist throughout the breeding season (typically several times a week). The material will be anchored so that swallows cannot attach their nests to the bridge.
- As an alternative to covering the underside of a bridge, the City of Temecula will have a qualified biologist remove nests as the birds construct them and before any eggs are laid. Visits to the site would need to occur daily throughout the breeding season (March 1 through August 31), because swallows can construct a nest in a 24-hour period.
- If covering of the underside of the bridge does not occur by March 1 and birds colonize the bridge overpasses, disturbance or removal of the bridge structures will not occur before August 31 or until a qualified biologist has determined that the young have fledged and all nest use has been completed.

If appropriate steps are taken to prevent swallows and phoebes from constructing new nests as described above, work can proceed at any time of the year.

Survey for Bat Roosting Prior to Construction

An inspection for bats may be necessary prior to construction. While not observed during the survey, bats may use the overpasses for roosting. If the overpasses are deemed suitable as roosting habitat, the areas should be surveyed to determine bat presence and then, when clear, covered to prevent roosting.

2.3.5. Threatened and Endangered Species

2.3.5.1. Regulatory Setting

The primary federal law protecting threatened and endangered species is the FESA (16 USC Section 1531, et seq. See also 50 CFR Part 402). This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the FHWA (and the Department, as assigned), are required to consult with USFWS and the NOAA Fisheries Service to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species, or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 3 of FESA defines "take" as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the CESA (California Fish and Game Code Section 2050, et seq.). CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. CDFW is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits take of any species determined to be an endangered species or a threatened species. "Take" is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions, CDFW issues an incidental take permit. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

2.3.5.2. Affected Environment

The BSA is not covered by any mapped critical habitat for listed species. The following threatened, endangered, or candidate species have geographic ranges near enough to the BSA to warrant consideration.

San Bernardino Merriam's Kangaroo Rat

San Bernardino Merriam's kangaroo rat (*Dipodomys merriami parvus*, "SBKR") is a federally endangered species. Historically, the SBKR occupied alluvial fan terraces at the bases the San Gabriel, San Bernardino, and San Jacinto mountain ranges in San Bernardino and Riverside Counties, California (U.S. Fish and Wildlife Service, 1998). Currently, the SBKR critical habitat has been finalized for this species, and the nearest mapped critical habitat extent is approximately 20 miles northeast of the BSA along the San Jacinto River near Valle Vista,

California (73 Federal Register 61936 62002). Other SBKR occurrences have been noted along the Santa Ana River and along Lytle, Cajon, and Cable creeks.

No occurrences of SBKR were mapped within 1 mile of the BSA on the California Natural Database historical occurrences overlay (California Department of Fish and Wildlife, 2018). Because of their discrete and isolated distribution, it appears unlikely that SBKR would occur within the BSA.

Stephens' Kangaroo Rat

Stephens' kangaroo rat (*Dipodomys stephensi*) is federally endangered and state threatened. No critical habitat rules have been published for this species. This species relies on sparsely vegetated, forb-dominated grassland. No suitable habitat exists for this species within the BSA.

Coastal California Gnatcatcher

There is final critical habitat for this threatened species. Its nesting season is from late February to mid-July. The coastal California gnatcatcher is an uncommon species for the area. Its habitat includes low coastal sage scrub, which is absent from the project area or adjoining areas.

Least Bell's Vireo

There is final critical habitat for this federally and state endangered species. This is an obligate riparian species and prefers early successional habitat. Structurally diverse woodlands with cottonwood, willow, oak, and mulefat are ideal habitat. This species is unlikely to occur within the project area as preferred habitat is absent and will not be impacted by the project.

Southwestern Willow Flycatcher

There is final critical habitat for this federally and state endangered species. Its preferred habitat is dense riparian tree and shrub communities along water bodies. The vegetation must be one-quarter acre in size and at least 30 feet wide. This habitat type does not occur within the BSA, because the vegetation within the creek was not dense or consist of a significant percentage of woody species, and standing seasonal waters are absent from the waterway.

Quino Checkerspot Butterfly

There is final critical habitat designated for this federally endangered species, but outside of the project area. Preferred habitat for the Quino checkerspot butterfly is characterized by patchy scrub or small tree landscapes with openings of several meters between woody plants. The project area is characterized by developed landscapes with the limited effected portion of the creek channel dominated by weedy herbaceous species. Suitable habitat for the Quino checkerspot butterfly is absent from the BSA.

Riverside Fairy Shrimp

There is final critical habitat for this federally endangered species. Riverside fairy shrimp are generally restricted to vernal pools and other non-vegetated ephemeral pools greater than 12 inches deep. Vernal pool habitat is not present, and fairy shrimp do not have potential to occur within the BSA.

Vernal Pool Fairy Shrimp

There is final critical habitat for this federally threatened species. Vernal pool habitat is not present, and fairy shrimp do not have potential to occur within the BSA.

California Orcutt Grass

There is final critical habitat for this federally and state endangered species. This species is closely associated with deep ephemeral vernal pools underlain by clay soils. This habitat type does not exist within the BSA, and the species was determined not to occur within the BSA.

Munz's Onion

There is final critical habitat for this federally endangered and state threatened species. Munz's onion occurs in grassland, sage scrub, or juniper woodland communities. These habitats do not occur within the BSA, and the species was not detected during the baseline survey.

San Diego Ambrosia

There is final critical habitat for this federally endangered species. This species is typically found on upper terraces of rivers and drainages and occasionally within large vernal pools. Habitat for this species does not occur within the BSA, and the species was not detected during the baseline survey.

San Diego Button-celery

There is final critical habitat for this federally and state endangered species. This species is closely associated with deep ephemeral vernal pools underlain by clay soils. This habitat type does not exist within the BSA, and the species was determined not to occur within the BSA.

Spreading Navarretia

There is final critical habitat for this federally threatened species. The species is closely associated with the ephemeral inundation cycle of vernal pool habitat, but it may also occur in human-made depressions and ditches that have the same hydrological dynamics. This species was not detected during the baseline survey and is unlikely to occur within the BSA due to the extreme episodic nature of the waterway, abundance of weedy species, and lack of impacts to suitable habitat.

Thread-leaved Brodiaea

There is final critical habitat for this federally threatened and state endangered species. Habitat for this species consists of grassland communities, alkali playas, and vernal pools. This species is unlikely to occur within the BSA due to a lack of suitable habitat.

2.3.5.3. Environmental Consequences

Impact criteria define the level of direct and indirect impacts on listed species. The purpose of the impact criteria is to help determine when an impact is significant under CEQA.

The following CEQA Checklist item was used to evaluate the impacts of the proposed project on listed species:

- Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service?

Table 2 lists the threatened and endangered species with potential to occur within the BSA, their state and federal statuses, effect finding based primarily on habitat presence and quality, and an effect finding for critical habitat.

Table 2. Preliminary Effect Findings for Draft Environmental Document

Common Name	Scientific Name	Status	Effect Finding	Effect Finding for Critical Habitat (if applicable)
Plants				
California Orcutt Grass	*Orcuttia californica*	FE, SE	No Effect	N/A
Munz's Onion	*Allium munzii*	FE, ST	No Effect	N/A
San Diego Ambrosia	*Ambrosia pumila*	FE	No Effect	N/A
San Diego Button-celery	*Eryngium aristulatum*	FE, SE	No Effect	N/A
Spreading Navarretia	*Navarretia fossalis*	FT	No Effect	N/A
Thread-leaved Brodiaea	*Brodiaea filifolia*	FT, SE	No Effect	N/A
Invertebrates				
Quino Checkerspot Butterfly	*Euphydryas editha quino*	FE	No Effect	N/A
Riverside Fairy Shrimp	*Streptocephalus woottoni*	FE	No Effect	N/A
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	FT	No Effect	N/A
Mammals				
San Bernardino Merriam's Kangaroo Rat	*Dipodomys merriami parvus*	FE, ST	No Effect	N/A
Stephens' Kangaroo Rat	*Dipodomys stephensi*	FE, ST	No Effect	N/A
Birds				
Least Bell's Vireo	*Vireo bellii pusillus*	FE, SE	No Effect	N/A
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	FE, SE	No Effect	N/A
Coastal California Gnatcatcher	*Polioptila californica*	FT	No Effect	N/A

*Federal Endangered (FE); Federal Threatened (FT); Federal Proposed (FP, FPE, FPT); State Endangered (SE); State Threatened (ST)

The proposed project was found to avoid any substantial effects to listed species.

2.3.5.4. Avoidance, Minimization, and/or Mitigation Measures

Avoidance and minimization measures are limited to those taken to prevent the introduction of invasive species to the site, a topic that is discussed below in Section 2.3.6. No mitigation or other measures are necessary, because no threatened or endangered species were determined to be present.

2.3.6. Invasive Species

2.3.6.1. Regulatory Setting

On February 3, 1999, President William J. Clinton signed EO 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." FHWA guidance issued August 10, 1999, directs the use of the State's invasive species list, which is maintained by the California Invasive Species Council, to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

2.3.6.2. Affected Environment

Invasive/noxious plant species listed on the California Department of Food and Agriculture and Cal-IPC noxious weed lists were found within the BSA during plant surveys conducted for this project.

2.3.6.3. Environmental Consequences

In compliance with the Executive Order on Invasive Species, EO 13112, and guidance from the FHWA, the landscaping and erosion control included in the proposed project will not use species that are listed as invasive. None of the species on the Cal-IPC list of invasive species is used by the Department for erosion control or landscaping in the Temecula area. All equipment and materials will be inspected for the presence of invasive species and cleaned if necessary. In areas of particular sensitivity, such as adjacent to the creek, extra precautions will be taken if invasive species are found in or next to the construction areas. These precautions include the inspection and cleaning of construction equipment, and eradication strategies to be implemented should an invasion occur.

2.3.6.4. Avoidance, Minimization, and/or Mitigation Measures

Avoid and Minimize the Spread of Invasive Plant Species during Project Construction

The City of Temecula or its contractor will be responsible for avoiding and minimizing the introduction of new invasive plants and the spread of invasive plants previously documented in the BSA. Two or more of the following BMPs will be written into the construction specifications and implemented during project construction:

- Retain all fill material onsite to prevent the spread of invasive plants to uninfested areas.
- Use a weed-free source for project materials (e.g., straw wattles for erosion control that are weed-free or contain less than 1 percent weed seed).
- Prevent invasive plant contamination of project materials during transport and when stockpiling (e.g., by covering soil stockpiles with a heavy-duty, contractor-grade tarpaulin).
- Use sterile wheatgrass seed and native plant stock during revegetation.

The goal for implementation of two or more of these BMPs is to minimize the disturbance and transport of soil and vegetation to the greatest extent feasible to complete the work. Detailed information about implementing these BMPs can be found in Cal-IPC's *Preventing the Spread of Invasive Plants: Best Management Practices for Transportation and Utility Corridors.* (Cal-IPC, 2012)

Construction Impacts

Before any ground-breaking disturbance occurs, including grading, a consulting biologist will conduct a mandatory contractor/worker environmental awareness training for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid effects on sensitive biological resources, primarily nesting birds, adjacent to the work area, as well as inform them of the penalties for not complying with applicable state and federal laws and permit requirements. Because no special-status species occur within the BSA, plant- or animal-specific contractor/worker environmental awareness training is not necessary unless clearing is to take place during the nesting season. If that is the case, simple instructions to not disturb areas taped off at a specified radius around the active nest would suffice.

The environmental training will also cover general restrictions and guidelines all construction personnel must follow to reduce or avoid effects on sensitive biological resources during project construction, as follows:

- Project-related vehicles will observe the posted speed limit on hard-surfaced roads and a 20 mile-per-hour speed limit on unpaved roads or access areas in the work area during travel within the project limits.
- Project-related vehicles and construction equipment will restrict off-road travel to the work area.
- Vegetation clearing and construction operations will be limited to the minimum necessary in areas of temporary access work areas and staging.
- All food-related trash will be disposed of in closed containers and removed from the work area at least once a week during the construction period. Construction personnel will not feed wildlife or otherwise attract wildlife to the project work area.
- No pets or firearms will be allowed in the project work area.

- To prevent possible resource damage from hazardous materials such as motor oil or gasoline, construction personnel will not service vehicles or construction equipment outside staging areas designated for this service.

The training will also include identifying the BMPs written into construction specifications for avoiding and minimizing the introduction and spread of invasive plants (see discussion above under "Avoid and Minimize the Spread of Invasive Plant Species during Project Construction") and the rationale behind their implementation during project construction.

2.3.7. Climate Change

2.3.7.1. Regulatory Setting

The U.S. EPA regulates greenhouse gases (GHGs) through the Clean Air Act only for certain mobile and stationary sources. The EPA, in conjunction with the National Highway Traffic Safety Administration, has established fuel economy standards for and light-duty vehicles (passenger cars and trucks). The Greenhouse Gas Reporting Program requires permits only from large emitters (more than 25,000 metric tons CO_2 per year). The EPA has not issued explicit guidance or methods to conduct project-level GHG analysis.

The California 2006 Global Warming Solutions Act (Assembly Bill 32) requires reducing GHG emissions to 1990 levels by 2020 and preparing (and updating every five years) a Scoping Plan for achieving the maximum technologically feasible and cost-effective reductions in GHG emissions from sources or categories of sources of GHGs by 2020. Additional legislation includes Senate Bill 32 (2016) that establishes a GHG emission reduction target of 40 percent below 1990 levels by 2030, creation and extension of a cap-and-trade program, and targets for sales of renewable electricity (California Air Resources Board, 2014).

2.3.7.2. Affected Environment

GHGs trap heat in the atmosphere and warm the earth by absorbing energy and slowing the rate at which the energy escapes to space. The GHGs are:

- Carbon dioxide (CO_2)
- Methane (CH_4)
- Nitrous Oxide (N_2O).
- Fluorinated gases: Chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)

The effect of each gas on climate change depends on three main factors:

- **Concentration, or abundance**- the amount of a particular gas in the air.
- **Length of time** ("lifetime") the gas can remain in the atmosphere, ranging from a few years to a few thousand years.
- **Strength of energy absorption** ("radiative efficiency")-

Concentrations are measured in parts per million, parts per billion, and parts per trillion. Once part per million is equivalent to one drop of water diluted into about 13 gallons of liquid.

Global Warming Potential (GWP) essentially measures life and radiative efficiency and is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO_2. The larger the GWP, the more that a given gas warms the earth compared to CO_2 over that time period. The 100-year GWP is based on the energy absorbed by gas over 100 years (U.S. Environmental Protection Agency, 2018).

Table 3. GHGs' Effect on Climate Change

	CO_2	CH_4	N_2O	Fluorinated Gases
Sources	Combustion of fossil fuels (coal, natural gas, and oil), solid waste, trees and wood products, chemical reactions (cement manufacture)	Production and transport of coal, natural gas, and oil; livestock; decay of organic waste in municipal solid waste landfills	Agricultural and industrial activities; combustion of fossil fuels and solid waste	Industrial processes
100-Year GWP	1	25	298	7,390-22,800
% U.S. GHG Emissions, 2016	81%	10%	6%	3%

EPA tracks U.S. GHG emissions and their sources through two complementary programs: the Inventory of U.S. Greenhouse Gas Emissions and Sinks (the Inventory) and the Greenhouse Gas Reporting Program. The Inventory covers all sources and forestry sinks, began in 1990, and lists national data by sector.

In 2016, the percentage of GHGs by sector were:

- Transportation: 28 percent
- Electricity: 28 percent
- Industry: 22 percent
- Residential and commercial: 11 percent
- Agriculture: 9 percent

The Greenhouse Gas Reporting Program covers only large emitters (more than 25,000 metric tons of CO_2 per year), began in 2010, and provides facility-specific emissions.

EPA's FLIGHT (facility-level information on greenhouse gases tool) lists two reporting facilities in Temecula in 2016: Infineon Technologies Americas Corporation and Pechanga Resort and Casino (U.S. Environmental Protection Agency , 2017).

2.3.7.3. Environmental Consequences

An individual project does not generate enough GHG emissions to influence global climate change substantially. Rather, global climate change is a cumulative impact. This means that a project may contribute to a potential impact through its incremental change in emissions when combined with the contributions of all other sources of GHGs. In assessing cumulative impacts, it must be determined whether a project's incremental effect is "cumulatively considerable" (CEQA Guidelines §15064(h)(1) and 15130). To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects to make this determination is not possible. This evaluation, therefore, relies on a qualitative analysis. The proposed trail extension would provide an active transportation link from the commercial and residential areas east of Ynez Road to the creek and to the industrial areas to the west. It is possible that use of the trail extension may reduce auto trips, and thereby reduce GHG emissions, although not by a measurable quantity.

2.3.7.4. CEQA Considerations

The proposed project would result in less-than-significant impacts related to climate change. Use of the trail may promote the use of non-motorized and non-polluting modes of transport in place of auto transport and thereby reduce GHG emissions.

2.3.7.5. Avoidance, Minimization, and/or Mitigation Measures

No mitigation is required.

Chapter 3. Cumulative Impacts

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

The geographic area considered in this cumulative effects analysis is the same as the project area.

The proposed project's incremental effect is not "cumulatively considerable"; therefore, its effect is not considered significant. The basis for concluding that the incremental effect is not cumulatively considerable is:

Habitat connectivity is not expected to be impacted, because there is no existing riparian habitat connecting the creek to upland habitats. Existing upland habitat near the river appears to occur only within the BSA near the I-15 crossing, although the existing steep slope and height of the channel lining appears to prevent access for terrestrial species between habitats.

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Chapter 5. Comments and Coordination

Permitting coordination is underway or has been completed with the following personnel:

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