





COACHELLA VALLEY-SAN GORGONIO PASS RAIL CORRIDOR SERVICE

Program Environmental Document and Service Development Plan

Appendix E - CEQA Mitigation Monitoring and Reporting Program

Coachella Valley-San Gorgonio Pass Rail Corridor Service Program – Combined Final Tier 1/Program EIS/EIR and ROD

June 2022

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Mitigation Monitoring and Reporting Program

According to the California Environmental Quality Act (CEQA) Section 15168(a), a local agency may prepare a Program EIR that can be characterized as one large project or a series of actions that are linked geographically; logical parts of a chain of contemplated events; rules, regulations, or plans that govern the conduct of a continuing program; or individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways. Under CEQA, a Program EIR can function as a first-tier environmental document that assesses and documents the broad environmental impacts of a program with the understanding that a more detailed site-specific review may be required to assess future projects implemented under the program.

In accordance with CEQA and pursuant to Public Resources Code Section 21000 et seq., the Riverside County Transportation Commission (RCTC) prepared a Draft Tier 1/Program Environmental Impact Statement/Environmental Impact Report (Draft Tier 1/Program EIS/EIR) (State Clearinghouse No. 2015012066) that identified the potentially significant environmental impacts of the Coachella Valley-San Gorgonio Pass Rail Corridor Service Program (Program). The Draft Tier 1/Program EIS/EIR identified potentially significant impacts to: Land Use and Planning, Transportation, Visual Quality and Aesthetics, Air Quality and Greenhouse Gases, Noise and Vibration, Jurisdictional Waters and Wetland Resources, Biological Resources, Floodplains, Hydrology, and Water Quality, Geology, Soils, Seismicity, and Paleontological Resources, Hazards and Hazardous Materials, Public Utilities and Energy, Cultural Resources, Parklands and Community Services, and Safety and Security.

Public Resources Code Section 21081.6(a)(1), requires lead agencies to "adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment." This Mitigation Monitoring and Reporting Program (MMRP) for the Program is designed to fulfill the requirements of CEQA, pursuant to California Public Resources Code, Division 13, Section 21081.6.

This MMRP identifies the Tier 1/Program-level mitigation strategy proposed in the Tier 1/Program EIS/EIR for any subsequent Tier 2/Project-level environmental clearance that may be required as part of the Program. This includes the impact that is being addressed by the mitigation strategy, the timing of implementation of the mitigation strategy, and the actions to be taken indicating compliance with the mitigation strategy, as described in the Final Tier 1/Program EIS/EIR.

After certification by RCTC, this Tier 1/Program EIS/EIR may be used by RCTC and other agencies as a "first tier" document for later projects, as authorized by Section 15183 (projects consistent with a community plan or zoning) of the State CEQA Guidelines (Title 14, California Code of Regulations, Section 15000, et seq.). These Tier 2/Project-level projects are not known at this time but could include adoption of infrastructure-related plans and additional planning activities such as rezoning or adoption of local land use planning documents, with the understanding that site-specific impacts will require additional CEQA analysis. As previously indicated, other agencies may also utilize this Tier 1/Program EIS/EIR for their decisions. However, the extent to which the Tier 1/Program EIS/EIR is relied upon will depend upon whether the actions are consistent with the local agency's General Plan, identification of new Tier 2/Project-specific impacts requiring additional CEQA review, and whether the other agency chooses to use the Tier 1/Program EIS/EIR. There are no such proposed actions by other agencies currently known.

Table 1. Mitigation Monitoring and Reporting Program

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Land Use and Planning			
Mitigation Strategy LU-1: Based on the results of a subsequent Tier 2/Project-	Potentially	As part of	Consideration, identification, and
level analysis and recommendations, the identified lead agency or agencies shall	significant land	subsequent Tier	inclusion of site-specific construction
determine the extent and duration of construction activities of the Tier 2/Project-	use impacts	2/Project-level	best management practices to be
level improvement being proposed and develop construction best management	during	analysis	implemented for the proposed rail
practices that shall be implemented by the contractor to reduce noise, air quality,	construction		infrastructure and/or station facility
and transportation effects, such as temporary sound barriers and traffic	activities		site. These site-specific best
management plans. Depending on the nature of construction activities proposed			management practices shall be
and the location where construction activities could occur, construction best			included as part of subsequent Tier
management practices could include, but are not limited to, the following:			2/Project-level environmental
Limit noise generating construction activities to the hours identified in the			documentation.
applicable local jurisdiction's ordinance and/or policies governing			
construction activities			
Control fugitive dust by watering disturbed areas			
Require specifications for construction equipment and idling times			
Mitigation Strategy LU-2: Based on the results of a subsequent Tier 2/Project-	Potentially	As part of	Determination if a construction
level analysis and recommendations, the identified lead agency or agencies shall	significant land	subsequent Tier	management plan is warranted for
determine if a construction management plan is required for construction activities	use impacts	2/Project-level	the proposed rail infrastructure
of the Tier 2/Project-level improvement being proposed. If required, a construction	during	analysis	and/or station facility site. This site-
management plan shall be developed by the contractor and reviewed by the lead	construction		specific determination shall be
agency or agencies prior to construction and implemented during construction	activities		included as part of subsequent Tier
activities. The construction management plan shall include, but not be limited to,			2/Project-level environmental
the following:			documentation.

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Measures that minimize effects on populations and communities within the Tier 2/Project Study Area			
 Measures pertaining to visual protection, air quality, safety controls, noise controls, and traffic controls to minimize effects on populations and communities within the Tier 2/Project Study Area Measures to ensure property access is maintained for local businesses, 			
 Measures to ensure property access is maintained for local businesses, residences, and community and emergency services 			
Measures to consult with local transit providers to minimize effects on local and regional bus routes in affected communities			
 Measures to consult with local jurisdictions and utility providers to minimize effects on utilities in affected communities 			
Mitigation Strategy LU-3: During a subsequent Tier 2/Project-level analysis, a	Potentially	As part of	Inclusion of a site-specific land use
land use consistency analysis shall be conducted by the identified lead agency or	significant land	subsequent Tier	consistency analysis for the
agencies to determine consistency of the Tier 2/Project-level improvement being	use impacts	2/Project-level	proposed rail infrastructure and/or
proposed with the applicable local jurisdictional general plans or programs. If the	during	analysis	station facility site. This site-specific
land use consistency analysis identifies sensitive land uses or environmental	construction		land use consistency analysis shall
resources within the Tier 2/Project-level Study Area, design or siting strategies	and operation		be included as part of subsequent
shall be identified by the lead agency or agencies to avoid or minimize conflicts with sensitive land uses or environmental resources.	activities		Tier 2/Project-level environmental documentation.
Mitigation Strategy LU-4: During a subsequent Tier 2/Project-level analysis,	Potentially	As part of	Consideration and identification of
siting of rail infrastructure and station facilities shall be designed by the identified	significant	subsequent Tier	site-specific design features for the
lead agency or agencies to avoid or minimize conversion of farmland resources.	agricultural	2/Project-level	proposed rail infrastructure and/or
	resource	analysis	station facility that avoid or minimize
	impacts during		conversion of farmland resources.
			These site-specific design features

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
	construction		shall be included as part of
	activities		subsequent Tier 2/Project-level
			environmental documentation.
Mitigation Strategy LU-5: During a subsequent Tier 2/Project-level analysis, the	Potentially	As part of	Inclusion of a site-specific land
identified lead agency or agencies shall determine if the siting of the Tier	significant	subsequent Tier	evaluation and site assessment, if
2/Project-level improvement being proposed is located within an area mapped as	agricultural	2/Project-level	required, for the proposed rail
farmland by the California Department of Conservation. If the Tier 2/Project-level	resource	analysis	infrastructure and/or station facility
improvement is located in an area mapped as farmland, the preparation of a land	impacts during		site. This site-specific land use
evaluation and site assessment shall be conducted to determine significance of	construction		consistency analysis shall be
impacts attributed to the loss or conversion of farmland associated with the siting	activities		included as part of subsequent Tier
of the Tier 2/Project-level improvement being proposed.			2/Project-level environmental
			documentation.
Mitigation Strategy LU-6: During a subsequent Tier 2/Project-level analysis, the	Potentially	As part of	Determination if Williamson Act
identified lead agency or agencies shall determine if the siting of the Tier	significant	subsequent Tier	lands are present where the
2/Project-level improvement being proposed is located on land enrolled in a	impacts to	2/Project-level	proposed rail infrastructure and/or
Williamson Act contract. Where lands enrolled in a Williamson Act contract are	Williamson Act	analysis	station facility is located. This site-
impacted during the siting of rail infrastructure or station facilities, the California	lands during		specific determination and if
Department of Conservation shall be notified by the identified lead agency or	construction		applicable, coordination with the
agencies and requirements of Government Code Section 51290 51295 and	activities		California Department of
51296.6 shall be met.			Conservation shall be included as
			part of subsequent Tier 2/Project-
			level environmental documentation.
Transportation	I		I
Mitigation Strategy TR-1: During Tier 2/Project-level analysis, a Project specific	Potentially	As part of	Inclusion of a site-specific traffic
traffic impact analysis shall be required for the sites identified for the specific rail	significant	subsequent Tier	impact analysis for the proposed rail
infrastructure or station facility proposed. The traffic impact analysis shall be	traffic impacts		infrastructure and/or station facility

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
prepared using the standards and procedures of the applicable local jurisdiction(s)	during	2/Project-level	site. This site-specific traffic impact
in which the Project is located. The traffic impact analysis may include, but will not	construction	analysis	analysis shall be included as part of
be limited to, the following:	and		subsequent Tier 2/Project-level
Analysis of construction related traffic impacts including identification and analysis of:	operational activities		environmental documentation.
 Transportation management plans to mitigate construction related traffic, including coordination with emergency providers 			
 Alternative work windows or temporary construction features (e.g., shoo fly) to minimize disruption to rail operations during construction 			
 Coordination with railroad host, operators and the jurisdiction within which construction will occur 			
 Identification of haul routes for construction trucks, construction traffic management strategies, and any re-routing of vehicular, pedestrian, and bicycle routes 			
Analysis of operational related traffic impacts including identification and analysis of:			
 Roadway network impacts and fair share mitigation to mitigate impacts 			
 Transportation system management/signal optimization, including retiming, rephrasing, and signal optimization; turn prohibitions; use of one-way street; and traffic diversion to alternative routes 			
For station facilities, identification and analysis of:			
 Roadway network impacts associated with trips resulting from travel activity at stations 			
 Station amenities (e.g., parking, alternative modes of transit features, ticketing, emergency access) 			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Visual and Aesthetic Resources			
Mitigation Strategy VIS-1: During the Tier 2/Project-level environmental process,	Potentially	As part of	Identification, inventory, and impact
the identified lead agency or agencies shall conduct an inventory of visual or	significant	subsequent Tier	evaluation analysis for visual/
aesthetic resources at the location of specific rail infrastructure and station facility	visual resource	2/Project-level	aesthetic resources at the location of
proposed. If visual or aesthetic resources are present, the identified lead agency	impacts	analysis	the proposed rail infrastructure
or agencies shall undertake an analysis associated with the specific rail	associated		and/or station facility site. This
infrastructure and station facility proposed. The analysis shall include, but not be	with		evaluation analysis shall be included
limited to, the following:	operational		as part of subsequent Tier 2/Project-
 Infrastructure/station effects and impacts associated with blocking views of identified visual resources (e.g., local scenic resources, mountain/foothill views) 	activities		level environmental documentation.
 Infrastructure/station effects and impacts associated with change in visual character (e.g., removal of structures or landscaping) 			
 Infrastructure/station effects and impacts associated with local design criteria and guidelines 			
 Infrastructure/station effects and impacts associated with local lighting design criteria and guidelines 			
Criteria to determine the type of site-specific mitigation for visual resources would			
be developed by the identified lead agency or agencies in consultation with local			
jurisdictions during the Tier 2/Project-level environmental process.			
Mitigation Strategy VIS-2: To address potential lighting impacts related to	Potentially	As part of	Consideration, identification, and
nighttime construction lighting, the contractor shall use construction lighting during	significant	subsequent Tier	inclusion of site-specific lighting best
nighttime that is limited to the minimum necessary for safety and security, and the	lighting and	2/Project-level	management practices to be
use of downward facing, cut off fixtures that do not allow spillover onto adjacent	glare impacts	analysis	implemented for the proposed rail
land uses. A construction lighting plan shall be developed for each station facility,	during		infrastructure and/or station facility
taking into account local and regional lighting policies, including but not limited to,	construction		site during construction and
the Mount Palomar Nighttime Lighting Policy.	and		operation. These site-specific best management practices shall be

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
	operational		included as part of subsequent Tier
	activities		2/Project-level environmental
			documentation.
Air Quality and Greenhouse Gases	<u> </u>		I
Mitigation Strategy AQ-1: During Tier 2/Project-level analysis, a site-specific air	Potentially	As part of	Inclusion of a site-specific air quality
quality analysis shall be required for the specific rail infrastructure or station	significant air	subsequent Tier	analysis for the proposed rail
facilities proposed. If an air quality analysis is warranted at the Tier 2/Project-level,	quality impacts	2/Project-level	infrastructure and/or station facility
the air quality analysis shall be prepared using the standards and procedures of	during	analysis	site. This site-specific air quality
the South Coast Air Quality Management District and applicable local	construction		analysis shall be included as part of
jurisdiction(s) in which the Project is located. The air quality analysis shall include	and		subsequent Tier 2/Project-level
analysis of construction and operational air quality impacts, including identification	operational		environmental documentation.
and analysis of:	activities		
Construction equipment to be used and corresponding air quality			
emissions that could be generated from construction activities.			
Construction and operational traffic impacts analysis, including			
quantification of construction emissions and comparison with South			
Coast Air Quality Management District significance thresholds.			
Sensitive receptors and exposure of those sensitive receptors to air			
quality emissions during construction and operational activities. If			
sensitive receptors are located within or adjacent to the Project site, a			
health risk assessment to assess cancer risks and non carcinogenic			
hazards for sensitive receptors may be required.			
Best management practices to be implemented during construction			
activities such as practices to limit idling and construction emissions, the			
use of ozone precursor emission controls, implementation of diesel			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
emission reduction plans, and use of California Air Resources Board			
certified equipment for pose combustion controls			
 If a Project is located within an area designated as non-attainment for federal particulate matter 10 microns or less and particulate matter 2.5 microns or less standards, a particulate matter 10 microns or less and particulate matter 2.5 microns or less hot spot analysis shall be prepared based on guidance provided in Transportation Conformity Guidance for Qualitative Hot Spot Analyses in Particulate Matter 2.5 Microns or Less 			
and Particulate Matter 10 Microns or Less Non-attainment and Maintenance Areas (United States Environmental Protection Agency 2006). As part of the hot spot analyses, a Project-level conformity determination shall include a finding of whether the Project is a Project of Air Quality Concern.			
Mitigation Strategy GHG-1: During Tier 2/Project-level analysis, a construction	Potentially	As part of	Inclusion of a site-specific
energy conservation plan to avoid excess energy consumption shall be required	significant	subsequent Tier	construction energy conservation
for the specific rail infrastructure or station facility proposed. The construction	energy	2/Project-level	plan for the proposed rail
 energy conservation plan shall identify best management practices including, but not limited to, the following: Identification of opportunities to use newer, more energy efficient construction equipment, vehicles, and materials Limit construction equipment idling 	consumption impacts during construction activities	analysis	infrastructure and/or station facility site. This site-specific construction energy conservation plan shall be included as part of subsequent Tier 2/Project-level environmental documentation.
 Develop and implement a program encouraging construction workers to carpool or use public transportation for travel to and from construction sites 			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Locate construction materials production facilities onsite or in proximity to project work sites			
Schedule material deliveries during off peak hours to minimize highway congestion			
Mitigation Strategy GHG-2: During Tier 2/Project-level analysis, an operational energy conservation plan shall be required for the specific rail infrastructure or	Potentially significant	As part of subsequent Tier	Inclusion of a site-specific construction energy conservation
station facility proposed. The operational energy conservation plan shall identify	energy	2/Project-level	plan for the proposed rail
best management practices, including, but not limited to, the following:	consumption	analysis	infrastructure and/or station facility
Limit operational idling at stations	impacts during operational		site. This site-specific operational energy conservation plan shall be
Identify state of the art locomotives to maximize fuel efficiency	activities		included as part of subsequent Tier
Target market to drivers of single occupancy vehicles to maximize the			2/Project-level environmental
effects of rail modal use on energy conservation and reduction of			documentation.
greenhouse gas emissions			
Concentrate bus service routes to feed passengers to train stations			
• Bring dispersed riders to train stations through other methods (e.g.,			
demand response systems [paratransit, taxi, shuttle, call and ride])			
Noise and Vibration			
Mitigation Strategy NOI-1: During Tier 2/Project-level analysis, a site-specific	Potentially	As part of	Inclusion of a site-specific
construction noise management plan shall be prepared for the specific rail	significant	subsequent Tier	construction noise management plan
infrastructure or station facility proposed. The construction noise management	noise impacts	2/Project-level	for the proposed rail infrastructure
plan shall include, but not be limited to, the following:	during	analysis	and/or station facility site. This site-
A detailed construction schedule correlating to areas or zones of onsite	construction		specific noise management plan
Project construction activity(ies) and the anticipated equipment types and	activities		shall be included as part of
quantities involved. Information will include expected hours of actual			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
operation per day for each type of equipment per phase and indication of			subsequent Tier 2/Project-level
anticipated concurrent construction activities on site.			environmental documentation.
 Identification of construction noise reduction methods such as shutting off idling equipment, construction of a temporary noise barrier, maximizing the distance between construction equipment staging areas and adjacent sensitive land use receptors. Identification of construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow surrounding property owners to contact the job superintendent if necessary. In the event the municipality with jurisdiction receives a complaint, the construction noise management plan shall include guidance to ensure the appropriate corrective actions are implemented and a report of the action is provided to the reporting party. Appropriate corrective actions may include stricter enforcement of construction schedule, re location of stationary equipment further from adjacent noise sensitive receptors, reduction in the number of equipment 			
working simultaneously in proximity to the sensitive receptor, erection of temporary noise barriers, or a combination of the above.			
 Mitigation Strategy NOI-2: During Tier 2/Project-level analysis, a site-specific noise and vibration assessment shall be prepared for the specific rail infrastructure or station facility proposed. The site-specific noise and vibration assessment shall include, but not be limited to, the following: Identification of adjacent noise sensitive land uses that would be impacted by construction and operation activities associated with the specific rail infrastructure or station facility. 	Potentially significant noise and vibration impacts during construction and	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific noise and vibration assessment for the proposed rail infrastructure and/or station facility site. This site-specific noise and vibration assessment shall be included as part of subsequent Tier 2/Project-level environmental documentation.

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Identification of construction equipment required to be within 50 feet of	operational		
existing structures. If construction equipment is required within 50 feet,	activities		
the assessment will demonstrate that the human annoyance threshold of			
78 velocity in decibels (0.032 inches per second peak particle velocity)			
and structural damage thresholds of 0.2 inches per second peak particle			
velocity for nonengineered timber and masonry buildings and 0.12			
inches per second peak particle velocity for historic age buildings that			
are extremely susceptible to vibration damage is achieved.			
 Identification of existing noise levels at the nearest noise sensitive land 			
uses.			
 Identification of any on site generated noise sources, including 			
generators, mechanical equipment, and trucks and predicted noise levels			
at property lines from all identified equipment.			
• Recommended mitigation to be implemented (e.g., enclosures, barriers,			
site orientation), to ensure compliance with the local jurisdiction's noise			
regulations or ordinances. Noise reduction measures shall include			
building noise attenuating walls, reducing noise at the source by			
requiring quieter machinery or limiting the hours of operation, or other			
attenuation measures. Exact noise mitigation measures and their			
effectiveness shall be determined by the site-specific noise analyses.			
Biological Resources	1	<u> </u>	
Mitigation Strategy BIO-1: During the Tier 2/Project-level analysis, a preliminary	Potentially	As part of	Determination if biological resources
biological resource screening shall be performed as part of the environmental	significant	subsequent Tier	are present where the proposed rail
review process to determine whether the specific rail infrastructure or station	biological	2/Project-level	infrastructure and/or station facility is
facility proposed has any potential to impact biological resources. If the specific	resources	analysis	located. If biological resources are
rail infrastructure or station facility proposed has no potential to impact biological	impacts during		present, inclusion of a site-specific

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
resources, no further action will be required. If the specific rail infrastructure or	construction		biological resources assessment
station facility proposed has the potential to impact biological resources, a	and		report shall be included as part of
qualified biologist shall conduct a biological resources assessment report to	operational		subsequent Tier 2/Project-level
document the existing biological resources within the Tier 2/Project-level Study	activities		environmental documentation.
Area. The report shall include, but not be limited to, analysis and			
recommendations on the following topics:			
Special status species			
Nesting birds			
Wildlife movement			
Sensitive plant communities and critical habitat			
Jurisdictional waters			
Applicable habitat conservation plans			
Other biological resources identified as sensitive by local, state and/or federal agencies			
Pending the results of the biological resources assessment, design alterations;			
further technical studies (e.g., protocol surveys); and/or consultations with the			
United States Fish and Wildlife Service, California Department of Fish and			
Wildlife, and other local, state, and federal agencies may be required. If the			
specific rail infrastructure or station facility proposed cannot be designed without			
complete avoidance, the lead agency shall coordinate with the appropriate			
resource agency to obtain regulatory permits and implement Project specific			
mitigation prior to any construction activities.			
Mitigation Strategy BIO-2: If completion of the Project specific biological	Potentially	As part of	If identified by the biological
resources assessment determines that special status plant species have potential	significant	subsequent Tier	resources assessment, inclusion of
to occur on site, surveys for special status plants shall be completed prior to any	biological	2/Project-level	site-specific special status plant
vegetation removal, grubbing, or other construction activity of each project	resources	analysis	survey(s) for the proposed rail

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
(including staging and mobilization). The surveys shall be floristic in nature and	impacts during		infrastructure and/or station facility
shall be seasonally timed to coincide with the target species identified in the	construction		site. The site-specific special status
Project specific biological resources assessment. All plant surveys shall be	and		plant survey(s) shall be included as
conducted by a qualified biologist approved by the implementing agency no more	operational		part of subsequent Tier 2/Project-
than 2 years prior to Project implementation. All special status plant species	activities		level environmental documentation.
identified on site shall be mapped onto a site-specific aerial photograph or			
topographic map. Surveys shall be conducted in accordance with the most current			
protocols established by the California Department of Fish and Wildlife and/or the			
United States Fish and Wildlife Service. A report of the survey results shall be			
submitted to the implementing agency for review. If special status plant species			
are identified, Mitigation Strategy BIO-3 shall apply.			
Mitigation Strategy BIO-3: If federally or state listed and/or California Rare Plant	Potentially	As part of	Consideration, identification, and
Rank 1 and 2 species are found during special status plant surveys (pursuant to	significant	subsequent Tier	inclusion of site-specific best
Mitigation Strategy BIO 1), the specific rail infrastructure or station facility	biological	2/Project-level	management practices/mitigation to
proposed shall be redesigned to avoid impacting these plant species where	resources	analysis	be implemented for the proposed rail
feasible based on coordination with the local jurisdiction and applicable resource	impacts during		infrastructure and/or station facility
agencies. If California Rare Plant Rank 3 and 4 species are found, the biologist	construction		site during construction and
shall evaluate to determine if they meet criteria to be considered special status. If	and		operation. These site-specific best
so, the same process as identified for California Rare Plant Rank 1 and 2 species	operational		management practices/mitigation
shall apply. If special status plants species cannot be avoided and would be	activities		measures shall be included as part
impacted by the specific rail infrastructure or station facility proposed, all impacts			of subsequent Tier 2/Project-level
shall be mitigated for each species as a component of habitat restoration. A			environmental documentation.
restoration plan shall be prepared and submitted to the lead agency and/or the			
local jurisdiction overseeing the Project for approval. The restoration plan shall			
include, at a minimum, the following components:			
Description of the Project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type)			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Goal(s) of the compensatory mitigation project (type(s) and area(s) of			
habitat to be established, restored, enhanced, and/or preserved; specific			
functions and values of habitat type(s) to be established, restored,			
enhanced, and/or preserved)			
Description of the proposed compensatory mitigation site (location and			
size, ownership status, existing functions and values)			
Implementation plan for the compensatory mitigation site (rationale for			
expecting implementation success, responsible parties, schedule, site			
preparation, planting plan)			
Maintenance activities during the monitoring period, including weed			
removal as appropriate (activities, responsible parties, schedule)			
Monitoring plan for the compensatory mitigation site, including			
performance standards, target functions and values, target acreages to			
be established, restored, enhanced, and/or preserved, annual monitoring			
reports			
Success criteria based on the goals and measurable objectives (said			
criteria to include numeric criteria to be selected based on the scale of			
the restoration effort and the restoration technique used)			
An adaptive management program and remedial measures to address			
any shortcomings in meeting success criteria			
Notification of completion of compensatory mitigation and agency			
confirmation			
Contingency measures (initiating procedures, alternative locations for			
contingency compensatory mitigation, funding mechanism)			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Mitigation Strategy BIO-4: Specific habitat assessment and survey protocol	Potentially	As part of	If identified by the biological
surveys are established for several federally and/or state endangered or	significant	subsequent Tier	resources assessment, inclusion of
threatened species. If the results of the biological resources assessment	biological	2/Project-level	site-specific special status habitat
determine that suitable habitat may be present for any such species, protocol	resources	analysis	assessment and protocol survey(s)
habitat assessments/surveys shall be completed in accordance with the California	impacts during		for the proposed rail infrastructure
Department of Fish and Wildlife and/or United States Fish and Wildlife Service	construction		and/or station facility site. The site-
protocols prior to issuance of any construction permits/Project approvals.	and		specific special status habitat
Alternatively, in lieu of conducting protocol surveys, the implementing agency may	operational		assessment and protocol survey(s)
choose to assume presence within the Project footprint and proceed with	activities		shall be included as part of
development of appropriate avoidance measures, consultation, and permitting, as			subsequent Tier 2/Project-level
applicable. If the target species is detected during protocol surveys, or protocol			environmental documentation.
surveys are not conducted and presence assumed based on suitable habitat,			
additional coordination shall apply.			
Mitigation Strategy BIO-5: Prior to initiation of construction activities (including	Potentially	As part of	Inclusion and implementation of a
staging and mobilization), all personnel associated with Project construction shall	significant	subsequent Tier	site-specific worker environmental
attend worker environmental awareness program training, conducted by a	biological	2/Project-level	awareness program training, if
qualified biologist, to aid workers in recognizing special status resources that may	resources	analysis	required, during construction
occur in the Tier 2/Project-level Study Area. The specifics of this program shall	impacts during		activities for the proposed rail
include, but not be limited to, the following:	construction		infrastructure and/or station facility
Identification of the sensitive species and habitats	and		site. Additional details about the site-
	operational		specific worker environmental
Description of the regulatory status and general ecological	activities		awareness program shall be
characteristics of sensitive resources			included as part of subsequent Tier
Review of the limits of construction and mitigation measures required to			2/Project-level environmental
reduce impacts on biological resources within the work area			documentation.

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Preparation of a fact sheet conveying this information shall for			
distribution to all contractors, their employers, and other personnel			
involved with construction of the Project			
Employee documentation associated with worker environmental			
awareness program attendance and acknowledgment			
Floodplains, Hydrology, and Water Quality			
Mitigation Strategy HWQ-1: During Tier 2/Project-level analysis, additional	Potentially	As part of	If required, inclusion of a site-
floodplain hydrology documentation shall be conducted to determine if the siting of	significant	subsequent Tier	specific floodplain assessment for
specific rail infrastructure or station facility proposed would encroach into a	floodplain	2/Project-level	the proposed rail infrastructure
floodplain. If the siting of specific rail infrastructure or station facility requires	hydrology	analysis	and/or station facility site. This site-
encroachment into a floodplain, a floodplain assessment shall be conducted to	impacts during		specific floodplain assessment and
evaluate the impacts of specific designs on water surface elevations and flood	construction		coordination with applicable
conveyance and evaluate potential flooding risk. Any project that would result in	activities		regulatory agencies shall be
floodplain encroachment shall coordinate with the governing agency or local			included as part of subsequent Tier
jurisdiction. Any additional requirements that may be needed shall be determined			2/Project-level environmental
in coordination with the applicable regulatory agencies.			documentation.
Mitigation Strategy HWQ-2: Based on the results of the Tier 2/Project-level	Potentially	As part of	Consideration, identification, and
analysis and recommendations, the construction of specific rail infrastructure or	significant	subsequent Tier	inclusion of site-specific best
station facility proposed shall comply with the provisions of the National Pollutant	water quality	2/Project-level	management practices to be
Discharge Elimination System General Permit for Stormwater Discharges	impacts during	analysis	implemented for the proposed rail
Associated with Construction and Land Disturbance Activities (Order Number	construction	-	infrastructure and/or station facility
2009 0009 DWQ, National Pollutant Discharge Elimination System Number	activities		site during construction activities per
CAS000002) and any subsequent amendments (Order Number 2010 0014 DWQ			NPDES requirements. These site-
			specific best management practices
			shall be included as part of

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
and Order Number 2012 0006 DWQ). These provisions shall include, but are not			subsequent Tier 2/Project-level
limited to, the following:			environmental documentation.
 Construction activities shall not commence until a waste discharger identification number is received from the State Water Resources Control Board Stormwater Multiple Application and Report Tracking System. Identification of good housekeeping, erosion control, and sediment control best management practices shall be utilized during construction activities. A stormwater pollution prevention plan shall be prepared. A rain event action plan shall be prepared. A notice of termination shall be submitted to the State Water Resources Control Board within 90 days of completion of construction and stabilization of the site. 			
These requirements, and any additional approvals, shall be determined in coordination with the governing agencies or local jurisdiction before construction on a project commences.			
 Mitigation Strategy HWQ-3: Based on the results of the Tier 2/Project-level analysis and recommendations, the operation of specific rail infrastructure or station facility proposed shall comply with the provisions of the applicable Regional Water Quality Control Board Municipal Separate Storm Sewer System Program. These provisions shall include, but are not limited to, the following: Low impact, site design, and source control best management practices shall be identified to be utilized during operational activities. 	Potentially significant water quality impacts during operational activities	As part of subsequent Tier 2/Project-level analysis	Consideration, identification, and inclusion of site-specific best management practices to be implemented for the proposed rail infrastructure and/or station facility site during operational activities per RWQCB requirements. These site- specific best management practices shall be included as part of

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
A water quality management plan shall be prepared that will be			subsequent Tier 2/Project-level
implemented and maintained throughout the life of a project and used by			environmental documentation.
property owners, facility operators, tenants, facility employees, and			
maintenance contractors.			
These requirements, and any additional approvals, shall be determined in			
coordination with the governing agencies or local jurisdiction before operation on			
a project commences.			
Geology, Soils, Seismicity, and Paleontological Resources			<u> </u>
Mitigation Strategy GEO-1: During the Tier 2/Project-level analysis, a preliminary	Potentially	As part of	Inclusion of a site-specific
geotechnical report shall be prepared by a licensed geotechnical or civil engineer	significant	subsequent Tier	preliminary geotechnical report for
for the specific rail infrastructure or station facility proposed. The preliminary	geologic	2/Project-level	the proposed rail infrastructure
geotechnical report shall include, but not be limited to, analysis and	impacts	analysis	and/or station facility site. This site-
recommendations on the following topics:	associated		specific preliminary geotechnical
Site preparation	with Program		report shall be included as part of
Soil bearing capacity	implementation		subsequent Tier 2/Project-level
Appropriate sources and types of fill			environmental documentation.
Liquefaction			
Lateral spreading			
Corrosive soils			
Structural foundations			
Grading practices			
The recommendations identified in the preliminary geotechnical report shall be			
refined in a final geotechnical report.			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Mitigation Strategy PAL-1: During the Tier 2/Project-level analysis, the lead	Potentially	As part of	Inclusion of a site-specific
agency or agencies shall determine if a paleontological resources assessment	significant	subsequent Tier	paleontological resources
report is required for the specific rail infrastructure or station facility proposed. If	paleontological	2/Project-level	assessment report for the proposed
required, a paleontological resources assessment report shall be prepared for the	resource	analysis	rail infrastructure and/or station
specific rail infrastructure or station facility proposed. The report shall include, but	impacts during		facility site. This site-specific
not be limited to, analysis and recommendations on the following topics:	construction		paleontological resources
Geologic context of the region and site and the potential to contain paleontological resources	activities		assessment report shall be included as part of subsequent Tier 2/Project-
A records search of institutions holding paleontological collections from the Southern California region			level environmental documentation.
• A review of published and unpublished literature for past paleontological finds in the area			
If the paleontological resources assessment report identifies that paleontological			
resources are present at the site or if the geologic units to be encountered by the			
Project are designated as having a high paleontological sensitivity by the			
applicable local jurisdiction and lead agency, a paleontological resources impact			
mitigation program shall be prepared and implemented by a professional			
paleontologist as defined under Secretary of the Department of the Interior			
Standards. The paleontological resource impact mitigation program shall include,			
but not be limited to, the following:			
• The qualifications of the principal investigator and monitoring personnel			
Construction crew awareness training content, procedures, and requirements			
Measures to prevent potential looting, vandalism, or erosion impacts			
Location, frequency, and schedule for onsite monitoring activities			
Criteria for identifying and evaluating potential fossil specimens or localities			

Mitigation Strategies • A plan for the use of protective barriers and signs or implementation of other physical or administrative protection measures • Collection and salvage procedures • Identification of an institution or museum willing and able to accept any fossils discovered • Compliance monitoring and reporting procedures	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Hazards and Hazardous Materials			
Mitigation Strategy HAZ-1: During Tier 2/Project-level analysis, a Phase I Environmental Site Assessment shall be conducted to determine the significance of impacts on hazardous waste or materials sites due to the siting of specific rail infrastructure or station facility proposed. The site-specific Phase I Environmental Site Assessment shall adhere to ASTM conforming requirements and include recommendations on if a subsequent Phase II Site Investigation is required for the selected site. The Phase I Environmental Site Assessment shall also include a discussion of observed and/or suspected asbestos containing materials, potential lead-based paint, and other materials falling under the Universal Waste requirements within the selected site.	Potentially significant hazards and hazardous material impacts during construction activities	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific Phase I Environmental Site Assessment for the proposed rail infrastructure and/or station facility site. This site- specific Environmental Site Assessment shall be included as part of subsequent Tier 2/Project- level environmental documentation.
 Mitigation Strategy HAZ-2: During Tier 2/Project-level analysis, a site-specific hazardous materials management program shall be prepared for the specific rail infrastructure or station facilities proposed. The hazardous materials management program shall provide for safe storage, containment, and disposal of chemicals and hazardous materials related to Project construction and operation, including the proper disposal of waste materials. The hazardous materials management program shall include, but should not be limited to, the following: A description of hazardous materials and hazardous wastes used (29 Code of Federal Regulations 1910.1200) 	Potentially significant hazards and hazardous material impacts during construction and	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific hazardous materials management program for the proposed rail infrastructure and/or station facility site. This site- specific hazardous materials management program shall be included as part of subsequent Tier 2/Project-level environmental documentation.

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
A description of handling, transport, treatment, and disposal procedures,	operational		
as relevant for each hazardous material or hazardous waste (29 Code of	activities		
Federal Regulations 1910.120)			
• Preparedness, prevention, contingency, and emergency procedures,			
including emergency contact information (29 Code of Federal			
Regulations 1910.38)			
A description of personnel training including, but not limited to: (1)			
recognition of existing or potential hazards resulting from accidental spills			
or other releases; (2) implementation of evacuation, notification, and			
other emergency response procedures; (3) management, awareness,			
and handling of hazardous materials and hazardous wastes, as required			
by their level of responsibility (29 Code of Federal Regulations 1910)			
Instructions on keeping Safety Data Sheets for each on site hazardous			
chemical (29 Code of Federal Regulations 1910.1200)			
 Identification of the locations of hazardous material storage areas, 			
including temporary storage areas, which shall be equipped with			
secondary containment sufficient in size to contain the volume of the			
largest container or tank (29 Code of Federal Regulations 1910.120)			
Mitigation Strategy HAZ-3: During Tier 2/Project-level analysis, sites identified	Potentially	As part of	Inclusion of a site-specific screening
for the specific rail infrastructure or station facility proposed shall be screened by	significant	subsequent Tier	to determine any land use
the identified lead agency or agencies to determine if land use restrictions or	hazards and	2/Project-level	restrictions or activity use limitations
activity use limitations are present. If the site contains land use restrictions or	hazardous	analysis	for the proposed rail infrastructure
activity use limitations that would be affected by the Project, coordination with the	material		and/or station facility site. This site-
governing agency (Department of Toxic Substance Control or Regional Water	impacts during		specific screening shall be included
Quality Control Board) shall be required. Such coordination shall consist of	construction		as part of subsequent Tier 2/Project-
notifying the local enforcement branch of the agencies that work is planned for a	activities		level environmental documentation.

Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Potentially significant hazards during construction and operational activities	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific fire control and emergency response plan for the proposed rail infrastructure and/or station facility site. This site- specific fire control and emergency response plan shall be included as part of subsequent Tier 2/Project- level environmental documentation.
Potentially	As part of	Inclusion and implementation of
significant	subsequent Tier	additional water supply
water supply	2/Project-level	documentation, including avoidance
impacts during	analysis	and minimization measures, if
operational		required. This site-specific water
activities		supply documentation shall be
		included as part of subsequent Tier
		2/Project-level environmental
	Addressed Potentially significant hazards during construction and operational activities Potentially significant water supply impacts during operational	AddressedImplementationAddressedImplementationImplementationImplementationImplementationImplementationPotentiallyAs part ofsignificantsubsequent Tierhazards during2/Project-levelconstructionanalysisandImplementationoperationalImplementationactivitiesImplementationPotentiallyAs part ofsignificantsubsequent Tierwater supply2/Project-levelimpacts duringanalysisoperationalImplementation

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Obtainment of a water supply verification letters from the applicable			
water purveyor per Senate Bill 221 requirements			
 Mitigation Strategy UTL-2: During Tier 2/Project-level analysis, a site-specific utilities report shall be prepared for the rail infrastructure or station facility proposed. The utilities report will identify the ability for existing utility infrastructure to serve the Project, additional utility infrastructure needs, and local jurisdiction/utility provider coordination. The report shall include, but not be limited to, the following analyses: Wastewater/Sewer Infrastructure. Identification of existing sewer infrastructure, sewer capacity, required wastewater/sewer relocations, and site-specific wastewater generation estimates Electrical Infrastructure. Identification of existing electrical infrastructure, electrical capacity, required electrical infrastructure relocations, and site-specific electrical demand estimates Natural Gas Infrastructure. Identification of existing natural gas infrastructure, required natural gas infrastructure relocations, and site-specific natural gas demand estimates 	Potentially significant utility infrastructure impacts during Program implementation	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific utilities report for the proposed rail infrastructure and/or station facility site. This site-specific utilities report shall be included as part of subsequent Tier 2/Project-level environmental documentation.
Cultural Resources	1		
Mitigation Strategy CUL-1: During subsequent Tier 2/Project-level analysis, a preliminary cultural resource screening shall be conducted by the identified lead	Potentially significant	As part of subsequent Tier	Determination if cultural resources have the potential to be or are
agency or agencies to determine if the Tier 2/Project-level improvement being	cultural	2/Project-level	present where the proposed rail
proposed has the potential to impact cultural resources. If the proposed Tier	resource	analysis	infrastructure and/or station facility is
2/Project-level improvement has the potential to impact cultural resources, a	impacts during		located. If cultural resources have
qualified cultural resources specialist shall conduct a cultural resources	Program		the potential to be or are present,
assessment report to document the existing cultural resources within the Tier	implementation		inclusion of a site-specific cultural

	Addressed	Timing of Implementation	Actions Indicating Compliance
2/Project-level Study Area. The report may include, but not be limited to, the			resources assessment report shall
following:			be included as part of subsequent
 following: Survey and inventory for archaeological resources, including those determined to be tribal cultural resources, including a review of updated information for the applicable cultural information center and other data repositories. Survey and inventory for historic, built environment resources, including a review of updated information for the applicable cultural information center and other data repositories. All identified cultural resources shall be recorded using the appropriate California Department of Parks and Recreation cultural resources recordation forms. Cultural resources shall be evaluated for eligibility for inclusion in the National Register of Historic Places and California Register of Historical Resources, and evaluations shall be conducted by individuals who meet the Secretary of the Interior's professional qualification standards in archaeology, history, and/or architectural history. Documentation of Tier 2/Project-level Section 106 and Assembly Bill 52 Native American consultation efforts and site-specific recommendations and input received from Native American monitors on site during ground disturbance activities Identification of procedures regarding repatriation of cultural 			be included as part of subsequent Tier 2/Project-level environmental documentation.

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
 Notification and early coordination with the Bureau of Indian Affairs (BIA) and applicable Tribal Historic Preservation Officers for Tier 2/Project-level fieldwork and surveys occurring within Native American reservation lands. 			
If the resource is found to be a historical resource/historic property, the agency carrying out implementation of the Tier 2/Project-level improvement shall be required to identify and implement site specific mitigation if the Tier 2/Project-level improvement has a substantial adverse change to the resource, including physical damage, destruction, relocation, or alteration of the property that materially alters in an adverse manner those physical characteristics of the property that convey its			
significance for inclusion in or eligibility for the NRHP, California Register of Historical Resources, or local register. These Tier 2/Project-level site specific mitigation measures shall be developed in coordination with applicable Section 106 and AB 52 consultation requirements.			
Parklands and Community Services	I	l.	
Mitigation Strategy PCS-1: During Tier 2/Project-level analysis, recreational	Potentially	As part of	Identification, inventory, and impact
resources that would be impacted by the site-specific rail infrastructure	significant	subsequent Tier	evaluation analysis for parkland or
improvement or station facility shall be identified, and any physical take of	parkland or	2/Project-level	community facility resources at the
recreational properties shall be evaluated. Measures to avoid or minimize impacts	community	analysis	location of the proposed rail
 on recreational properties shall include, but are not limited to, the following: Selection of rail station locations that avoid recreational resources Moving equipment and facilities to another located within existing parkland Planting vegetation to offset removed vegetation or to establish visual or auditory screening 	facility impacts associated with Program implementation		infrastructure and/or station facility site. This evaluation analysis shall be included as part of subsequent Tier 2/Project-level environmental documentation.

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
Safety and Security			
Mitigation Strategy SS-1: During Tier 2/Project-level analysis, a Project specific collision hazard analysis shall be required and would be prepared in coordination local jurisdictions in which the specific rail infrastructure or station facility is located. The collision hazard analysis shall be prepared in compliance with the Federal Railroad Administration's Collision Hazard Analysis Guide: Commuter and Intercity Passenger Service (Federal Railroad Administration 2007), which provides a step by step procedure on how to perform a hazard analysis and how to develop effective mitigation strategies that would improve passenger rail safety.	Potentially significant safety and security impacts during construction and operational activities	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific collision hazard analysis for the proposed rail infrastructure and/or station facility site. This site-specific collision hazard analysis shall be included as part of subsequent Tier 2/Project- level environmental documentation.
Mitigation Strategy SS-2: Based on the results of a subsequent Tier 2/Project- level analysis and recommendations, safety and security certification plans shall be developed for the specific rail infrastructure or station facility proposed. The safety and security certification plan shall be prepared in compliance with the Federal Railroad Administration, Occupational Safety and Health Administration, California Public Utilities Commission, and other applicable agencies and address design, construction, testing and initiation into revenue service.	Potentially significant safety and security impacts during construction and operational activities	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific safety and security certification plan for the proposed rail infrastructure and/or station facility site. This site-specific safety and security certification plan shall be included as part of subsequent Tier 2/Project-level environmental documentation.
Socioeconomics and Communities Affected	I	1	L
Mitigation Strategy PH-1: During Tier 2/Project-level analysis, any required acquisitions related to the construction of infrastructure improvements (such as sidings, additional main line track, wayside signals, drainage, grade separation structures, and stations) shall be identified. If the proposed Project would have the potential to result in property acquisitions that would require residential or commercial displacement, a relocation mitigation plan shall be prepared, in	Potentially significant relocation impacts during Program implementation	As part of subsequent Tier 2/Project-level analysis	Inclusion of a site-specific relocation mitigation plan, including avoidance and minimization measures for the proposed rail infrastructure and/or station facility site. This site-specific relocation mitigation plan shall be included as part of subsequent Tier

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
consultation with affected property owners. The relocation mitigation plan shall be			2/Project-level environmental
designed to meet the following objectives:			documentation.
 Provide affected property and business owners and tenants a high level of individualized assistance in situations when acquisition is necessary, and the property owner desires to relocate the existing use Coordinate relocation activities that would result in displacements to ensure all displaced persons and businesses receive fair and consistent relocation benefits 			
Minimize the permanent closure of businesses and nonprofit agencies as a result of property acquisition			
• Within the limits established by law and regulation, minimize the economic disruption caused to property owners by relocation			
Provide regulatory compliance assistance to those business owners who require complex permitting			
• The relocation mitigation plan shall include, but not be limited to, the following components:			
 A description of the appraisal, acquisition, and relocation process, as well as a description of the activities of the appraisal and relocation specialists 			
 A means of assigning appraisal and relocation staff to affected property owners, tenants, or other residents on an individual basis 			
 Individualized assistance to affected property owners, tenants, or other residents in applying for funding and researching areas for relocation 			
 Identification of a single point of contact for property owners, residents, and tenants with questions about the relocation process. This point of contact shall also act to address concerns about the 			

Mitigation Strategies	Impact Being Addressed	Timing of Implementation	Actions Indicating Compliance
relocation process; it applies to the individual situations of property owners, tenants, and other residents			