

Section 7. Mitigation Monitoring and Reporting Program

The California Environmental Quality Act (CEQA) requires that an agency adopt a Mitigation Monitoring or Reporting Program (MMRP) prior to approving a project that includes mitigation measures. This MMRP has been prepared in compliance with the requirements of Section 21081.6 of the California Public Resources Code and Sections 15091(d) and 15097 of the CEQA Guidelines.

The purpose of this MMRP is to ensure compliance with the adopted mitigation measures included in the 2008 Regional Transportation Plan (RTP) Program EIR (PEIR), in accordance with CEQA requirements. The 2008 RTP PEIR evaluates the transportation plan on a system-wide, regional scale, and includes feasible mitigation measures to reduce environmental impacts. The MMRP for the 2008 RTP PEIR clarifies the process for implementing agencies to comply with these mitigation measures and designates responsibility for implementing, monitoring, and reporting mitigation.

This MMRP applies to all projects in the 2008 RTP that are required to prepare a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR) for a project, pursuant to CEQA. This MMRP calls for monitoring reports prepared for these individual projects to be submitted directly to SCAG and to the Lead Agency for each particular project.

ADMINISTRATIVE PROCEDURES

SCAG will rely upon each project's Lead Agency to implement monitoring and verification of successful completion of each mitigation measure. Reporting compliance with a mitigation measure consists of establishing a record that a mitigation measure is being implemented. This process will involve the following steps.

1. Draft environmental documents (Notices of Intent to adopt a MND and Draft EIRs) for applicable projects in the 2008 RTP shall be sent to SCAG at the beginning of the project's CEQA-mandated public comment period. These draft documents must include proposed mitigation measures. In addition, final environmental documents, including the required project-level MMRP, shall be sent to SCAG within five days of final approval of each project.
2. Each project's MMRP shall include references, where appropriate, to mitigation measures included in the 2008 RTP PEIR and this MMRP.
3. A report shall be sent to SCAG that states compliance with the MMRP. This report shall be sent to SCAG at the same time that monitoring reports are submitted to the lead agency for each particular project.
4. The documents and reports will be analyzed through SCAG's Intergovernmental Review (IGR) process to determine whether they are

consistent with the RTP policies and comply with mitigation measures included in the PEIR for the 2008 RTP. If a project is found to be inconsistent with regional environmental mitigation policies or mitigation measures adopted as part of the 2008 RTP PEIR, then SCAG will send correspondence to the project's Lead Agency stating that the project conflicts with regional policy or with a mitigation measure. The purpose of this MMRP is to ensure compliance with adopted mitigation measures. SCAG's IGR process is to review projects' of regional significance for consistency with the RTP, including policies and mitigation measures. Additional guidance on SCAG's IGR process is provided in SCAG's Intergovernmental Review Procedures Handbook.

5. For projects of statewide, regional or areawide significance, transportation information that results from a project-specific MMRP shall be submitted to SCAG periodically as results become reasonably available, over the course of project construction and operation, in accordance with CEQA, Public Resources Code Section 21081.7, and CEQA Guidelines Section 15097(g).
6. Submitted transportation information, compliance reports and appendices to project MMRPs will be on file with SCAG and will be publicly available to all interested parties.

MONITORING PROCEDURES

The development process of most transportation projects generally falls into three phases relevant to the MMRP: design, construction, and operation. Directly related to these phases of development are three implementation mechanisms:

1. The incorporation of mitigation measures into the project planning and design;
2. The incorporation of mitigation measures into construction contracts; and
3. The implementation of mitigation measures by administrative action.

MONITORS

Lead Agencies are responsible for ensuring compliance with the mitigation measures adopted as part of the 2008 RTP PEIR. Each Lead Agency for each applicable project shall assign monitors for individual project mitigation measures/conditions listed below in Table 1. .

ENFORCEMENT

CEQA requires mitigation measures to be “fully enforceable” through the use of authority conferred by other laws within each Lead Agency’s jurisdiction (Public Resources Code 21081.6(b)). The Lead Agency is responsible for identifying accountable enforcement actions for individual mitigation measures/conditions adopted as part of the 2008 RTP as they apply to each project (as well as additional project specific measures that will be identified as part of project specific environmental review).

SCAG shall receive a copy of the mitigation monitoring or reporting program prepared for each project within five days of adoption (in conjunction with filing the Notice of Determination), and shall receive a report documenting compliance with all pre-construction and construction measures on completion of construction prior to operation. As stated above, the documents will be analyzed through SCAG’s Intergovernmental Review process to determine whether they are consistent with mitigation measures adopted with the 2008 RTP. If a project is found to be inconsistent with regional environmental mitigation policies or mitigation measures adopted as part of the 2008 RTP PEIR, then SCAG will send correspondence to the project’s Lead Agency stating that the project conflicts with the RTP. Transportation projects are required to be consistent with the RTP including mitigation measures adopted as part of the PEIR for the RTP. The MMRP is a tool to help implementing agencies and SCAG ensure compliance with adopted mitigation measures. The monitor, as assigned by the Lead Agency for each project, will act as a reporter of information on compliance based on the terms set forth in the project specific mitigation monitoring or reporting program. If a failure to mitigate or comply with mitigation measures is reported by the monitor, the implementing agency will act to require correction for such failure.

MITIGATION MEASURES ADOPTED WITH THE 2008 RTP

The mitigation measures adopted with the 2008 RTP PEIR are included in Table 1 below. The Table identifies the timing of implementation and the parties responsible for implementation of the mitigation measures. As indicated in Table 1, most of these measures will be implemented by each project implementing agency for applicable projects in the RTP.

For those mitigation measures that SCAG is responsible for implementing or partially implementing, reports on the progress of implementation of these measures will be made periodically to the SCAG Energy and Environment Committee and the Regional Council.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-AV.1: Prior to project approval, project implementation agencies should implement design guidelines, local policies, and programs aimed at protecting views of scenic corridors and avoiding visual intrusions. Projects should be designed to minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Avoid, if possible, large cuts and fills when the visual environment (natural or urban) would be substantially disrupted. Site or design projects should minimize their intrusion into important viewsheds and use contour grading to better match surrounding terrain.	X	X				X
MM-AV.2: Prior to the issuance of permits, project implementation agencies should require and projects should, to the extent feasible, construct noise barriers of materials whose color and texture complements the surrounding landscape and development. Noise barriers should be graffiti resistant and landscaped with plants that screen the barrier, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas. Landscaping should use natural landscaping to minimize contrasts between the project and surrounding areas. Wherever possible, interchanges and transit lines at the grade of the surrounding land should limit view blockage. The edges of major cut and fill slopes should be contoured to provide a more natural-looking finished profile.	X	X				X
MM-AV.3: Project implementation agencies should, where practicable and feasible, avoid construction of transportation facilities in state and locally designated scenic highways and/or vista points.	X	X				X
MM-AV.4: Prior to project approval, project implementation agencies should complete design studies for projects in designated or eligible Scenic Highway corridors and develop site-specific mitigation measures to minimize impacts on the quality of the views or visual experience that originally qualified the highway for scenic designation.	X					X
MM-AV.5: If transportation facilities are constructed in state- and locally-designated scenic highways and/or vista points, design, construction, and operation of the transportation facility should be consistent with applicable guidelines and regulations for the preservation of scenic resources along the designated scenic highway.	X	X				X
MM-AV.6: Project implementation agencies should develop design guidelines for each type of transportation facility that make elements of proposed facilities visually compatible with surrounding areas. Visual design guidelines should, at a minimum, include setback buffers, landscaping, color, texture, signage, and lighting criteria. The following methods should be employed whenever possible: <ul style="list-style-type: none"> • Transportation systems should be developed to be compatible with the surrounding environment (i.e., colors and materials of construction material). • Vegetation used as screening should blend in and complement the natural landscape. • Trees bordering highways should remain or be replaced so that clear-cutting is not evident. • Grading should blend with the adjacent landforms and topography. 	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-AV.7: Project implementation agencies should design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. Project implementation agencies should design projects to minimize their intrusion into important viewsheds and use contour grading to better match surrounding terrain. To the maximum extent feasible, landscaping along highway corridors should be designed to add significant natural elements and visual interest to soften the hard-edged, linear travel experience that would otherwise occur.	X	X	X			X
MM-AV.8: Project implementation agencies should use natural landscaping to minimize contrasts between the project and surrounding areas. Wherever possible, interchanges and transit lines should be designed at the grade of the surrounding land to limit view blockage. Edges of major cut-and-fill slopes should be contoured to provide a more natural looking finished profile. Project implementation agencies should replace and renew landscaping to the greatest extent possible along corridors with road widenings, interchange projects, and related improvements. New corridor landscaping should be designed to respect existing natural and man-made features and to complement the dominant landscaping of surrounding areas.	X	X				X
MM AV.9: Project implementation agencies should construct sound walls of materials whose color and texture complements the surrounding landscape and development and to the maximum extent feasible, use color, texture, and alternating facades to “break up” large facades and provide visual interest. Where there is room, project sponsors should landscape the sound walls with plants that screen the sound wall, preferably with either native vegetation or landscaping that complements the dominant landscaping of surrounding areas.	X	X	X			X
MM-AV.10: In visually sensitive site areas and prior to project approval, local land use agencies should apply development standards and guidelines to maintain compatibility with surrounding natural areas, including site coverage, building height and massing, building materials and color, landscaping, site grading, etc.	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: “Planning and Project Design,” “During Construction,” and “Post Construction” require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>Emissions of particulate matter are directly related to growth and VMT. Regardless of how clean a vehicle operates, the vast majority of PM10 and PM2.5 emissions from on-road sources are generated from re-entrained dust on paved roads and is a function of the vehicle miles traveled. Mitigation measures that reduce VMT are proposed. Additional measures to control fugitive dust and transportation-related PM10 and PM2.5 are outlined in the 2007 Air Quality Management Plan (AQMP) and include control methods, such as watering, chemical stabilization, paving, revegetation, track-out control, construction project signage, sweeping and motor vehicle controls.</p> <p>Mitigation measures from the following air quality management plans are hereby incorporated by reference:</p> <ul style="list-style-type: none"> • 2007 South Coast Air Quality Management Plan (AQMP) <ul style="list-style-type: none"> South Coast Air Quality Management District Mitigation Measures and Control Efficiencies for the following: <ul style="list-style-type: none"> Off-road Engines On-road Engines Harbor Craft Ocean-going Vessels Locomotives Fugitive Dust • Mojave Desert Air Quality Management Plan • Antelope Valley Air Quality Management Plan • Imperial County Air Quality Management Plan 	X			X	X	X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-AQ.1: Pursuant to CAA Section 108(f)(1)(A), Transportation Control Measures (TCMs) from the 2007 AQMP include the following sixteen measures:</p> <ul style="list-style-type: none"> I. Programs for improved use of public transit; II. Restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles; III. Employer-based transportation management plans, including incentives; IV. Trip-reduction ordinances; V. Traffic flow improvement programs that achieve emission reductions; VI. Fringe and transportation corridor parking facilities, serving multiple occupancy vehicle programs or transit service; VII. Programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration, particularly during periods of peak use; VIII. Programs for the provision of all forms of high-occupancy, shared-ride services, such as the pooled use of vans; IX. Programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place; X. Programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas; XI. Programs to control extended idling of vehicles; XII. Programs to reduce motor vehicle emissions, consistent with Title II of the Clean Air Act, which are caused by extreme cold start conditions; XIII. Employer-sponsored programs to permit flexible work schedules; XIV. Programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single-occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity; XV. Programs for new construction and major reconstruction of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation, when economically feasible and in the public interest; and XVI. Programs to encourage the voluntary removal from use and the marketplace of pre- 1980 model year light duty vehicles and pre-1980 model light duty trucks. <p>The 2008 RTP has been prepared to facilitate implementation of the transportation control measures outlined in the 2007 AQMP. The 2008 RTP incorporates both the capital and noncapital improvements recommended by the AQMP.</p> <p>*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.</p>				X	X	X

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-AQ.2: ARB has adopted a series of measures designed to attain federal air quality standards for PM2.5 and 8-hour ozone. ARB’s strategy, outlined in the South Coast SIP, includes the following elements:</p> <ul style="list-style-type: none"> ▪ Set technology forcing new engine standards; ▪ Reduce emissions from the in-use fleet; ▪ Require clean fuels, and reduce petroleum dependency; ▪ Work with US EPA to reduce emissions from federal and state sources; and ▪ Pursue long-term advanced technology measures. <p>Proposed new transportation-related SIP measures include:</p> <p><i>On-road Sources</i></p> <ul style="list-style-type: none"> • Improvements and Enhancements to California’s Smog Check Program • Expanded Passenger Vehicle Retirement • Modifications to Reformulated Gasoline Program • Cleaner In-Use Heavy-Duty Trucks • Ship Auxiliary Engine Cold Ironing and Other Clean Technology • Cleaner Ship Main Engines and Fuel • Port Truck Modernization • Accelerated Introduction of Cleaner Line-Haul Locomotives • Clean Up Existing Commercial Harbor Craft <p><i>Off-road Sources</i></p> <ul style="list-style-type: none"> • Construction and Other Equipment • Cleaner In-Use Off-Road Equipment • Agricultural Equipment Fleet Modernization • New Emission Standards for Recreational Boats • Off-Road Recreational Vehicle Expanded Emission Standards. 				X	X	X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: “Planning and Project Design,” “During Construction,” and “Post Construction” require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
Mitigation measures include the mitigation measures included in Impact 3.2-1. Also, compliance with AQMD Rule 403 (Fugitive Dust) will reduce emissions of fugitive dust from construction activities.				X	X	X
MM-AQ.3: Apply water or "toxic free" dust suppressants to exposed earth surfaces to control emissions.		X				X
MM-AQ.4: All excavating and grading activities should cease during second stage smog alerts and periods of high winds.		X				X
MM-AQ.5: All trucks hauling dirt, sand, soil, or other loose materials off-site should be covered or wetted or should maintain at least two feet of freeboard (i.e., minimum vertical distance between the top of the load and the top of the trailer).		X				X
MM-AQ.6: All construction roads that have high traffic volumes, should be surfaced with base material or decomposed granite, or should be paved or otherwise be stabilized.		X				X
MM-AQ.7: Public streets should be cleaned, swept or scraped at frequent intervals or at least three times a week if visible soil material has been carried onto adjacent public roads.		X				X
MM-AQ.8: Construction equipment should be visually inspected prior to leaving the site and loose dirt should be washed off with wheel washers as necessary.		X				X
MM-AQ.9: Water or non-toxic soil stabilizers should be applied as needed to reduce off-site transport of fugitive dust from all unpaved staging areas and other unpaved surfaces.		X				X
MM-AQ.10: Traffic speeds on all unpaved surfaces should not exceed 25 mph.		X				X
MM-AQ.11: Low sulfur or other alternative fuels or diesel powered vehicles with Tier 3 or better engines or retrofitted/repowered - to meet equivalent emissions standards as Tier 3 engines - should be used in construction equipment where feasible.		X				X
MM-AQ.12: Deliveries related to construction activities that affect traffic flow should be scheduled during off-peak hours (e.g. 10:00 A.M. and 3:00 P.M.) and coordinated to achieve consolidated truck trips. When the movement of construction materials and/or equipment impacts traffic flow, temporary traffic control should be provided to improve traffic flow (e.g., flag person).		X				X
MM-AQ.13: To the extent possible, construction activity should utilize electricity from power poles rather than temporary diesel power generators and/or gasoline power generators.		X				X
MM-AQ.14: Local governments or agencies with purview should, as practical and feasible revegetate exposed earth surfaces following construction. Application of xeriscape principles, including such techniques and materials as native or low water use plants and low precipitation sprinklers heads, bubblers, drip irrigation systems and timing devices, should also be considered.			X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
GHG emissions are generally associated with the combustion of fossil fuel to power motor vehicles and provide energy. As such, the most effective way to reduce GHG emissions is to reduce energy use and associated fossil fuel combustion. The RTP PEIR Energy Section provides a comprehensive list of mitigation measures that would reduce fossil fuel combustion in the SCAG region. Additional measures are as follows:						
MM-AQ.15: Local governments or agencies with purview should, as practical and feasible, implement policies for sustainable airport development, management and airfield design to reduce air pollution and GHG emissions from operations, including cargo operations, ground support and access to and from airports (see Los Angeles World Airports Sustainability Vision and Principles and the Green LA Action Plan).				X	X	X
MM-AQ.16: Local governments or agencies with purview should, as practical and feasible, implement a green construction policy that could include: <ul style="list-style-type: none"> Ensuring that all off-road construction vehicles should be alternative fuel vehicles, or diesel powered vehicles with Tier 3 or better engines or retrofitted/repowered -to meet equivalent emissions standards as Tier 3 engines; Using the minimum feasible amount of GHG emitting construction materials; Using cement blended with the maximum feasible amount of flyash or other materials that reduce GHG emissions Using asphalt with light colored additives and chemical additives that increase reflectivity and therefore reduce contribution to the heat island effect Requiring recycling of construction debris to maximum extent feasible Incorporating planting of shade trees into construction projects where feasible 				X	X	X
MM-AQ.17: Local governments should set specific limits on idling time for commercial vehicles, including delivery and construction vehicles.				X		X
MM-AQ.18: SCAG should work with the Ports of Los Angeles and Long Beach as appropriate to facilitate implementation of the Clean Air Action Plan (CAAP).				X	X	
MM-BIO.1: Each transportation project should assess displacement of habitat due to removal of native vegetation during route planning. Routes should be planned in order to avoid and/or minimize removal of native vegetation. Projects located in or adjacent to habitat areas should incorporate buffers to minimize lighting, noise, and other project impacts that can severely disrupt wildlife. Vegetation for buffers should be appropriate to the adjacent vegetation association and protect the genetic integrity of the adjacent habitat.	X	X				X
MM-BIO.2: When avoidance of native vegetation removal is not possible, each transportation project should replant disturbed areas with commensurate native vegetation of high habitat value adjacent to the project (i.e. as opposed to ornamental vegetation with relatively less habitat value).			X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-BIO.3: Individual transportation projects should include offsite habitat enhancement or restoration to compensate for unavoidable habitat losses from the project site.	X		X			X
MM-BIO.4: Pre-construction special status species surveys should be conducted by a qualified biologist to verify presence or absence of species at risk. Species surveys should occur during the portion of the species' life cycle where the species is most likely to be identified within the appropriate habitat. In all cases, impacts on special status species and/or their habitat should be avoided during construction to the extent feasible.	X					X
MM-BIO.5: A Worker Awareness Program (environmental education) should be developed and implemented to inform project workers of their responsibilities in regards to avoiding and minimizing impacts on sensitive biological resources.	X	X				X
MM-BIO.6: An Environmental Inspector should be appointed to serve as a contact for issues that may arise concerning implementation of mitigation measures, and to document and report on adherence to these measures.			X			X
MM-BIO.7: A qualified wetland scientist should review construction drawings as part of each project-specific environmental analysis to determine whether wetlands will be impacted, and if necessary perform a formal wetland delineation. Appropriate state and federal permits should be obtained, but each project EIR will contain language clearly stating the provisions of such permits, including avoidance measures, restoration procedures, and in the case of permanent impacts compensatory creation or enhancement measures to ensure a no net loss of wetland extent or function and values.	X	X	X			X
MM-BIO.8: Sensitive habitats (native vegetative communities identified as rare and/or sensitive by the CDFG) and special-status plant species (including vernal pools) impacted by projects should be restored and augmented, if impacts are temporary, at a 1.1: 1 ratio (compensation acres to impacted acres). Permanent impacts should be compensated for by creating or restoring habitats at a 3:1 ratio as close as possible to the site of the impact. The CDFG may recommend mitigation ratios that vary on a project-by-project basis and may exceed those recommended in MM-BIO.8.			X			X
MM-BIO.9: When work is conducted in identified sensitive habitat areas and/or areas of intact native vegetation, construction protocols should require the salvage of perennial plants and the salvage and stockpile of topsoil (the surface material from 6 to 12 inches deep) and should be used in restoring native vegetation to all areas of temporary disturbance within the project area.		X	X			X
MM-BIO.10: If specific project area trees are designated as "Landmark Trees" or "Heritage Trees", then approval for removals should be obtained through the appropriate entity, and appropriate mitigation measures should be developed at that time, to ensure that the trees are replaced. Due to the close proximity of these areas to sensitive wildlife habitats, all mitigation trees will use only locally-collected native species.	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.11: Suitable habitat for listed vernal pool crustaceans should be avoided to the extent feasible. If infeasible, impacts should be mitigated in accordance with the Programmatic Biological Opinion (PBO) for vernal pool invertebrates, issued by the USFWS Sacramento Field Office in 1995. Surveys should be conducted, with USFWS approval, in accordance with the 1996 <i>Interim Survey Guidelines to Permittees for Recovery Permits under Section 10(a)(1)(A) of the Endangered Species Act for the Listed Vernal Pool Branchiopods</i>, to establish whether or not listed invertebrates are present.</p> <p>Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS.</p>	X	X	X			X
<p>MM-BIO.12: Projects within the range and within suitable habitat for species listed as threatened or endangered under the California Endangered Species Act (such as the Mohave ground squirrel) or the Federal Endangered Species Act (such as the Arroyo toad) should conduct surveys, with CDFG and/or USFWS approval, in accordance with established and approved survey methods appropriate for the species of interest, such as the 1999 USFWS <i>Survey Protocol For The Arroyo Toad</i>, to establish whether or not the species is present. If species is determined present then the following applies:</p> <ul style="list-style-type: none"> • A pre-construction survey should be conducted by a qualified biologist at each site to identify suitable habitat for the species of interest and to determine what avoidance measures, including relocation, fencing installation, and avoidance of breeding season will be required. • Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG). • Project applicants must obtain an Incidental Take Permit under Section 2081 of the Fish and Game Code before proceeding with implementation of any project subject to CESA. Additional authorization may be required by the USFWS for take of federal-listed species or their occupied habitat. 	X	X	X			X
<p>MM-BIO.13: Projects within the range and within suitable habitat for the blunt-nosed leopard lizard should conduct surveys, with USFWS approval, in accordance with the 2004 CDFG <i>Approved Survey Methodology For The Blunt-Nosed Leopard Lizard</i>, to establish whether or not the species is present. If species is determined present then the following applies:</p> <p>Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG). No direct taking of the blunt-nosed leopard lizard should occur as this is a CDFG fully protected species with no regulatory mechanism to authorize direct taking (killing) of individuals.</p>	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.14: Projects within the range and within suitable habitat for the California red-legged frog should implement the measures detailed in the Programmatic Biological Opinion (PBO) for construction impacts to the red-legged frog that was issued by the USFWS (Federal Register 1999) to the USACE. The measures listed below are taken largely from the PBO and, if applied to the western pond turtle as well as the frog, would be adequate as standard mitigation for both species. A similar level of effort for survey protocol can also be applied to the Mountain yellow-legged frog, with adjustments to its climate, habitat, and breeding requirements.</p> <ul style="list-style-type: none"> The name and credentials of a biologist qualified to act as a construction monitor will be submitted to USFWS for approval at least 15 days prior to commencement of work; The USFWS-approved biologist should survey the site two weeks prior to the onset of work activities and immediately prior to commencing work. If red-legged frog adults, tadpoles, or eggs are found, the approved biologist should contact USFWS to determine whether relocating any life stages is appropriate; The USFWS-approved biologist should ensure that the introduction or spread of invasive exotic plant species is avoided to the maximum extent possible, by removing weeds from areas of exposed bare soil within the construction zone where construction occurs in riparian vegetation. The number and size of access routes, staging areas, and total area of activity should be limited to the minimum necessary to achieve the project goal; If work sites require dewatering, the intakes should be screened with a maximum mesh sizes of 5 millimeters; The USFWS-approved biologist should permanently remove and destroy from within the project area any individuals of exotic species, such as bullfrogs, crayfish, and centrarchid fishes, to the maximum extent practicable. 	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.15: Projects within the range and within suitable habitat for the California tiger salamander should conduct surveys, with USFWS approval, in accordance with the 2003 USFWS <i>Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander</i>, to establish whether or not the species is present. In addition to measures described for the California red-legged frog, which would also serve to protect the California tiger salamander, the following measures should be implemented to further minimize adverse effects to the California tiger salamander.</p> <ul style="list-style-type: none"> • A pre-construction survey should be conducted at each site to identify suitable pond and upland burrow aestivation areas. As feasible within the context of the work area, aestivation areas should be temporarily fenced and avoided. • At locations where upland aestivation habitat is identified and cannot be avoided, aestivation burrows should be excavated by hand prior to construction and individual animals moved to natural burrows or artificial burrows constructed of PVC pipe within 0.25 miles of the construction site as approved by the USFWS. • To ensure compliance with these measures and minimize California tiger salamander take, a qualified biological monitor should be present during all new site disturbance construction activities (vegetation removal, clearing, grubbing, grading) at locations with suitable upland aestivation habitat. • Impacts on breeding ponds should be avoided until the ponds have dried. • Upon approval by the USFWS, preconstruction surveys to salvage and relocate individual California tiger salamanders should include installation of drift fences and pitfall traps within construction sites to identify and relocate animals. Following removal of individuals, construction areas should be fenced with temporary exclusionary silt fencing. • Temporary impacts on upland aestivation habitat should be restored to grassland habitat. • Mitigation for occupied habitat permanently impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG). 	X	X	X			X
<p>MM-BIO.16: Projects within the range and within suitable habitat for the Coachella Valley fringe-toed lizard should conduct surveys, with USFWS/CDFG approval, in accordance with the CDFG <i>Protocol for Determining Coachella Valley Fringe-Toed Lizard (CVFTL) Presence</i>, to establish whether or not the species is present. The measures listed below are taken largely from the CDFG protocol recommendations and would be adequate as standard mitigation for this species. If the species is determined present then the following applies:</p> <p>Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG).</p>	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.17: Projects within the range and within suitable habitat for the desert tortoise should conduct surveys, with USFWS approval, in accordance with the 1992 USFWS <i>Field Survey Protocol For Any Federal Action That May Occur Within The Range Of The Desert Tortoise</i>, to establish whether or not the species is present. If the species is determined present then the following applies:</p> <ul style="list-style-type: none"> • Upon approval by the USFWS, preconstruction surveys of project impact areas should be required to salvage and relocate individual desert tortoise out of harms. Following removal of individuals, construction areas should be fenced with temporary exclusionary silt fencing. <p>Mitigation for occupied habitat impacted is likely to be compensatory acquisition of mitigation credits or off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG).</p>	X	X	X			X
<p>MM- BIO.18: California species of special concern (CSC), such as the two-striped garter snake and several bat species are considered special-status species that meet the definition of rare, threatened or endangered species for the purposes of CEQA. Projects within the range and within suitable habitat for California species of special concern should conduct surveys in accordance with the best professional judgment of a qualified biologist. The following measures should be implemented to further minimize adverse effects to CSC species:</p> <ul style="list-style-type: none"> • Preconstruction surveys of project impact areas should be required to salvage and relocate individual two-striped garter snakes out of harms. Following removal of individuals, construction areas should be fenced with temporary exclusionary silt fencing. • Disturbances to bat roosts and nursery habitat should be avoided between March 1 and September 15 to avoid the breeding season for bats unless preconstruction surveys are conducted by a qualified biologist and no bat roosts or nurseries are found within the project area. Mitigation for the unavoidable loss of bat roosting and nursery habitat may include creation of habitat within newly constructed or renovated bridge structures, replacing appropriate tree species of adequate-sized trees providing habitat, and the installation of bat boxes to create additional habitat on a project-by-project basis depending on the level of impact. • Similarly appropriate survey, salvage, and mitigation measures should be taken with regard to other CSC classified species. If avoidance of impacts to species is not feasible, on site and/or off site protection of appropriate mitigation lands in perpetuity should be secured for these species. • Mitigation for occupied habitat is likely to be compensatory acquisition of mitigation credits or off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG. 	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.19: To avoid disrupting nesting Swainson’s hawks, construction activities at known nesting locations should occur between September and March outside the nesting season (nesting typically occurs from March 1 through September 1). Alternatively, if construction activities take place during the nesting season, a qualified biologist should conduct a pre-construction survey no more than two weeks before the start of construction for any given milepost and report whether or not there are nesting Swainson’s hawks within 500 feet of any project (assuming available authorized access). If there are nesting Swainson’s hawks present within the 500-foot buffer areas, construction will be delayed until the CDFG has been consulted to determine suitable avoidance measures. A potential avoidance measure may include delaying all construction activity within 500 feet of an active Swainson’s hawk nest until the adult and/or young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist.</p>	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: “Planning and Project Design,” “During Construction,” and “Post Construction” require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.20: No more than two weeks before construction in any given milepost, a survey for burrows and burrowing owls should be conducted by a qualified biologist within 500 feet of the project (assuming available authorized access). The survey will conform to the protocol described by the California Burrowing Owl Consortium's 1993 Burrowing Owl Protocol and Mitigation Guideline which includes up to four surveys on different dates if there are suitable burrows present as well as the CDFG's 1995 Staff Report on Burrowing Owl Mitigation. Both mitigation guidelines also recommend habitat land acquisition and protection in perpetuity for project-related loss of occupied wintering and breeding habitat for burrowing owls. If occupied burrowing owl dens are found within the survey area, a determination should be made by a qualified biologist in consultation with CDFG whether or not project work will impact the occupied burrows or disrupt reproductive behavior.</p> <ul style="list-style-type: none"> • If it is determined that construction will not impact occupied burrows or disrupt breeding behavior, construction will proceed without any restriction or mitigation measures. • If it is determined that construction will impact occupied burrows during August through February, the subject owls will be passively relocated from the occupied burrow(s) using one-way doors. There should be at least two unoccupied burrows suitable for burrowing owls within 300 feet of the occupied burrow before one-way doors are installed. Artificial burrows should be in place at least one-week before one-way doors are installed on occupied burrows. One-way doors will be in place for a minimum of 48 hours before burrows are excavated. • If it is determined that construction will physically impact occupied burrows or disrupt reproductive behavior during the nesting season (March through July) then avoidance is the only mitigation available. Construction should be delayed within 300 feet of occupied burrows until it is determined that the subject owls are not nesting or until a qualified biologist determines that juvenile owls are self-sufficient or are no longer reliant on the natal burrow as their primary source of shelter and survival. • Mitigation for occupied habitat is likely to be compensatory acquisition of mitigation credits or off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG. 	X					X
<p>MM-BIO.21: When working within 100 feet of salt or brackish marshland presence for the California black rail, California clapper rail, and Yuma clapper rail should be assumed for either species during the period February 1- August 31 and construction should be scheduled to begin no earlier than September 1 and end no later than January 31 to avoid potential impact on reproduction. The Department of Fish and Game and United States Fish and Wildlife Service should be consulted when projects identify occupied habitat or habitat capable of supporting California clapper rail, light-footed clapper rail, and Yuma clapper rail.</p>	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.22: Projects within the range and within suitable habitat for the coastal California gnatcatcher should conduct surveys, with USFWS approval, in accordance with the 1997 USFWS <i>Coastal California Gnatcatcher Presence/Absence Survey Guidelines</i>, to establish whether or not the species is present. If the species is determined present then the following applies:</p> <p>To avoid disrupting nesting coastal California gnatcatchers, construction activities at known nesting locations should occur between September and March outside the nesting season (nesting typically occurs from March 1 through September 1). Alternatively, if construction activities take place during the nesting season, a qualified biologist should conduct a pre-construction survey no more than two weeks before the start of construction for any given milepost and report whether or not there are nesting coastal California gnatcatchers within 500 feet of any project (assuming available authorized access). If there are nesting coastal California gnatcatchers present within the 500-foot buffer areas, construction will be delayed until the USFWS and/or CDFG has been consulted to determine suitable avoidance measures. A potential avoidance measure may include delaying all construction activity within 500 feet of an active coastal California gnatcatchers nest until the adults and/or young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist.</p> <p>Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG).</p>	X	X	X			X
<p>MM-BIO.23: Projects within the range and within suitable habitat for the least Bell's vireo should conduct surveys, with USFWS approval, in accordance with the 2001 USFWS <i>Least Bell's Vireo Survey Guidelines</i>, to establish whether or not the species is present. If the species is determined present then the following applies:</p> <p>To avoid disrupting nesting least Bell's vireo, construction activities at known nesting locations should occur between September and March outside the nesting season (nesting typically occurs from March 1 through September 1). Alternatively, if construction activities take place during the nesting season, a qualified biologist should conduct a pre-construction survey no more than two weeks before the start of construction for any given milepost and report whether or not there are nesting least Bell's vireo within 500 feet of any project (assuming available authorized access). If there are nesting least Bell's vireo present within the 500-foot buffer areas, construction will be delayed until the CDFG has been consulted to determine suitable avoidance measures. A potential avoidance measure may include delaying all construction activity within 500 feet of an active least Bell's vireo nest until the adults and/or young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist.</p> <p>Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted or other similar ratio with the approval of the USFWS and/or CDFG).</p>	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-BIO.24: Projects within the range and within suitable habitat for the southwestern willow flycatcher should conduct surveys, with USFWS approval, in accordance with the 2000 USFWS <i>Southwestern Willow Flycatcher Protocol Survey Guidelines (Revision 2000)</i>, to establish whether or not the species is present. If the species is determined present then the following applies:</p> <p>To avoid disrupting nesting southwestern willow flycatcher, construction activities at known nesting locations should occur between September and March outside the nesting season (nesting typically occurs from March 1 through September 15). Alternatively, if construction activities take place during the nesting season, a qualified biologist should conduct a pre-construction survey no more than two weeks before the start of construction for any given milepost and report whether or not there are nesting southwestern willow flycatcher within 500 feet of any project (assuming available authorized access). If there are nesting southwestern willow flycatchers present within the 500-foot buffer areas, construction will be delayed until the CDFG has been consulted to determine suitable avoidance measures. A potential avoidance measure may include delaying all construction activity within 500 feet of an active southwestern willow flycatcher nest until the adults and/or young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist</p> <p>Mitigation for occupied habitat impacted is likely to be compensatory off-site acquisition or protection of similar habitats at a ratio of 3:1 (compensation acres to that impacted) or other similar ratio with the approval of the USFWS and/or CDFG).</p>	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM BIO-25: Suitable nesting sites for migratory nongame native bird species protected under the Federal Migratory Bird Treaty Act and/or trees with unoccupied raptor nests (large stick nests or cavities) should only be removed prior to February 1, or following the nesting season. A survey to identify active raptor and other migratory nongame bird nests should be conducted by a qualified biologist at least two weeks before the start of construction at project sites from February 1 through August 31. Active raptor nests should be re-located within 500 feet of the project to the extent feasible and assuming available authorized access. Suitable nesting habitat for protected native birds should be re-located within 300 feet of the project.</p> <ul style="list-style-type: none"> Beginning thirty days prior to the disturbance of suitable nesting habitat, the project proponent should arrange for weekly bird surveys conducted by a qualified biologist with experience in conducting breeding bird surveys to detect protected native birds occurring in the habitat that is to be removed and any other such habitat within 300 feet of the construction work area (within 500 feet for raptors) as access to adjacent areas allows. The last survey should be conducted no more than 3 days prior to the initiation of clearance/ construction work. If an active raptor nest is found within 500 feet of the project or nesting habitat for a protected native bird is found within 300 feet of the project, a determination should be made by a qualified biologist in consultation with CDFG whether or not project construction work will impact the active nest or disrupt reproductive behavior. If it is determined that construction will not impact an active nest or disrupt breeding behavior, construction will proceed without any restriction or mitigation measure. If it is determined that construction will impact an active raptor nest or disrupt reproductive behavior then avoidance is the only mitigation available. Construction should be delayed within 300 feet of such a nest, or as determined by CDFG, until the adults and/or young of the year are no longer reliant on the nest site for survival as determined by a qualified biologist. If it is determined that construction will impact an active raptor or native bird nest or disrupt reproductive behavior then avoidance is the only mitigation available. Construction should be delayed within 300 feet of such a nest (within 500 feet for raptor nests), until August 31 or as determined by CDFG, until the adults and/or young of the year are no longer reliant on the nest site for survival and when there is no evidence of a second attempt at nesting as determined by a qualified biologist. Limits of construction to avoid a nest should be established in the field with flagging and stakes or construction fencing marking the protected area 300 feet (or 500 feet) from the nest. Construction personnel should be instructed on the sensitivity of the area. 	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<ul style="list-style-type: none"> Documentation to record compliance with applicable State and Federal laws pertaining to the protection of native birds should be recorded. 	X		X	X		X
MM BIO-26: Individual transportation projects included in the 2008 RTP should conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on and off-site. Habitat linkages/ wildlife movement corridors should be analyzed on a broader and cumulative impact analysis scale to avoid adverse impacts from linear projects that have potential for impacts on a broader scale or critical narrow choke points that could reduce function of recognized movement corridors on a larger scale. Mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat) is one opportunity that project proponents and jurisdictions may pursue.	X		X	X		X
MM BIO-27: Each transportation project should provide wildlife crossings/access based on proven standards, such as FHWA's Critter Crossings or Ventura County Mitigation Guidelines and in consultation with wildlife corridor authorities with sufficient knowledge of both regional and local wildlife corridors at locations useful and appropriate for the species of concern.	X	X				X
MM BIO-28: Individual transportation projects should include analysis of wildlife corridors during project planning. Impacts to these corridors should be avoided and/or minimized.	X					X
MM BIO-29: Each transportation project included in the Plan should use wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads. Wildlife fencing used should be based on proven designs for impacted species and developed in conjunction with wildlife corridor authorities with sufficient knowledge of both regional and local wildlife corridors. Inclusion of this mitigation measure should be considered on a case-by-case basis, as use of wildlife fencing could further increase the effects of habitat fragmentation and isolation for many species. Also see BIO.1 through BIO.10.	X	X	X			X
MM BIO-30: Individual transportation projects should avoid siting new RTP transportation facilities within areas not presently exposed to such impacts. If avoidance is infeasible, the project should minimize vehicular accessibility to areas beyond the actual transportation surface. This can be accomplished through fencing and signage. Additionally, the area of native habitats to be lost to proximity to a transportation facility should be assessed and habitat at a quality of equal or superior value should be secured and protected in perpetuity.		X				X
MM BIO-31: Each project should establish litter control programs in appropriate areas, such as trash receptacles at road turnouts, rest stops, and viewpoints. All refuse containers should be provided with mechanisms which prevent scavenging animals from gaining access to the contents of such containers.		X				X
MM BIO-32: Each project should use road noise minimization methods, such as brush and tree planting, at heavy noise-producing transportation areas that might affect wildlife. Native vegetation should be used.		X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM BIO-33: Each project should be preceded by pre-construction monitoring to ensure no sensitive species' habitat would be unnecessarily destroyed (also see BIO-4 through BIO-10). All discovered sensitive species habitat should be avoided where feasible, or disturbance should be minimized.	X	X	X			X
MM BIO-34: Each project should schedule work to avoid critical life stages (e.g. nesting) of species of concern.	X	X	X			X
MM BIO-35: Each project should fence and/or mark sensitive habitat to prevent unnecessary machinery or foot traffic during construction activities.		X				X
MM BIO-36: When removal and/or damage to sensitive species habitat are unavoidable during construction, each project should replant any disturbed natural areas with appropriate native vegetation following the completion of construction activities. In the case of permanent losses to sensitive species habitat, mitigation should also follow the offsite habitat compensation guidance (also see BIO-4 through BIO-25).			X			X
MM BIO-37: Individual projects should avoid and/or minimize construction activities that have the potential to expose species to noise, smoke, or other disturbances. Pre-construction surveys should be conducted as appropriate to determine the presence of any species that would need to be protected from such an impact (see BIO-4 through BIO-10).	X	X				X
MM BIO-38: Individual projects should be scheduled to avoid construction during critical life stages or sensitive seasons (e.g. the nesting season; see BIO-25, and BIO-11 through BIO-24).	X					X
MM BIO-39: Construction through or adjacent to wetlands or riparian areas should be avoided where feasible through route-planning. All wetlands and watercourses, whether intermittent, ephemeral, or perennial, should be retained and provided with substantial setbacks which preserve the riparian and aquatic habitat values and maintain their value to on-site and off-site wildlife populations. These setbacks should be a natural buffer a minimum of 100 feet from the outside edge of the riparian zone on each side of a drainage. See also BIO.1 through BIO.10.	X					X
MM BIO-40: Each transportation project should avoid removal of wetland or riparian vegetation. Specific vegetation that is not to be removed should be so marked during construction. Wetland and riparian vegetation removal should be minimized as much as possible.	X	X				X
MM BIO-41: Each transportation project should replace any disturbed wetland, riparian or aquatic habitat, either on-site or at a suitable off-site location at ratios to ensure no net loss. See BIO.8; BIO.1 through BIO.7; and BIO.9.			X			X
MM BIO-42: When individual projects include unavoidable losses of riparian or aquatic habitat, adjacent or nearby riparian or aquatic habitat should be enhanced (e.g. through removal of non-native invasive wetland species and replacement with more ecologically valuable native species). See BIO.8; BIO.1 through BIO.7; and BIO.9.			X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM BIO-43: Individual projects near water resources should implement Best Management Practices (BMPs) at construction sites to minimize erosion and sediment transport from the area. BMPs include encouraging growth of vegetation in disturbed areas, using straw bales or other silt-catching devices, and using settling basins to minimize soil transport. A more detailed description of BMPs is provided in Section 3.12 Water Resources.	X	X	X			X
MM BIO-44: Individual projects should schedule construction activities to avoid sensitive times for biological resources (e.g. steelhead spawning periods during the winter and spring) and to avoid the rainy season when erosion and sediment transport is increased.	X					X
MM BIO-45: Future impacts to biological resources should be minimized through cooperation, information sharing and program development as part of SCAG's regional planning efforts. SCAG should consult with the resource agencies, such as USFWS and CDFG.				X	X	
MM-CUL.1: As part of the appropriate environmental review of individual projects, the project implementation agencies should identify potential impacts to historic resources. A record search at the appropriate Information Center should be conducted to determine whether the project area has been previously surveyed and whether historic resources were identified.	X					X
MM-CUL.2: If indicated as necessary by a records search, prior to construction activities, project implementation agencies should obtain a qualified architectural historian to conduct historic architectural surveys as recommended by the Archaeological Information Center. In the event the records indicate that no previous survey has been conducted, the Information Center will make a recommendation on whether a survey is warranted based on the sensitivity of the project area for cultural resources within 1,000 feet of the improvement.	X					X
MM-CUL.3: The project implementation agencies should comply with Section 106 of the NHPA including, but not limited to, projects for which federal funding or approval is required for the individual project. This law requires federal agencies to evaluate the impact of their actions on resources included in or eligible for listing in the National Register. Federal agencies must coordinate with the State Historic Preservation Officer in evaluating impacts and developing mitigation. This mitigation measure may include, but are not limited to the following: <ul style="list-style-type: none"> The project implementation agencies should carry out the maintenance, repair, stabilization rehabilitation, restoration, preservation, conservation or reconstruction of any impacted historic resource, which should be conducted in a manner consistent with the Secretary of Interior's Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Where feasible, the project implementation agencies should employ design measures to avoid historical resource areas. Where feasible, noise buffers/walls and/or visual buffers/landscaping or some other material should be constructed to preserve the contextual setting of significant built resources. 	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
In some instances, the following mitigation measure may be appropriate in lieu of the previous mitigation measure:						
MM-CUL.4: The project implementation agencies should secure a qualified environmental agency and/or architectural historian, or other such qualified person to document any significant historical resource(s), by way of historic narrative, photographs, and architectural drawings, as mitigation for the effects of demolition of a resource. However, such documentation will not mitigate the effects to less than significance.	X	X				X
MM-CUL.5: As part of the appropriate environmental review of individual projects, the project implementation agencies should consult with the NAHC to determine whether known sacred sites are in the project area, and identify the Native American(s) to contact to obtain information about the project site.	X					X
MM-CUL.6: Prior to construction activities, the project implementation agencies should obtain a qualified archaeologist to conduct a record search at the appropriate Information Center of the California Archaeological Inventory to determine whether the project area has been previously surveyed and whether resources were identified.	X					X
MM-CUL.7: As necessary prior to construction activities, the project implementation agencies should obtain a qualified archaeologist or architectural historian (depending on applicability) to conduct archaeological and/or historic architectural surveys as recommended by the Information Center. In the event the records indicate that no previous survey has been conducted, the Information Center will make a recommendation on whether a survey is warranted based on the sensitivity of the project area for cultural resources.	X					X
MM-CUL.8: If the record search indicates that the project is located in an area rich with cultural materials, the project proponent should retain a qualified archaeologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing features of the subject property.		X				X
MM-CUL.9: Construction activities and excavation should be conducted to avoid cultural resources (if identified). If avoidance is not feasible, further work may be needed to determine the importance of a resource. The project implementation agencies should obtain a qualified archaeologist familiar with the local archaeology, and/or as appropriate, an architectural historian who should make recommendations regarding the work necessary to determine importance. If the cultural resource is determined to be important under state or federal guidelines, impacts on the cultural resource will need to be mitigated.	X	X				X
MM-CUL.10: Project implementation agencies should stop construction activities and excavation in the area where cultural resources are found until a qualified archaeologist can determine the importance of these resources.		X				X
MM-CUL.11: As part of the appropriate environmental review of individual projects, the project implementation agencies should obtain a qualified paleontologist to identify and evaluate paleontological resources where potential impacts are considered high; the paleontologist should also conduct a field survey in these areas.	X					X
MM-CUL.12: Construction activities should avoid known paleontological resources, if feasible, especially if the resources in a particular lithic unit formation have been determined through detailed investigation to be unique.	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-CUL.13: When a construction activity could significantly disturb soils or geologic formations in areas identified as having a moderate to high potential to support paleontological resources, a qualified researcher must be stationed on-site to observe during excavation operations and recover scientifically valuable specimens.</p> <p>As part of this mitigation, the following actions should be taken:</p> <ul style="list-style-type: none"> A certified paleontologist should be retained (or required to be retained) by the project implementing agency prior to construction to establish procedures for surveillance and the preconstruction salvage of exposed resources if fossil-bearing sediments have the potential to be impacted. The monitor should provide preconstruction coordination with contractors, oversee original cutting in previously undisturbed areas of sensitive formations, halt or redirect construction activities as appropriate to allow recovery of newly discovered fossil remains, and oversee fossil salvage operations and reporting. This measure should be placed as a condition on all plans where excavation and earthmoving activity is proposed in a geologic unit having a moderate or high potential for containing fossils. Excavations of paleontological resources should be overseen by the qualified paleontologist and the paleontological resources given to a local agency, or other applicable institution, where they could be displayed or used for research 	X	X				X
<p>MM-CUL.14: Where practicable, routes and project designs that would permanently alter unique geologic features should be avoided.</p>	X	X				X
<p>MM-CUL.15: As part of environmental review of individual projects, project implementation agencies, in the event of discovery or recognition of any human remains, during construction or excavation activities associated with the project, in any location other than a dedicated cemetery, should cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the coroner of the county in which the remains are discovered has been informed and has determined that no investigation of the cause of death is required.</p>	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-CUL.16: If the remains are of Native American origin:</p> <ul style="list-style-type: none"> The coroner will contact the Native American Heritage Commission in order to ascertain the proper descendants from the deceased individual. The coroner should make a recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods. This may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains or, If the Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the commission, in which case The landowner or his authorized representative should obtain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and rebury the Native American human remains and any associated grave goods, with appropriate dignity, on the property and in a location that is not subject to further subsurface disturbance where the following conditions occur: <ul style="list-style-type: none"> The NAHC is unable to identify a descendent; The descendant identified fails to make a recommendation; or The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the NAHC Commission fails to provide measures acceptable to the landowner. 	X	X				X
<p>MM-CUL.17: Future impacts to cultural resources should be minimized through cooperation, information sharing, and SCAG's ongoing regional planning efforts. Resource agencies, such as the Office of Historic Preservation, should be consulted during this process.</p>				X	X	
<p>MM-EN.1: In reviewing projects, lead and implementing agencies should consider energy implications of construction processes. In general the most energy efficient construction process and long-term operational design should be selected unless there's an overriding reason why not.</p>	X					X
<p>MM-EN.2: State and federal lawmakers and regulatory agencies should pursue the design of programs to either require or incentivize the expanded availability including the expansion of alternative fuel filling stations and use of alternative-fuel vehicles to reduce the impact of shifts in petroleum fuel supply and price.</p>				X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-EN.3: SCAG should continue to consider energy uncertainty impacts prior to the development of the next Regional Transportation Plan. Topics that should be considered include: <ul style="list-style-type: none"> • How the price and availability of transportation fuels affects revenues and demand; • How increases in fuel efficiency could affect revenues and emissions; • How the cost of commuting and personal travel affects mode choice and growth patterns; • How the cost of goods movement affects international trade and employment; or • How the escalation of fuel prices affects the cost of infrastructure construction, maintenance and operation. • This work will help SCAG better understand the relationship between transportation, land use and energy uncertainty. 				X	X	
MM-EN.4: SCAG should convene key stakeholders to evaluate and where feasible, recommend transportation measures such as congestion pricing, a refined regional goods movement system and technologies that reduce fossil fuel consumption.				X	X	
MM-EN.5: SCAG should encourage clean post recycle conversion technologies to produce energy or technologies that offset energy use or air emissions.				X	X	
MM-EN.6: SCAG should continue to develop energy efficiency and green building guidance to provide direction on specific approaches and models and to specify levels of performance for regionally significant projects to be consistent with regional plans.				X	X	
MM-EN.7: SCAG should encourage the Federal and State Government to increase clean, cost-effective, reliable, domestic renewable energy generation, such as solar and wind turbines.				X	X	
MM-EN.8: SCAG should encourage the Federal Government to increase the Corporate Average Fuel Economy (CAFE) to a level that will reduce our dependence on petroleum and reduce greenhouse gas emissions.				X	X	
MM-EN.9: SCAG should continue to pursue partnerships with Southern California Edison, municipal utilities, and the California Public Utilities Commission to promote energy efficiency and reduce greenhouse gas emissions in the region.				X	X	
MM-EN.10: SCAG should continue to develop, in coordination with the California Air Resources Board, a data and information collection and analysis system that provides an understanding of energy demand and greenhouse gas emissions in the SCAG region.				X	X	
MM-EN.11: SCAG should continue to work with local jurisdictions and energy providers, through its Energy and Environment Committee and other means, to encourage regional-scale planning for improved energy management. Future impacts to energy should be minimized through cooperative planning, and information sharing within the SCAG region.				X	X	
MM-EN.12: SCAG should continue to develop, in coordination with the California Air Resources Board, a data and information collection and analysis system that provides an understanding of the energy demand and greenhouse gas emissions in the SCAG Region.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-EN.13: Local agencies should consider various best practices and technological improvements that can reduce the consumption of fossil fuels such as:</p> <ul style="list-style-type: none"> • Expanding light-duty vehicle retirement programs • Increasing commercial vehicle fleet modernization • Implementing driver training module on fuel consumption • Replacing gasoline powered mowers with electric mowers • Reducing idling from construction equipment • Incentivizing alternative fuel vehicles and equipment • Developing infrastructure for alternative fueled vehicles • Increasing use and mileage of High Occupancy Vehicle (HOV), High Occupancy Toll (HOT) and dedicated Bus Rapid Transit (BRT) lanes • Implementing truck idling rule, devices, and truck-stop electrification • Requiring electric truck refrigerator units • Reducing locomotives fuel use • Modernizing older off-road engines and equipment • Implementing cold ironing at ports • Encouraging freight mode shift • Limit use and develop fleet rules for construction equipment • Requiring zero-emission forklifts • Developing landside port strategy with alternative fuels, clean engines, and electrification 	X	X	X	X		X
<p>MM-EN.14: Local agencies should include energy analyses in environmental documentation and general plans with the goal of conserving energy through the wise and efficient use of energy. For any identified energy impacts, appropriate mitigation measures should be developed and monitored. SCAG recommends the use of Appendix F, Energy Conservation, of the <i>CEQA Guidelines</i>.</p>	X	X	X			X
<p>MM-EN.15: Local governments or agencies with purview over utilities should, as practical and feasible, should streamline permitting and provide public information to facilitate accelerated construction of geothermal, solar and wind power generation facilities and transmission line improvements.</p>				X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-EN.16: Local governments and utilities should develop a “Green Building Program” to promote green building standards.	X			X		X
MM-EN.17: Local governments should consider jobs/housing balance, to the extent practical and feasible and encourage the development of communities where people live closer to work, bike, walk, and take transit as a substitute for personal auto travel.	X			X		X
MM-EN.18: Utilities should install and maintain California Best Available Control Technologies on all power plants at the US-Mexico border.	X			X		X
MM-EN.19: Utilities should consider increasing capacity of existing transmission lines, where feasible.				X		X
MM-EN.20: Project sponsors should support programs to reduce single occupancy vehicle trips such as telecommuting, ridesharing, alternative work schedules, and parking cash-outs.	X			X		X
MM-EN.21: Project sponsors should support only the use of the best available technology including monitoring air and water impacts for locating any nuclear waste facility.	X			X		X
MM-EN.22: Project sponsors should submit projected electricity and natural gas demand calculations to the local electricity or natural gas provider, for any project anticipated to require substantial utility consumption. Any infrastructure improvements necessary for project construction should be completed according to the specifications of the energy provider.	X					X
MM-EN.23: Project sponsors should encourage, should to the extent practical and feasible, new buildings incorporate solar panels in roofing and utilize other renewable energy sources to offset new demand on conventional power sources. For example, transit providers should, as feasible, assure that designers of new transit stations incorporate solar panels in roofing.	X			X		X
MM-EN.24: Project sponsors should encourage energy efficient design for buildings, potentially including strengthening local building codes for new construction and renovation to achieve a higher level of energy efficiency. This may include strengthening local building codes for new construction and renovation to require a higher level of energy efficiency.	X					X
MM-EN.25: Local governments should seek funding through utility-sponsored programs to conduct energy efficiency “tune-ups” of existing buildings, as practical and feasible, by checking, repairing, and readjusting heating, ventilation, air conditioning, lighting, hot water equipment, insulation and weatherization.	X					X
MM-EN.26: Local governments and developers should encourage the use of energy efficient appliances and office equipment.	X	X	X			X
MM-EN.27: Project sponsors should pursue incentives and technical assistance for lighting efficiency.	X		X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: “Planning and Project Design,” “During Construction,” and “Post Construction” require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-EN.28: Project sponsors should require that projects use efficient lighting. (Fluorescent lighting uses approximately 75% less energy than incandescent lighting to deliver the same amount of light.)	X			X		X
MM-EN.29: Project sponsors should require measures that reduce the amount of water sent to the sewer system. (Reduction in water volume sent to the sewer system means less water has to be treated and pumped to the end user, thereby saving energy.)	X	X	X			X
MM-EN.30: Local governments and developers should incorporate where practical and feasible, on-site renewable energy production, such as the installation of solar panels, water reuse systems, and/or other systems to capture energy sources that would otherwise be wasted.	X	X	X			X
MM-EN.31: Project sponsors should pursue incentives to encourage the use of energy efficient equipment and vehicles.	X					X
MM-EN.32: Local governments should provide public education and publicity about energy efficiency programs and incentives in cooperation with local utility providers.				X		X
MM-EN.33: If a carbon trading system is established, a lead agency may consider whether carbon offsets would be an appropriate means of project mitigation. The project proponent could, for example, fund off-site projects (e.g., alternative energy projects) that will reduce carbon emissions, or could purchase “credits” from another entity that will fund such projects. The lead agency should ensure that any mitigation taking the form of carbon offsets is specifically identified and that such mitigation will in fact occur.				X		X
MM-EN.34: Local governments should consider the following land use principles that use resources efficiently, and to the extent practical and feasible, minimize pollution and reduce waste: <ul style="list-style-type: none"> Mixed-use residential and commercial development that is connected with public transportation and utilizes existing infrastructure. Land use and planning strategies to that increase biking and walking trips 	X		X	X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: “Planning and Project Design,” “During Construction,” and “Post Construction” require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-EN.35: Local governments should encourage the integration of green building measures into project design such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Energy saving measures for new and remodeled buildings include:</p> <ul style="list-style-type: none"> • Using energy efficient materials in building design, construction, rehabilitation, and retrofit • Encouraging new development to exceed Title 24 energy efficiency requirements • Developing Cool Communities measures including tree planting and light-colored roofs. These measures focus on reducing ambient heat, which reduces energy consumption related to air conditioning and other cooling equipment. • Utilizing efficient commercial/residential space and water heaters: This could include the advertisement of existing and/or development of additional incentives for energy efficient appliance purchases to reduce excess energy use and save money. Federal tax incentives are provided online at http://www.energystar.gov/index.cfm?c=Products.pr_tax_credits • Encouraging landscaping that requires no additional irrigation: utilizing native, drought tolerant plants can reduce water usage up to 60 percent compared to traditional lawns. <ul style="list-style-type: none"> – Encouraging combined heating and cooling (CHP), also known as cogeneration, in all buildings. – Encouraging neighborhood energy systems, which allow communities to generate their own electricity – Orienting streets and buildings for best solar access – Encouraging buildings to obtain at least 20% of their electric load from renewable energy (3) 	X			X		X
<p>MM GEO-1: Implementing agencies should ensure that projects are designed in accordance with county and city code requirements for seismic ground shaking. The design of projects should consider seismicity of the site, soil response at the site, and dynamic characteristics of the structure, in compliance with the appropriate California Building Code and State of California design standards for construction in or near fault zones, as well as all standard design, grading, and construction practices in order to avoid or reduce geologic hazards.</p>	X	X	X			X
<p>MM GEO-2: Implementing agencies should ensure that projects located within or across Alquist-Priolo Zones comply with design requirements provided in Special Publication 117, published by the California Geological Survey, as well as relevant local, regional, state, and federal design criteria for construction in seismic areas.</p>	X	X				X
<p>MM GEO-3: The project implementing agencies should ensure that geotechnical analyses from qualified geotechnical experts are conducted within construction areas to ascertain soil types and local faulting prior to preparation of project designs. These investigations would identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems.</p>	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM GEO-4: The project implementing agencies should ensure that project designs provide adequate slope drainage and appropriate landscaping to minimize the occurrence of slope instability and erosion. Design features should include measures to reduce erosion caused by stormwater. Road cuts should be designed to maximize the potential for revegetation.	X	X				X
MM GEO-5: Implementing agencies should ensure that projects avoid landslide areas and potentially unstable slopes wherever feasible.	X	X				X
MM GEO-6: The project implementing agencies should ensure that site-specific geotechnical investigations conducted by a qualified geotechnical expert should be required prior to preparation of project designs. These investigations would identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems.	X	X				X
MM GEO-7: The project implementing agencies should ensure that site-specific geotechnical investigations conducted by a qualified geotechnical expert should be required prior to preparation of project designs to identify the potential for subsidence and expansive soils. These investigations would identify areas of potential failure and recommend remedial geotechnical measures to eliminate any problems. Recommended corrective measures, such as structural reinforcement and replacing soil with engineered fill, should be implemented in project designs.	X					X
MM GEO-8: Implementing agencies should ensure that projects avoid geologic units or soils that are unstable, expansive soils, and soils prone to lateral spreading, subsidence, liquefaction, or collapse wherever feasible.	X					X
MM GEO-9: Implementing agencies should ensure that, prior to preparing project designs, new and abandoned wells are identified within construction areas to ensure the stability of nearby soils.	X	X				X
MM GEO-10: Future impacts to geological resources should be minimized through cooperation, information sharing, and program development as part of SCAG's regional planning efforts. Resource agencies, such as the USGS, should be consulted during this update process.	X					X
MM-HM.1: The project implementation agency should comply with all applicable laws, regulations, and health and safety standards set forth by federal, state, and local authorities that regulate the proper handling of such materials and their containers to the routine transport, use, and disposal of hazardous materials does not create a significant hazard to the public or the environment.				X	X	
MM-HM.2: SCAG should encourage the USDOT, the Office of Emergency Services, and Caltrans to continue to conduct driver safety training programs and encourage the private sector to continue conducting driver safety training.	X	X	X			X
MM-HM.3: SCAG should encourage the USDOT and the CHP to continue to enforce speed limits and existing regulations governing goods movement and hazardous materials transportation.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-HM.4: Prior to approval of any RTP project, the Lead Agency for each individual project should consider existing and known planned school locations when determining the alignment of new transportation projects and modifications to existing transportation facilities.				X	X	
MM-HM.5: Prior to approval of any RTP project, the project implementation agency should consult all known databases of contaminated sites and undertake a standard Phase 1 Environmental Site Assessment in the process of planning, environmental clearance, and construction for projects included in the 2008 RTP. If contamination is found the implementing agency should coordinate clean up and/or maintenance activities.	X					X
MM-HM.6: Where contaminated sites are identified, the project implementation agency should develop appropriate mitigation measures to assure that worker and public exposure is minimized to an acceptable level and to prevent any further environmental contamination as a result of construction.	X	X	X			X
MM-LU.1: SCAG should encourage cities and counties in the region to provide SCAG with electronic versions of their most recent general plan and any updates as they are produced.	X	X	X			X
MM-LU.2: SCAG should encourage through regional policy comments that cities and counties update their general plans at least every ten years, as recommended by the Governor's Office of Planning and Research.				X	X	
MM-LU.3: SCAG should work with its member cities and counties to ensure that transportation projects and growth are consistent with the RTP and general plans.				X	X	
MM-LU.4: Planning is an iterative process and SCAG is a consensus building organization. SCAG should work with cities and counties to encourage that general plans reflect RTP policies. SCAG will work to build consensus on how to address inconsistencies between general plans and RTP policies.				X	X	
MM-LU.5: SCAG should provide technical assistance and regional leadership to implement the Compass Blueprint growth strategy and integrate growth and land use planning with the existing and planned transportation network.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-LU.6: SCAG should provide planning services to local governments through Compass Blueprint Demonstration Projects. These projects will help local jurisdictions: <ul style="list-style-type: none"> • Update General Plans to reflect Compass Blueprint principles and integrate land use and transportation planning. • Develop specific plans, zoning overlays and other planning tools to enable and stimulate desired land use changes within 2% Strategy Opportunity Areas • Complete the economic analysis and community involvement efforts that will ensure that the planned changes are market feasible and responsible to stakeholder concerns. • Visualize potential changes, through innovative graphics and mapping technology to inform the dialogue about growth, development and transportation at the local and regional level. 				X	X	
MM-LU.7: SCAG should continue with a targeted public relations strategy that emphasizes regional leadership, the benefits and implications of Compass Blueprint principles, and builds a sense of common interests among Southern Californians.				X	X	
MM-LU.8: SCAG should expand the role of the Compass Partnership, a forum for convening representatives from government, civic leaders and members of the development community. SCAG should encourage cooperative land use decision-making and planning efforts between neighboring jurisdictions.				X	X	
MM-LU.9: SCAG should use its Intergovernmental Review Process to provide review and comment on large development projects regarding their consistency with the RTP and other regional planning efforts.				X	X	
MM-LU.10: Local governments should provide for new housing consistent with state housing law to accommodate their share of the forecasted regional growth.				X	X	
MM-LU.11: Local governments should consider shared regional priorities, as outlined in the Compass Blueprint, RTP, and other ongoing regional planning efforts in determining their own development goals and drafting local plans.	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-LU.12: Local governments and subregional organizations should encourage the cleanup and redevelopment of brownfield sites.	X			X		X
MM-LU.13: Where practical and feasible, local governments should develop programs enable the reuse of underutilized commercial, office and/or industrial properties for housing or mixed-use housing.	X			X		X
MM-LU.14: As part of the second tier review performed on a project-by-project basis, a study should be completed by the lead agency to determine whether an area is classified as a "cohesive community" as defined by Environmental Handbook Volume 4, Community Impact Assessment (Caltrans 1997). The study should include the method for determining the level of cohesiveness for a given community and identify mitigation measures to reduce or avoid significant effects. Specific mitigation measures could include, but are not limited to pedestrian overcrossings, "cut and covers" and development of parks or other social interaction centers.	X			X		X
MM-LU.15: Significant adverse impacts to community cohesion resulting from the displacement of residences or businesses should be mitigated with specific relocation measures as dictated by local, state or federal requirements on a project-by project basis. Such measures include assistance in finding a new location, assistance with moving, or compensation for losses. Where it has been determined that displacement is necessary and displaced individuals are eligible, a relocation assistance program consistent with the State Uniform Location Assistance and Real Properties Acquisition Policies Act provides compensation and assistance in finding new residence for displaced individuals.	X	X	X			X
MM-LU.16: Project implementation agencies should design new transportation facilities that consider access to existing community facilities, as feasible. During the design phase of the project, community amenities and facilities should be identified and considered in the design of the project.	X	X	X			X
MM-LU.17: Project implementation agencies should design roadway improvements that minimize barriers to pedestrians and bicyclists, as feasible. During the design phase, pedestrian and bicycle routes should be determined that permit connections to nearby community facilities.	X	X	X			X
MM LU-18: SCAG's on-going regional planning efforts will be used to build a consensus in the region to support changes in land use to accommodate future population growth while maintaining the quality of life in the region.	X	X	X			X
MM-NO.1: Project implementing agencies should comply with all local sound control and noise level rules, regulations, and ordinances.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-NO.2: Project implementing agencies should limit the hours of construction to <u>those specified by local agencies, or if no rules are identified to the following hours within 3,000 feet of residential and hotel uses:</u> between 6:00 a.m. and 8:00 p.m. on Monday through Friday and between 7:00 a.m. and 8:00 p.m. on Saturdays. Construction should not occur on Sundays or Holidays within 3,000 feet of sensitive receptors without specific overriding need being documented.	X	X	X			X
MM-NO.3: Equipment and trucks used for project construction should utilize the best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures and acoustically attenuating shields or shrouds) in order to minimize construction noise impacts.	X	X				X
MM-NO.4: Impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction should be hydraulically or electrically powered wherever possible, to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatically powered tools is unavoidable, an exhaust muffler on the compressed air exhaust would be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves should be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures will be used, such as the use of drilling rather than impact equipment, whenever feasible.		X				X
MM-NO.5: Project implementing agencies should ensure that stationary noise sources are located as far from sensitive receptors as possible. If they must be located near existing receptors, they should be adequately muffled.		X				X
MM-NO.6: The project implementing agencies should designate a complaint coordinator responsible for responding to noise complaints received during the construction phase. The name and phone number of the complaint coordinator should be conspicuously posted at construction areas and on all advanced notifications. This person should be responsible for taking steps required to resolve complaints, including periodic noise monitoring, if necessary.	X	X				X
MM-NO.7: Noise generated from any rock-crushing or screening operations performed within 3,000 feet of any occupied residence should be mitigated by the project proponent by strategic placement of material stockpiles between the operation and the affected dwelling or by other means approved by the local jurisdiction.	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-NO.8: Project implementing agencies should direct contractors to implement appropriate additional noise mitigation measures including, but not limited to, changing the location of stationary construction equipment, shutting off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources to comply with local noise control requirements.		X				X
MM-NO.9: Project implementing agencies should implement use of portable barriers in the vicinity of sensitive receptors during construction including construction of subsurface barriers, debris basins, and storm water drainage facilities.	X	X	X			X
MM-NO.10: In residential areas, pile driving will be limited to daytime working hours. No pile-driving or blasting operations should be performed within 3,000 feet of an occupied residence on Sundays, legal holidays, or between the hours of 8:00 p.m. and 8:00 a.m. on other days. Any variance from this condition should be approved by the local jurisdiction only with documentation of overriding need.	X	X	X			X
MM-NO.11: Wherever possible, sonic or vibratory pile drivers will be used instead of impact pile-drivers (sonic pile drivers are only effective in some soils). If sonic or vibratory pile drivers are not feasible, acoustical enclosures will be provided as necessary to ensure that pile driving noise does not exceed speech interference criterion at the closest sensitive receptor.	X	X				X
MM-NO.12: Engine and pneumatic exhaust controls on pile drivers will be required as necessary to ensure that exhaust noise from pile driver engines is minimized to the extent feasible.		X				X
MM-NO.13: Where feasible, pile holes will be pre-drilled to reduce potential noise and vibration impacts.		X				X
MM-NO.14: As part of the appropriate environmental review of each project, a project specific noise evaluation should be conducted and appropriate mitigation identified and implemented.		X				X
MM-NO.15: Project implementation agencies should employ, where their jurisdictional authority permits, land use planning measures, such as zoning, restrictions on development, site design, and use of buffers to ensure that future development is compatible with adjacent transportation facilities.	X					X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-NO.16: Project implementation agencies should, to the extent feasible and practicable, maximize the distance between noise-sensitive land uses and new roadway lanes, roadways, rail lines, transit centers, park-and-ride lots, and other new noise-generating facilities.	X			X		X
MM-NO.17: Project implementation agencies should construct sound reducing barriers between noise sources and noise-sensitive land uses. Sound barriers can be in the form of earth-berms or soundwalls. Constructing roadways so as appropriate and feasible that they are depressed below-grade of the existing sensitive land uses also creates an effective barrier between the roadway and sensitive receptors.	X					X
MM-NO.18: Project implementation agencies should, to the extent feasible and practicable, improve the acoustical insulation of dwelling units where setbacks and sound barriers do not sufficiently reduce noise.	X	X				X
MM-NO.19: The project implementation agencies should implement, to the extent feasible and practicable, speed limits and limits on hours of operation of rail and transit systems, where such limits may reduce noise impacts.	X	X	X			X
MM-NO.20: To reduce noise impacts, maximize distance of the HSRT route alignment from sensitive receptors. If the HSRT guideway is constructed along the center of a freeway, operation noise impacts would be reduced by the increase in distance to the noise sensitive sites and the masking effects of the freeway traffic noise.	X		X			X
MM-NO.21: Reduce HSRT speed in the vicinity of sensitive receptors.	X					X
MM-NO.22: As a last resort, eliminate the noise-sensitive receptor by acquiring rail and freeway rights-of-way. This would ensure the effective operation of all transportation modes.	X		X			X
MM-NO.23: Passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations should be located away from sensitive receptors.	X					X
MM-NO.24: Local governments or agencies with purview, as practical and feasible, should adhere to published local, state, and federal guidelines concerning groundborne vibration impacts.	X	X	X	X		X
MM-OS.1: Individual projects must be consistent with federal, state, and local policies that preserve agricultural lands and support the economic viability of agricultural activities, as well as policies that provide compensation for property owners if preservation is not feasible.	X					X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-OS.2: For projects in agricultural areas, project implementation agencies should contact the California Department of Conservation and each county's Agricultural Commissioner's office to identify the location of prime farmlands and lands that support crops considered valuable to the local or regional economy. Impacts to such lands should be evaluated in project-specific environmental documents. The analysis should use the land evaluation and site assessment (LESA) analysis method (CEQA Guidelines §21095), as appropriate. The project implementation agencies or local jurisdictions should be responsible for ensuring adherence to the mitigation measures prior to construction. Mitigation measures may include conservation easements or the payment of in-lieu fees.	X					X
MM-OS.3: For those projects that require federal funding, the federal agency evaluates the effects of the action to agricultural resources using the criteria set forth in the Farmland Protection Policy Act (FPPA). The FPPA is administered by the NRCS, which determines impacts to farmland that could occur due to the proposed project. The determination is made through coordination between the federal agency proposing or supporting the project and NRCS. The assessment of potential impacts to farmland from corridor type projects, which is typical of transportation projects analyzed in this PEIR, will require completion of Form NRCS-CPA-106, Farmland Conservation Impact Rating for Corridor Type Projects. NRCS will make a determination, using set thresholds, as to whether additional project specific mitigation would be required.	X		X			X
MM-OS.4: Project implementation agencies should consider corridor realignment, buffer zones and setbacks, and berms and fencing where feasible, to avoid agricultural lands and to reduce conflicts between transportation uses and agricultural lands.	X		X			X
MM-OS.5: Prior to final approval of each project and when feasible and prudent, the implementing agency should establish conservation easement programs to mitigate impacts to prime farmland.	X	X	X			X
MM-OS.6: Prior to final approval of each project, the implementing agency should to the extent practical and feasible, avoid impacts to prime farmlands or farmlands that support crops considered valuable to the local or regional economy.	X					X
MM-OS.7: Prior to final approval of each project, the implementing agency should encourage enrollments of agricultural lands for counties that have Williamson Act programs, where applicable.	X					X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-OS-8: SCAG should support policies that preserve and promote the productivity and viability of agricultural lands, including promoting the availability of locally grown and organic food in the region.	X					X
MM-OS.9: SCAG should use its IGR process to review projects with potentially significant impacts to important farmlands and recommend impact avoidance and mitigation measures				X	X	
MM-OS.10: SCAG should work with member agencies and the region's farmland interests to develop regional guidelines for buffering farmland from urban encroachment, resolving conflicts that prevent farming on hillsides and other designated areas, and closing loopholes that allow conversion of non-farm uses without a grading permit.				X	X	
MM-OS.11: Developers and local governments should submit for IGR review projects with potentially significant impacts to important farmlands. Projects should include mitigation measures to reduce impacts and demonstrate project alternatives that avoid or lessen impact to agricultural lands. Mitigation should occur at a 1:1 ratio.				X	X	
MM-OS.12: Project implementation agencies should ensure that projects are consistent with federal, state, and local plans that preserve open space.	X		X			X
MM-OS.13: Project implementation agencies should consider corridor realignment, buffer zones and setbacks, and berms and fencing where feasible, to avoid open space, recreation land, and wildlife corridors to reduce conflicts between transportation uses and open space and recreation lands.	X					X
MM-OS.14: Project implementation agencies should identify open space areas that could be preserved and should include mitigation measures (such as dedication or payment of in-lieu fees) for the loss of open space.	X	X	X			X
MM-OS-15: Prior to final approval of each project, the implementing agency should conduct the appropriate project-specific environmental review, including consideration of loss of open space. Potential significant impacts to open space should be mitigated, as feasible. The project implementation agencies or local jurisdiction should be responsible for ensuring adherence to the mitigation measures prior to construction.	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-OS.16: For projects that require approval or funding by the USDOT, project implementation agencies should comply with Section 4(f) of the USDOT Act.	X					X
MM-OS.17: Future impacts to open space and recreation lands should be avoided through cooperation, information sharing, and program development as part of SCAG's ongoing regional planning efforts.	X					X
MM-OS.18: SCAG should establish criteria for evaluating impacts to regionally significant open space resources, and will recommend mitigation measures for significant impacts to regional resources. These recommendations will be included in SCAG's Regional Open Space Guidance.				X	X	X
MM-OS.19: SCAG should develop and implement coordinated mitigation programs for regional projects, with an emphasis on regional transportation projects.				X	X	
MM-OS.20: SCAG should produce and maintain a list/map of potential conservation opportunity areas. These conservation opportunity areas may be used by local governments and project sponsors as priority areas for mitigating impacts to open space resources. SCAG's forthcoming regional open space guidance document will include additional information on conservation opportunity areas.				X	X	
MM-OS.21: SCAG should use its IGR process to review projects with potentially significant impacts to open space and recommend impact avoidance and mitigation measures.				X	X	
MM-OS.22: Project sponsors should ensure that transportation systems proposed in the RTP avoid or mitigate significant impacts to natural lands, community open space and important farmland, including cumulative impacts and open space impacts from the growth associated with transportation projects and improvements.				X	X	
MM-OS.23: Project sponsors should ensure that at least one acre of unprotected open space is permanently conserved for each acre of open space developed as a result of transportation projects/improvements.	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-OS.24: Individual projects submitted for IGR review should either avoid significant impacts to regionally significant open space resources or mitigate the significant impacts through measures consistent with regional open space policies for conserving natural lands, community open space and farmlands. All projects submitted for IGR review should demonstrate consideration of alternatives that would avoid or reduce impacts to open space.	X		X			X
MM-OS.25: Individual projects should include into project design, to the maximum extent practicable, mitigation measures and recommended best practices aimed at minimizing or avoiding impacts to natural lands, including, but not limited to FHWA's Critter Crossings, and Ventura County Mitigation Guidelines.	X					X
MM-OS.26: SCAG, in collaboration with its member agencies, should work to enhance community open space and its accessibility.	X					X
MM-OS.27: SCAG should continue to work with the state to develop approaches for evaluating environmental impacts within the Compass Blueprint program, particularly energy, air quality, water, and open space and habitat.				X	X	
MM-OS.28: SCAG should support local jurisdictions and other service providers in their efforts to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection.				X	X	
MM-OS.29: SCAG should encourage member jurisdictions to work as partners to address regional outdoor recreation needs and to acquire the necessary funding for the implementation of their plans and programs. This should be done, in part, by consulting with agencies and organizations that have active open space work plans.				X	X	
MM-OS.30: SCAG should encourage member jurisdictions that have trails and trail segments determined to be regionally significant to work together to support regional trail networks. SCAG should encourage joint use of utility, transportation and other rights-of-way, greenbelts, and biodiversity areas				X	X	
MM-OS.31: Local governments should prepare a Needs Assessment to determine the level of adequate community open space level for their areas.				X	X	
MM-OS.32: Local governments should encourage patterns of urban development and land use, which reduce costs on infrastructure and make better use of existing facilities.	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-OS.33: SCAG's Compass Blueprint program and other on-going regional planning efforts will be used to build a consensus in the region to support changes in land use to accommodate future population growth while maintaining the quality of life in the region.	X			X		X
MM-OS.34: Project level mitigation for significant cumulative and growth-inducing impacts on open space resources should include the conservation of natural lands, community open space and important farmland through existing programs in the region.				X	X	
MM-OS.35: Local governments should establish programs to direct growth to less agriculturally valuable lands and ensure, where possible, the continued protection of the most agriculturally valuable land within each county. The following are offered as examples of programs: <ul style="list-style-type: none"> • The development or participation in transfer of development rights programs to encourage the preservation of agricultural lands. • Tools for the preservation of agricultural lands such as eliminating estates and ranchettes and clustering to retain productive agricultural land. • Easing restrictions on farmer's markets and encourage cooperative farming initiatives to increase the availability of locally grown food. • Considering partnering with school districts to develop farm-to-school programs 	X			X	X	X
MM-OS.36: Local governments should avoid the premature conversion of farmlands by promoting infill development and the continuation of agricultural uses until urban development is imminent; if development of agricultural lands is necessary, growth should be directed to those lands on which the continued viability of agricultural production has been compromised by surrounding urban development on the loss of local markets.	X			X		X
MM-OS.37: SCAG should consider consistency with ongoing regional open space planning in funding opportunities and programs administered by SCAG.				X	X	
MM-OS.38: Local governments should consider the most recent annual report on open space conservation in planning and evaluating projects and programs in areas with regionally significant open space resources.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-OS.39: Local governments should encourage patterns of urban development and land use, which reduce costs on infrastructure and make better use of existing facilities. Strategies local governments should pursue include: <ul style="list-style-type: none"> • Increase the accessibility to natural areas lands for outdoor recreation. • Promote infill development and redevelopment to revitalize existing communities • Utilize "green" development techniques • Promote water-efficient land use and development 	X			X		X
MM-OS.40: Where practical and feasible, project sponsors and local governments should consider increasing the accessibility to natural areas lands for outdoor recreation. Such measures should be coordinated with local and regional open space planning or management agencies.	X			X		X
MM-OS.41: Project sponsors and local governments should promote infill development and redevelopment to encourage the efficient use of land and minimize the development of agricultural and open space lands.	X			X		X
MM-OS.42: Local governments should consider the following land use principles that use resources efficiently, and to the extent practical and feasible, minimize pollution and reduce waste generation: <ul style="list-style-type: none"> • Mixed-use residential and commercial development that is connected with public transportation and utilizes existing infrastructure • Land use and planning strategies to increase biking and walking trips. 	X			X		X
MM-OS.43: Project sponsors and local governments should promote water-efficient land use and development.	X			X		X
MM-OS.44: Local governments should encourage multiple use spaces and encourage redevelopment in areas where it will provide more opportunities for recreational uses and access to natural areas close to the urban core.	X			X		X
MM-POP.1: SCAG should work with its member agencies to implement growth strategies to create an urban form designed to utilize the existing transportation networks and the transportation improvements contained in the 2008 RTP, enhancing mobility and reducing land consumption.	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-POP.2: For projects with the potential to displace homes and/or businesses, project implementation agencies should evaluate alternate route alignments and transportation facilities that minimize the displacement of homes and businesses. An iterative design and impact analysis would help where impacts to homes or businesses are involved. Potential impacts should be minimized to the extent feasible. If possible, existing rights-of-way should be used.				X	X	
MM-POP.3: Project implementation agencies should develop a construction schedule that minimizes potential neighborhood deterioration from protracted waiting periods between right-of-way acquisition and construction.	X					X
MM-POP.4: SCAG's Compass Blueprint strategy will be used to build consensus in the region relating to changes in land use to accommodate future population growth while maintaining the quality of life in the region.	X					X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
<p>MM-PS.1: Project implementation agencies should ensure that prior to construction all necessary local and state road and railroad encroachment permits are obtained. The project implementation agency should also comply with all applicable conditions of approval. As deemed necessary by the governing jurisdiction, the road encroachment permits may require the contractor to prepare a traffic control plan in accordance with professional engineering standards prior to construction. Traffic control plans should include the following requirements:</p> <ul style="list-style-type: none"> • Identification of all roadway locations where special construction techniques (e.g., directional drilling or night construction) would be used to minimize impacts to traffic flow. • Development of circulation and detour plans to minimize impacts to local street circulation. This may include the use of signing and flagging to guide vehicles through and/or around the construction zone. • Scheduling of truck trips outside of peak morning and evening commute hours. • Limiting of lane closures during peak hours to the extent possible. • Usage of haul routes minimizing truck traffic on local roadways to the extent possible. • Inclusion of detours for bicycles and pedestrians in all areas potentially affected by project construction. • Installation of traffic control devices as specified in the California Department of Transportation Manual of Traffic Controls for Construction and Maintenance Work Zones. • Development and implementation of access plans for highly sensitive land uses such as police and fire stations, transit stations, hospitals, and schools. The access plans would be developed with the facility owner or administrator. To minimize disruption of emergency vehicle access, affected jurisdictions should be asked to identify detours for emergency vehicles, which will then be posted by the contractor. Notify in advance the facility owner or operator of the timing, location, and duration of construction activities and the locations of detours and lane closures. • Storage of construction materials only in designated areas. • Coordination with local transit agencies for temporary relocation of routes or bus stops in work zones, as necessary. 				X	X	
<p>MM-PS.2: Prior to construction, the project implementation agency should identify the locations of existing utility lines. The contractor should avoid all known utility lines during construction.</p>	X					X
<p>MM-PS.3: Projects identified in the 2008 RTP that require solid waste collection will coordinate with the local public works department to ensure that the existing public services and utilities would be able to handle the increase. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility should be identified in each project's CEQA documentation.</p>	X					X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-PS.4: Each of the proposed projects identified in the 2008 RTP should comply with applicable regulations related to solid waste disposal.	X		X			X
MM-PS.5: The construction contractor should work with the respective local government's Recycling Coordinator to ensure that source reduction techniques and recycling measures are incorporated into project construction.				X		X
MM-PS.6: The amount of solid waste generated during construction will be estimated prior to construction, and appropriate disposal sites will be identified and utilized.	X	X				X
MM-PS.7: Project implementation agencies should integrate green building measures into project design such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. These measures could include the following: <ul style="list-style-type: none"> • Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. • The inclusion of a waste management plan that promotes maximum C&D diversion. • Source reduction through (1) use of materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed materials, and (5) use of structural materials in a dual role as finish material (e.g. stained concrete flooring, unfinished ceilings, etc.). • Reuse of existing structure and shell in renovation projects. • Design for deconstruction without compromising safety. • Design for flexibility through the use of moveable walls, raised floors, modular furniture, moveable task lighting and other reusable building components. • Development of indoor recycling program and space. 	X	X	X			X
MM-PS.8: Local governments and waste management agencies should discourage the siting of new landfills unless all other waste reduction and prevention actions have been fully explored. If landfill siting or expansion is necessary, landfills should be sited with an adequate landfill-owned, undeveloped land buffer to minimize the potential adverse impacts of the landfill in neighboring communities.	X	X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-PS.9: Project implementation agencies should discourage exporting of locally generated waste outside of the SCAG region during the construction and implementation of a project. Disposal within the county where the waste originates should be encouraged as much as possible. Green technologies for long-distance transport of waste (e.g., clean engines and clean locomotives or electric rail for waste-by-rail disposal systems) and consistency with SCAQMP and RTP policies should be required.	X	X				X
MM-PS.10: Project implementation agencies should encourage waste reduction goals and practices and look for opportunities for voluntary actions to exceed the 50% waste diversion target.	X	X	X	X		X
MM-PS.11: Project implementation agencies should encourage the development of local markets for waste prevention, reduction, and recycling practices by supporting recycled content and green procurement policies, as well as other waste prevention, reduction, and recycling practices.	X			X		X
MM-PS.12: Local government should develop ordinances that promote waste prevention and recycling activities, such as: requiring waste prevention and recycling efforts at all large events and venues; implementing recycled content procurement programs; and developing opportunities to divert food waste away from landfills and toward food banks and composting facilities.	X			X		X
MM-PS.13: Developers, local governments, and waste management agencies should develop environmentally friendly alternative waste management strategies such as composting, recycling, and conversion technologies.	X			X		X
MM-PS.14: Local governments and waste management agencies, where practical and feasible, should develop and site composting, recycling, and conversion technology facilities that are environmentally friendly and have minimum environmental and health impacts.	X			X		X
MM-PS.15: The growth inducing potential of individual projects should be carefully evaluated so that the full implications of the projects are understood. Individual environmental documents should quantify indirect impacts (growth that could be facilitated or induced) on public services and utilities to the extent feasible. Lead and responsible agencies then will make any necessary adjustments to the applicable General Plan. Any such identified adjustment should be communicated to SCAG.	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-PS.16: The project implementation agency should identify projects in the 2008 RTP that require police protection, fire service, and emergency medical service and should coordinate with local fire and police departments to ensure that the existing public services would be able to handle the increase in demand for their services. If the current levels of services at the project site are found to be inadequate, infrastructure improvements and/or personnel requirements for the appropriate public service should be identified in each project's CEQA documentation.	X					X
MM-PS.17: Project implementation agencies should undertake project specific review of the public utilities and services as part of project specific environmental review. For any identified impacts, project implementation agencies should ensure that the appropriate school district has the school capacity, or is planning for the capacity, that the project will generate. Appropriate mitigation measures, such as new school construction or expansion, should be identified. The project implementation agencies or local jurisdiction should be responsible for ensuring adherence to the mitigation measures. SCAG should be provided with documentation of compliance with any necessary mitigation measures.	X		X			X
MM-PS.18: Local jurisdictions should continue to adopt programs to comply with state solid waste diversion rate mandates and, where possible, should encourage further recycling to exceed these rates				X		X
MM-PS.19: Local jurisdictions should implement or expand city or county-wide recycling and composting programs for residents and businesses. This could include extending the types of recycling services offered (e.g. to include food and green waste recycling) and providing public education and publicity about recycling services.	X			X		X
MM-PS.20: Local governments, waste management agencies and SCAG should coordinate regional approaches and strategic siting of waste management facilities.	X			X		X
MM-PS.21: Local governments and waste management agencies, should encourage and, where practical and feasible, facilitate the creation of synergistic linkages between community businesses and the development of eco-industrial parks and materials exchange centers where one entity's waste stream becomes another entity's raw material by making priority funding available for projects that involve co-location of facilities.	X			X		X
MM-PS.22: Local governments and waste management agencies should prioritize siting of new solid waste management facilities including recycling, composting, and conversion technology facilities in conjunction with existing waste management or material recovery facilities.	X			X		X
MM-PS.23: Local governments and waste management agencies should increase programs to educate the public and increase awareness of reuse, recycling, composting, and green building benefits and raise consumer education issues at the county and city level, as well as at local school districts and education facilities.	X			X		X
MM-PS.24: SCAG should encourage projects to reuse and recycle construction and demolition waste.	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-PS.25: SCAG should encourage methane recovery in local landfills and wastewater treatment plants to generate electricity.				X	X	
MM-SEP.1: SCAG should help ensure the rapid repair of transportation infrastructure in the event of an emergency. <ul style="list-style-type: none"> • SCAG, in cooperation with local and state agencies, should identify critical infrastructure needs necessary for: a) emergency responders to enter the region, b) evacuation of affected facilities, and c) restoration of utilities. • SCAG should establish transportation infrastructure practices that promote and enhance security. 				X	X	
MM-SEP.2: SCAG should continue to promote the use of intelligent transportation system (ITS) technologies that enhance transportation security. <ul style="list-style-type: none"> • SCAG should work to expand the use of ITS to improve surveillance, monitoring and distress notification systems and to assist in the rapid evacuation of disaster areas • SCAG should facilitate the incorporation of security into the Regional ITS Architecture. • Transit operators should incorporate ITS technologies as part of their security and emergency preparedness and share that information with other operators. • Aside from deploying ITS technologies for advanced customer information, transit agencies should work intensely with ethnic, local and disenfranchised communities through public information/outreach sessions ensuring public participation are utilized to its fullest. In case of evacuation, these transit dependent persons may need additional assistance to evacuate to safety. 				X	X	
SCAG does not intend to undertake a first response or emergency management role. SCAG seeks to become a conduit for coordination and collaboration among these stakeholders at the regional level.						
MM-SEP.3: SCAG should establish transportation infrastructure practices that promote and enhance security. <ul style="list-style-type: none"> • SCAG should work with transportation operators to plan and coordinate transportation projects, as appropriate, with Department of Homeland Security grant projects, to enhance the regional transit security strategy (RTSS). • SCAG should establish transportation infrastructure practices that identify and prioritize the design, retrofit, hardening, and stabilization of critical transportation infrastructure to prevent failure, to minimize loss of life and property, injuries, and avoid long term economic disruption. • SCAG should establish a Transportation Security Working Group (TSWG) with goals of RTP consistency with RTSS, and to find ways SCAG programs can enhance RTSS. 				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-SEP.4: SCAG should establish a forum where policy makers can be educated and regional policy can be developed <ul style="list-style-type: none"> SCAG should work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies. 				X	X	
MM-SEP.5: SCAG should help to enhance the region's ability to deter and respond to acts of terrorism, human-caused or natural disasters through regionally cooperative and collaborative strategies. <ul style="list-style-type: none"> SCAG should work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies. 				X	X	
MM-SEP.6: SCAG should help to enhance the region's ability to deter and respond to terrorist incidents, human-caused or natural disasters by strengthening relationship and coordination with transportation. <ul style="list-style-type: none"> SCAG should work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies. SCAG should encourage all SCAG elected officials are educated in NIMS. SCAG should work with partner agencies, federal, state and local jurisdictions to improve communications and interoperability and to find opportunities to leverage and effectively utilize transportation and public safety/security resources in support of this effort. 				X	X	
MM-SEP.7: SCAG will work to enhance emergency preparedness awareness among public agencies and with the public at large. <ul style="list-style-type: none"> SCAG should work with local officials to develop regional consensus on regional transportation safety, security, and safety security policies. 				X	X	
MM-SEP.8: SCAG should work to improve the effectiveness of regional plans by maximizing the sharing and coordination of resources that would allow for proper response by public agencies. <ul style="list-style-type: none"> SCAG should encourage and provide a forum for local jurisdictions to develop mutual aid agreements for essential government services during any incident recovery. 				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-SEP.9: SCAG should help to enhance the capabilities of local and regional organizations, including first responders, through provision and sharing of information. <ul style="list-style-type: none"> • SCAG should work with local agencies to collect regional GeoData in a common format, and provide access to the GeoData for emergency planning, training and response. • SCAG should establish a forum for cooperation and coordination of these plans and programs among the regional partners including first responders and operations agencies • SCAG should develop and establish a regional information sharing strategy, linking SCAG and its member jurisdictions for ongoing sharing and provision of information pertaining to the region's transportation system and other critical infrastructure. 				X	X	
MM-SEP.10: SCAG should provide the means for collaboration in planning, communication, and information sharing before, during, or after a regional emergency. <ul style="list-style-type: none"> • SCAG should develop and incorporate strategies and actions pertaining to response and prevention of security incidents and events as part of the on-going regional planning activities. • SCAG should offer a regional repository of GIS data for use by local agencies in emergency planning, and response, in a standardized format. • SCAG should enter into agreements with other MPOs to provide this data, in coordination with the California OES in the event that an event disrupts SCAG's ability to function. 				X	X	
MM-SEP.11: SCAG should discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.				X	X	
MM-SEP.12: SCAG should maintain Buffer Zones or natural areas for adequate protection of lives and properties against natural and man-made hazards.				X	X	
MM-SEP.13: SCAG should discourage development on potentially hazardous developments in hillsides, canyons, areas susceptible to flooding, earthquakes, wildfire and other known hazards, and areas with limited access for emergency equipment.				X	X	
MM-SEP.14: SCAG should minimize public expenditure for infrastructure and facilities to support urban type land uses in areas where public health and safety could not be guaranteed.				X	X	
MM-SEP.15: SCAG should promote Fire-wise Land Management by encouraging the use of fire-resistant vegetation and the elimination of brush and chaparral in the immediate vicinity of development in areas with high fire threat.				X	X	
MM-SEP.16: SCAG should promote Fire Management Planning that help reduce fire threats in the region as part of the <i>Compass Blueprint and other ongoing regional planning efforts.</i>				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-SEP.17: SCAG should encourage local jurisdictions to strengthen and fully enforce fire codes and regulations.				X	X	
MM-SEP.18: SCAG should encourage the use of fire-resistant materials when constructing projects in areas with high fire threat.				X	X	
MM-SEP.19: SCAG should encourage the use of fire-resistant vegetation and the elimination of brush and chaparral in the immediate vicinity of development in areas with high fire threat.				X	X	
MM-SEP.20: SCAG should encourage reduction of fire threats in the region as part of the Compass Blueprint process and as part of other on-going regional planning efforts..				X	X	
MM-SEP.21: Project implementation agencies should encourage the use of fire-resistant vegetation native to Southern California and/or to the local microclimate (e.g., vegetation that has high moisture content, low growth habits, ignition-resistant foliage, or evergreen growth) and discourage the use of fire-promoting species especially non-native, invasive species (e.g., pampas grass, fennel, mustard, or the giant reed) in the immediate vicinity of development in areas with high fire threat..				X	X	
MM-SEP.22: Project implementation agencies should encourage natural re-vegetation or seeding with local, native species after a fire and discourage re-seeding of non-native, invasive species to promote healthy, natural ecosystem re-growth. Native vegetation is more likely to have deep root systems that prevent slope failure and erosion of burned areas than should shallow-rooted non-natives.	X			X		X
Measures intended to reduce vehicle miles traveled are part of the 2008 RTP. These include: increasing rideshare and work-at-home opportunities to reduce demand on the transportation system, investments in non-motorized transportation and maximizing the benefits of the land use-transportation connection and other Travel Demand Management measures.	X			X		X
MM-TR.1: Beyond the currently financially and institutionally feasible measures included in the 2008 RTP, SCAG should identify further reduction in VMT that could be obtained through land use strategies, additional car-sharing programs, additional vanpools, additional bicycle programs, and implementation of a universal employee transit access pass (TAP) program.				X		
MM-TR.2: Local governments should coordinate controlled intersections so that traffic passes more efficiently through congested areas. Where traffic signals or street lights are installed, require the use of Light Emitting Diode (LED) technology.				X	X	
MM-TR.3: Local governments should promote ride sharing programs e.g., by designating a certain percentage of parking spaces for high-occupancy vehicles, providing larger parking spaces to accommodate vans used for ride-sharing, and designating adequate passenger loading and unloading and waiting areas.				X		X
MM-TR.4: Local governments should create car-sharing programs. Accommodations for such programs include providing parking spaces for the car-share vehicles at convenient locations accessible by public transportation.				X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM.TR-5: Local governments should encourage the use of public transit systems by enhancing safety and cleanliness on vehicles and in and around stations, providing shuttle service to public transit, offering public transit incentives and providing public education and publicity about public transportation services				X		X
MM.TR-6: Local governments should encourage bicycling and walking by incorporate bicycle lanes into street systems in regional transportation plans, new subdivisions, and large developments, creating bicycle lanes and walking paths directed to the location of schools and other logical points of destination and provide adequate bicycle parking, and encouraging commercial projects to include facilities on-site to encourage employees to bicycle or walk to work.				X		X
MM-W.1: Transportation improvements should comply with federal, state, and local regulations regarding storm water management. State-owned highways and other transportation facilities are subject to compliance with a statewide stormwater permit issued to Caltrans.				X		X
MM-W.2: Project implementation agencies should ensure that new facilities include structural water quality control features such as drainage channels, detention basins, oil and grease traps, filter systems, and vegetated buffers to prevent pollution of adjacent water resources by polluted runoff where required by applicable urban storm water runoff discharge permits.	X	X				X
MM-W.3: Structural storm water runoff treatment should be provided according to the applicable urban storm water runoff permit where facilities will be operated by a permitted municipality or county. Where Caltrans is the operator, the statewide permit applies.	X					X
MM-W.4: Implementation agencies should consult with the RWQCB and Storm Water Management Plan permit holders as projects are designed to ensure that projects protect the goals of the Clean Water Act and comply with federal storm water NPDES permits	X		X			X
MM-W.5: Implementation agencies should ensure that operational best management practices for street cleaning, litter control, and catch basin cleaning are implemented to prevent water quality degradation in compliance with applicable storm water runoff discharge permits. Efforts should be made to assure treatment controls are in place as early as possible, such as during the acquisition process for rights-of-way, not just later during the facilities design and construction phase.	X	X	X			X
MM-W.6: Implementation agencies should comply with the State-wide construction storm water discharge permit requirements including preparation of Storm Water Pollution Prevention Plans for transportation improvement construction projects. Roadway construction projects should comply with the Caltrans storm water discharge permit. Best Management Practices should be identified and implemented to manage site erosion, wash water runoff, and spill control.	X	X	X			X
MM-W.7: Projects requiring the discharge of dredged or fill materials into U.S. waters, including wetlands, should comply with sections 404 and 401 of the Clean Water Act including the requirement to obtain a permit from the U.S. Army Corps of Engineers and the governing Regional Water Quality Control Board.	X	X				X
MM-W.8: In compliance with applicable municipal separate storm sewer system discharge permits as well as Caltrans' storm water discharge permit, long-term sediment control should be effected through erosion control and revegetation programs designed to allow reestablishment of native vegetation on slopes and undeveloped areas.		X	X			X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-W.9: Drainage of roadway runoff should comply with Caltrans' storm water discharge permit. Wherever possible, roadways should be designed to convey storm water through vegetated median strips that provide detention capacity and allow for infiltration before reaching culverts. The infiltration capacity of storm water runoff detention facilities should be sized to minimize, to the greatest extent possible, the effect of increased impervious surfaces.	X	X	X			X
MM-W.10: Project implementation agencies should avoid designs that require continual dewatering where feasible.	X	X	X			X
MM-W.11: Project implementation agencies should ensure that projects that do require continual dewatering facilities implement monitoring systems and long-term administrative procedures to ensure proper water management that prevents degrading of surface water and minimizes, to the greatest extent possible, adverse impacts on groundwater for the life of the project. Construction designs should comply with appropriate building codes and standard practices including the Uniform Building Code.	X					X
MM-W.12: Treatment and control features such as detention basins, infiltration strips, porous paving, and other features to control surface runoff and facilitate groundwater recharge should be incorporated into the design of new transportation projects early on in the process to ensure that adequate acreage and elevation contours are provided during the right-of-way acquisition process.	X					X
MM-W.13: Where feasible, transportation facilities should not be sited in groundwater recharge areas, to prevent conversion of those areas to impervious surface.	X					X
MM-W.14: Natural riparian conditions near projects should be maintained, wherever feasible, to minimize the effects of stormwater flows at stream crossings. Where feasible, riparian areas should be restored or expanded to mitigate additional impervious surface and associated runoff.	X			X		X
MM-W.15: Implementing agencies should assure projects mitigate for changes to the volume of runoff, where any downstream receiving waterbody has not been designed and maintained to accommodate the increase in flow velocity, rate, and volume without impacting the water's beneficial uses. Pre-project flow velocities, rates, and volumes must be not be exceeded. This applies not only to increases in storm water runoff from the project site, but also to hydrologic changes induced by flood plain encroachment. Projects should not cause or contribute to conditions that degrade the physical integrity or ecological function of any downstream receiving waters.	X	X	X			X
MM-W.16: Impacts should be reduced to the extent possible by providing culverts and facilities that do not increase the flow velocity, rate, or volume and/or acquiring sufficient storm drain easements that accommodate an appropriately vegetated earthen drainage channel, as required in MM-W.15.	X	X	X			X
MM-W.17: All roadbeds for new highway and rail facilities should be elevated at least one foot above the 100-year base flood elevation. Since alluvial fan flooding is not often identified on FEMA flood maps, the risk of alluvial fan flooding should be evaluated and projects should be sited to avoid alluvial fan flooding where feasible. Delineation of floodplains and alluvial fan boundaries should attempt to account for future hydrologic changes caused by global climate change.	X	X				X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-W.18: Transportation improvements should comply with local, state, and federal floodplain regulations. Projects requiring federal approval or funding should comply with Executive Order 11988 on Floodplain Management, which requires avoidance of incompatible floodplain development, restoration and preservation of the natural and beneficial floodplain values, and maintenance of consistency with the standards and criteria of the National Flood Insurance Program.	X	X				X
MM-W.19: Improvement projects on existing facilities should include upgrades to stormwater drainage facilities to accommodate any increased runoff volumes. These upgrades may include the construction of detention basins or structures that will delay peak flows and reduce flow velocities, including expansion and restoration of wetlands and riparian buffer areas. System designs should be completed to eliminate increases in peak flow rates from current levels.	X			X		X
MM-W.20: Local governments should encourage Low Impact Development and incorporation of natural spaces that reduce, treat, infiltrate and manage stormwater runoff flows in all new developments where practical and feasible.	X					X
MM-W.21: Local governments should implement, where practical and feasible, green infrastructure and water-related green building practices through incentives and ordinances. Green building resources include the U.S. Green Building Council's Leadership in Energy and Environmental Design, Green Point Rated Homes, and the California Green Builder Program.				X		X
MM-W.22: Local governments should integrate water resources planning with existing greening and revitalization initiatives, such as street greening, tree planting, development and restoration of public parks, and parking lot conversions, to maximize benefits and share costs.	X			X		X
MM-W.23: Developers, local governments, and water agencies should maximize, <u>where practical and feasible</u> , permeable surface area in existing urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. New impervious surfaces should be minimized to the greatest extent possible, including the use of in-lieu fees and off-site mitigation.	X			X		X
MM-W.24: SCAG should continue to work with local jurisdictions and water quality agencies, through its Water Policy Task Force and other means, to encourage regional-scale planning for improved water quality management and pollution prevention. Future impacts to water quality should be avoided, to the extent practical and feasible, through cooperative planning, information sharing, and comprehensive pollution control measure development within the SCAG region. This cooperative planning should occur as part of current and existing coordination, an integral part of SCAG's ongoing regional planning efforts.	X			X		X
MM-W.25: SCAG should continue to work with local jurisdictions and water agencies, to encourage regional-scale planning for improved stormwater management and groundwater recharge, including consideration of alternative recharge technologies and practices. Future adverse impacts should be avoided through cooperative planning, information sharing, and comprehensive implementation efforts within the SCAG region. Meetings of SCAG's Water Policy Task Force and Regional Council offer an opportunity for local jurisdictions and water agencies to share information and strategies for improving regional performance in these efforts.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-W.26: Local governments should prevent development in flood hazard areas that do not have appropriate protections, especially in alluvial fan areas of the region.				X	X	
MM-W.27: Local jurisdictions should encourage new development and industry to locate in those service areas with existing wastewater infrastructure and treatment capacity, making greater use of those facilities prior to incurring new infrastructure costs.	X			X		X
MM-W.28: Wastewater treatment agencies are encouraged to have expansion plans, approvals and financing in place once their facilities are operating at 80 percent of capacity. SCAG should provide opportunities for information sharing and program development.	X			X		X
MM-W.29: Local jurisdictions should promote reduced wastewater system demand by: <ul style="list-style-type: none"> • Designing wastewater systems to minimize inflow and decrease upstream treatment and infiltration to the extent feasible, • Reducing overall source water generation by domestic and industrial users • Deferring development approvals for industries that generate high volumes of wastewater until wastewater agencies have expanded capacity. 	X			X	X	X
MM-W.30: Regional water agencies should consider, to the greatest extent feasible, potential climate change hydrology and attendant impacts on available water supplies and reliability in the process of creating or modifying systems to manage water resources for both year-round use and ecosystem health. As the methodology and base data for such decisions is still developing, agencies should use the best currently available science in decision making. Local governments and water agencies should rely on current regional analyses when making local decisions regarding future water supply and reliability.	X			X		X
MM-W.31: Local water agencies should continue to evaluate future water demands and establish the necessary supply and infrastructure to meet that demand, as documented in their Urban Water Management Plans.	X			X		X
MM-W.32: Developers, local governments, and water agencies should include conjunctive use as a water management strategy when feasible.	X			X		X
MM-W.33: SCAG, in coordination with regional water agencies and other stakeholders, should encourage the kind of regional coordination throughout California and the Colorado River Basin that develops and supports sustainable policies in accommodating growth.	X					X
MM-W.34: SCAG, in coordination with regional water agencies and other stakeholders, should facilitate information sharing about the management and status of the Sacramento River Delta, the Colorado River Basin, and other water supply source areas of importance to local water supply.				X	X	

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: "Planning and Project Design," "During Construction," and "Post Construction" require compliance and verification during each of these stages.

Table 1: Mitigation Monitoring and Reporting Program

Mitigation Measure	Timing of Implementation				Responsible Party	
	Planning and Project Design	During Construction	Post Construction	Ongoing*	SCAG	Implementation Agency
MM-W.35: Developers and local governments should reduce exterior uses of water in public areas, and should promote reductions in private homes and businesses, by shifting to drought-tolerant native landscape plantings (xeriscaping), using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives. Local governments should also work with local retailers and vendors to promote the availability of drought resistant landscaping options and provide information on where these can be purchased. Use of reclaimed water especially in median landscaping and hillside landscaping should be implemented where feasible.				X	X	
MM-W.36: Future impacts to water supply should be minimized through cooperation, information sharing, and program development as part of SCAG’s ongoing regional planning efforts, in coordination with regional water agencies and other stakeholders. SCAG’s Water Policy Task Force presents an opportunity for local jurisdictions and water agencies to share information and strategies (such as those listed above) about their on-going water supply planning efforts, including the following types of actions: <ul style="list-style-type: none"> Minimize impacts to water supply by developing incentives, education and policies to further encourage water conservation and thereby reduce demand. Involve the region’s water supply agencies in planning efforts in order to make water resource information, such as water supply and water quality, location of recharge areas and groundwater, and other useful information available to local jurisdictions for use in their land use planning and decisions. Provide, as appropriate, legislative support and advocacy of regional water conservation, supply and water quality projects. Promote water-efficient land use and development. The Water Policy Task Force and other ongoing regional planning efforts present an opportunity for SCAG to partner with the region’s water agencies in outreaching to local governments, special water districts, and the California Department of Water Resources on important water supply issues. SCAG provides a unique opportunity to increase two-way communication between land use and water planners. The goals of the Task Force would not be to duplicate existing efforts of the water agencies. 	X			X		X

*Ongoing mitigation measures are those that occur continuously or iteratively and are not tied to any one particular project. Mitigation measures categorized in all three categories: “Planning and Project Design,” “During Construction,” and “Post Construction” require compliance and verification during each of these stages.