

MITIGATION MONITORING AND REPORTING PROGRAM

PURPOSE

The Mitigation Monitoring and Reporting Program (MMRP) has been prepared compliance with Section 21081.6 of the California Environmental Quality Act (CEQA) and *State CEQA Guidelines* Section 15097. It is the intent of this program to ensure that mitigation measures identified in the Program Environmental Impact Report (PEIR) are implemented.

INTRODUCTION

This MMRP describes the procedures that will be used to monitor implementation of the mitigation measures adopted in connection with the approval of the 2018 RTP/SCS. This MMRP takes the form of a table that identifies the responsible entity for monitoring implementation of each mitigation measure and the timing of each measure. TCAG will designate a staff person to serve as Coordinator for overall implementation and administration of the MMRP, and its application to future projects. The Coordinator will prepare periodic progress reports on mitigation measure implementation.

The PEIR identifies programmatic mitigation measures to be implemented by TCAG as PEIR lead agency, and also identifies recommended mitigation measures to be implemented by other implementing agencies that will be lead agencies for future transportation and land use projects. The Lead Agency for each future project will be responsible for assuring the project-specific mitigation measures it adopts are enforceable and will be responsible for monitoring those mitigation measures.

**Table 4.0-1
Mitigation Monitoring and Reporting Program Matrix**

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Impact – Aesthetics MM-AES-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects on scenic vistas, or state-designated or eligible, and County-designated, scenic highways or vista points, that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize impacts on scenic vistas, scenic highways, and vista points, including ensuring compliance with visual resource goals and policies within county and city general plans, as applicable and feasible. Such measures include, but are not limited to, the following: • Use a palette of colors, textures, building materials that are graffiti-resistant, and/or plant materials that complement the surrounding landscape and development; • Use contour grading to better match surrounding terrain. Contour edges of major cut-and-fill to provide a more natural looking finished profile; • Use alternating facades to “break up” large facades and provide visual interest; • Design new corridor landscaping to respect existing natural and man-made features and to complement the dominant landscaping of the surrounding areas; • Replace and renew landscaping along corridors with road widenings, interchange projects, and related improvements; • Retain or replace trees bordering highways, so that clear-cutting is not evident; • Provide new corridor landscaping that respects and provides appropriate transition to existing natural and man-made features, and is complementary to the dominant landscaping or native habitats of surrounding areas; and • Implement design guidelines, local policies, and programs aimed at protecting views of scenic corridors and avoiding visual intrusions in design of projects 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 of projects should minimize their intrusion into important viewsheds and use contour grading to better match surrounding terrain.	Ongoing over the life of the plan	Lead Agency ¹

¹ In this MMRP, “Lead Agency” means local and implementing agencies for future transportation and land use projects that implement the 2018 RTP/SCS

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-AES-4(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or minimizing the effects of light and glare on routes of travel for motorists, cyclists, and pedestrians, or on adjacent properties, that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize light and glare, including ensuring compliance with the goals and policies within county and city general plans, as applicable and feasible. Such measures may include but are not limited to the following: • Use lighting fixtures that are adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties; • Restrict the operation of outdoor lighting for construction and operation activities to the hours of 7:00 a.m. to 10:00 p.m.; • Lighting will be directed away from habitat and open space areas adjacent to the project site; • Use low level light sources with good color rendering and natural light qualities and/or cut-off fixtures for outdoor lighting; • Use unidirectional lighting to avoid light trespass onto adjacent properties; • Design exterior lighting to confine illumination to the project site, and/or to areas which do not include light-sensitive uses; • Provide structural and/or vegetative screening from light-sensitive uses; • Shield and direct all new street and pedestrian lighting away from light-sensitive off-site uses; • Use non-reflective glass or glass treated with a non-reflective coating for all exterior windows and glass used on building surfaces; and • Architectural lighting shall be directed onto the building surfaces and have low reflectivity to minimize glare and limit light onto adjacent properties.	Ongoing over the life of the plan	Lead Agency
Impact- Agricultural Resources		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-AG-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects from the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural uses that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Local agencies and implementing agencies should assess projects for the presence of important farmlands (prime farmland, unique farmland, farmland of statewide importance), and if present, perform a Land Assessment and Site Evaluation (LESA). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize farmland conversion impacts, including ensuring compliance with the goals and policies established within the applicable adopted county and city general plans to protect farmland. Such measures include but are not limited to the following, as well as other comparable measures identified by the Lead Agency taking into account project and site-specific considerations as applicable and feasible: • Project relocation or corridor realignment to avoid Prime Farmland, Unique Farmland, or Farmland of Local or Statewide Importance. • Maintain and expand agricultural land protections such as urban growth boundaries. • Support the acquisition or voluntary dedication to the Tulare County's Agricultural Conservation Easement Program. Tulare County would be responsible for implementation of the Tulare County's Agricultural Conservation Easement Program and ensuring that the terms of the conservation easement agreements are upheld. • Provide for mitigation fees to support a mitigation bank that invests in farmer education, agricultural infrastructure, water supply, marketing, etc. that enhance the commercial viability of retained agricultural lands. • As feasible, require that a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism be granted in perpetuity to a local, regional, or statewide organization or agency whose purpose includes the acquisition and stewardship of agricultural conservation easements. Such easements should provide conservation acreage at a minimum ratio of 1:1 for direct impacts and be located within Tulare County in reasonable proximity to the area of impact.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-AG-3(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects on forest land, timberland, or Timberland Production zones that are within the jurisdiction and responsibility of the California Department of Conservation, other public agencies, and Lead Agencies. Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to mitigate the significant effects of forest and timberland resources to ensure compliance with the goals and policies established within the applicable adopted county and city general plans to protect resources consistent with the California Forest Legacy Act of 2007 (Pub. Resources Code, § 12220(G)), as applicable and feasible. Such measures may include the following, other comparable measures identified by the Lead Agency taking into account project and site-specific considerations as applicable and feasible: • TCAG should facilitate and encourage implementing local agencies to encourage urban development, in place of development in rural and sensitive areas. Local jurisdictions should seek funding to prepare specific plans and related environmental documents to facilitate mixed-use development, and to allow these areas to serve as receiver sites for transfer of development rights away from environmentally sensitive lands and rural areas outside established urban growth boundaries. • TCAG should facilitate and encourage implementing and local agencies to establish preservation ratios to minimize loss of forest land, and timberland, such as 1 acre of unprotected forest land and timber land to be permanently conserved for each acre of open space developed as a result of individual projects. • TCAG should facilitate and encourage implementing and local agencies to implement design features in transportation projects to minimize impacts. Implementing agencies should consider corridor realignment, buffer zones and setbacks, and berms and fencing where feasible, to avoid forest lands and timberlands and to reduce conflicts between transportation uses and forest and timberlands.	Ongoing over the life of the plan	Lead Agency TCAG TCAG TCAG
Impact- Air Quality		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-AIR-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects regarding construction emissions that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize reduce construction emissions below SJVAPCD construction emissions thresholds. Such measures include, but are not limited to, the following: • Prepare a plan for approval by the SJVAPCD demonstrating feasible mitigation of construction exhaust emissions. Construction equipment powered by engines shall meet or exceed current EPA emissions standards for diesel engines. The plan shall demonstrate that off-road construction equipment used on-site shall achieve emissions equal to or cleaner than the latest EPA diesel engine emissions standards for the applicable horsepower range (e.g. EPA's Tier Certification Level) at the time of project construction. • Ensure that all construction equipment is properly tuned and maintained. • Minimize idling time to 5 minutes – saves fuel and reduces emissions. • Provide an operational water truck on-site at all times. Apply water to control dust as needed to prevent dust impacts off-site. • Utilize existing power sources (e.g., power poles) or clean fuel generators rather than temporary power generators. • Develop a traffic plan to minimize traffic flow interference from construction activities. The plan may include advance public notice of routing, use of public transportation, and satellite parking areas with a shuttle service. Schedule operations affecting traffic for off-peak hours. Minimize obstruction of through-traffic lanes. Provide a flag person to guide traffic properly and ensure safety at construction sites. • As appropriate, require that portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, obtain CARB Portable Equipment Registration with the state or a local district permit. Arrange appropriate consultations with the CARB or the District to determine registration and permitting requirements prior to equipment operation at the site. Minimize land disturbance. • Suspend grading and earth moving when wind gusts exceed 25 miles per hour unless the soil is wet enough to prevent dust plumes. • Cover trucks when hauling dirt. • Stabilize the surface of dirt piles if not removed immediately.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-AIR-1(a) (continued): • Limit vehicular paths on unpaved surfaces and stabilize any temporary roads. • Minimize unnecessary vehicular and machinery activities. • Sweep paved streets at least once per day where there is evidence of dirt that has been carried on to the roadway. • Revegetate disturbed land, including vehicular paths created during construction to avoid future off-road vehicular activities. • On Caltrans projects, Caltrans Standard Specifications 10-Dust Control, 17-Watering, and 18-Dust Palliative shall be incorporated into project specifications. • An asbestos dust mitigation plan shall be prepared for projects suspected to be located on or near soils which may contain naturally occurring asbestos. • Prohibition of any rock crushing activity where materials may contain asbestos. • Where project emissions exceed SJVAPCD thresholds, where feasible project sponsors can and should enter into an emissions reduction agreement with the SJAPCD. An emission reduction agreement can be an agreement in which the project sponsor provides pound for pound mitigation of emissions increases through a process that develops, funds, and implements emissions reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. • Project sponsors of major development projects, as defined by the SJVAPCD, can and should assess applicability of District Rule 9510 Indirect Source Review (ISR) to their individual development projects to reasonably mitigate air quality impacts associated with the project. District staff can be consulted for a determination.		
MM-AIR-2(a): TCAG shall pursue the following activities in reducing the impact associated with health risk within 500 feet of freeways and high-traffic volume roadways: • Participate in on-going statewide deliberations on health risks near freeways and high-traffic volume roadways. This involvement includes providing available data and information such as the current and projected locations of sensitive receptors relative to transportation infrastructure; • Work with air agencies including CARB and the air districts in the TCAG region to support their work in monitoring the progress on reducing exposure to emissions of PM10 and PM2.5 for sensitive receptors, including schools, hospitals, and residences within 500 feet of high-traffic volume roadways; • Work with stakeholders to identify planning and development practices that are effective in reducing health impacts to sensitive receptors; and • Share information on all of the above efforts with stakeholders, member cities, counties and the public.	Ongoing over the life of the plan	TCAG

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-AIR-2(b): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects regarding exposure of sensitive receptors to substantial pollutant concentrations that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider the measures that have been identified by SJVAPCD, CARB, and air district(s), or other comparable measures (such as those included in General Plans or other land use regulations), to reduce health risks below SJVAPCD significance thresholds. Lead agencies can and should identify appropriate measures, to be incorporated into project building design for residential, school, and other sensitive uses located within 500 feet (or other appropriate distance as may be identified by CARB) of freeways, heavily travelled arterials, railways and other sources of DPM and known or suspected carcinogens. The measures should include but not be limited to the following: • The project sponsor should retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with CARB and OEHHA requirements to determine the exposure of project residents/occupants/users to stationary source and mobile source emissions prior to issuance of a demolition, grading, or building permit. The HRA should be submitted to the Lead Agency for review and approval. The sponsor should implement the approved HRA recommendations, if any. • The project sponsor should implement the following features that have been found to reduce the air quality risk to sensitive receptors and should be included in the project construction plans. These should be submitted to the appropriate agency for review and approval prior to the issuance of a demolition, grading, or building permit and ongoing. • Do not locate sensitive receptors near distribution center's entry and exit points. • Do not locate sensitive receptors in the same building as a perchloroethylene dry cleaning facility. • Maintain a 50-foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year). • Install, operate, and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the MERV 13. The HV system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85 percent supply filters should be used. • Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the mobile and/or stationary pollutant sources. • Maintain positive pressure within the building. • Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
AIR-2(b) (continued): • Achieve a performance standard of at least 4 air exchanges per hour of recirculation • Achieve a performance standard of 0.25 air exchanges per hour of in unfiltered infiltration if the building is not positively pressurized. • Maintain, repair and/or replace HV system or prepare an Operation and Maintenance Manual for the HV system and the filter. The manual should include the operating instructions and maintenance and replacement schedule. This manual should be included in the CC&R's for residential projects and distributed to the building maintenance staff. In addition, the sponsor should prepare a separate Homeowners Manual. The manual should contain the operating instructions and maintenance and replacement schedule for the HV system and the filters. It should also include a disclosure to the buyers of the air quality analysis findings. • Private (individual and common) exterior open space areas, including playgrounds, patios, and decks, should either be shielded from stationary sources of air pollution by buildings or otherwise buffered to further reduce air pollution exposure for project occupants.		
Impact- Biological Resources		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-BIO-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects on threatened and endangered species and other special status species that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize impacts to sensitive and special status species, ensuring compliance with Sections 7, 9, and 10(a) of the federal Endangered Species Act; the California Endangered Species Act; the Native Plant Protection Act; and the State Fish and Game Code; and related applicable implementing regulations, as applicable and feasible. Such measures include but are not limited to the following: • Conduct a habitat assessment, by a qualified biologist, well in advance of implementation of tiered projects, to determine if individual project areas or their immediate vicinity contain habitat suitable to support species listed as threatened, endangered, or rare pursuant to CEQA or the Native Plant Protection Act, local policies and tree preservation ordinances, applicable HCPs, or other related planning documents. • If habitat suitable to supporting special-status plant or animal species is present, conduct sensitive species surveys according to CDFW protocols. • If special-status plant or animal species are detected within or in the vicinity of tiered project areas, consult with CDFW to implement ground-disturbing activities and to take avoidance measures as appropriate and feasible. • Redesign or modify projects to avoid direct and indirect impacts on special status plants, if feasible. • Protect special-status plants near project sites by installing environmentally sensitive area fencing (orange construction barrier fencing) around special-status plant populations. The environmentally sensitive area fencing should be installed at least 20 feet from the edge of the population.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
BIO-1(a): (continued) - Where avoidance is determined to be infeasible, prior to ground disturbing activities, consult with CDFW and USFWS in order to provide conservation measures to fulfill the requirements of the applicable authorization for incidental take pursuant to Section 7 or 10(a) of the federal Endangered Species Act or Section 2081 of the California Endangered Species Act to support issuance of an Incidental take permit. A wide variety of conservation strategies have been successfully used to protect the survival and recovery in the wild of federally and state-listed endangered species, including: - Avoidance strategies - Contribution of in-lieu fees - Use of mitigation bank credits - Funding of research and recovery efforts - Habitat restoration - Conservation easements - Permanent dedication of habitat - Other comparable measures - Develop and implement a Worker Awareness Program (environmental education) to inform project workers of their responsibilities in regards to avoiding and minimizing impacts on sensitive biological resources. - Appoint an Environmental Inspector to monitor implementation of mitigation measures. - Schedule construction activities to avoid sensitive times for biological resources (e.g. steelhead spawning periods during the winter and spring, nesting bird season) and to avoid the rainy season when erosion and sediment transport is increased. - Conduct pre-construction monitoring to delineate occupied sensitive species' habitat to facilitate avoidance. Where projects are determined to be within suitable habitat of listed or sensitive species that have specific field survey protocols or guidelines outlined by the USFWS, CDFW, or other local agency, conduct preconstruction surveys that follow applicable protocols and guidelines and are conducted by qualified and/or certified personnel.		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-BIO-2(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant impacts on designated sensitive natural communities, including riparian habitats, that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize impacts to sensitive natural communities, ensuring compliance with Section 1600 of the State Fish and Game Code; implementing regulations of the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the California Department of Fish and Wildlife; and other related federal, state, and local regulations, as applicable and feasible. Such measures include but are not limited to the following: • Conduct a habitat assessment, by a qualified biologist, well in advance of implementation of tiered projects, to determine if individual project areas or their immediate vicinity support freshwater marsh, wetland, vernal pool, and/or riparian communities subject to the CDFW's regulatory authority pursuant to Fish and Game Code Section 1600 et seq. • Where applicable, conduct a formal wetland delineation (of both State and Federal wetlands), by a qualified biologist, to determine the location and extent of wetlands and waterways on parcels slated for development. Identify project activities that may require notification to comply with all State and Federal requirements. Site map(s) designating wetlands as well as the location of any activities that may affect a lake or stream should be included with Project site evaluations. • Consult with the USFWS, NMFS, and CDFW where such designated sensitive natural communities, including riparian habitats, provide potential or occupied habitat for federally- and state-listed rare, threatened, and endangered species afforded protection pursuant to the federal Endangered Species Act and/or birds under the Migratory Bird Treaty Act. Also, notify CDFW in the event that project-related activities have the potential to change the bed, bank, and channel of streams and other waterways subject to CDFW regulatory authority pursuant to Fish and Game Code Section 1600 et seq. Such notification should occur prior to the commencement of any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral or intermittent as well as those that are perennial. • Comply with CDFW requirements for Lake and Streambed Alteration Agreements pursuant to the provisions of Section 1600 of the State Fish and Game Code. • Require project design to avoid sensitive natural communities and riparian habitats, wherever practicable and feasible. • Where avoidance is determined to be infeasible, develop sufficient conservation measures through coordination with regulatory agencies (i.e., USFWS or CDFW) to protect sensitive natural communities and riparian habitats. • Install fencing and/or mark sensitive natural communities to be avoided during construction activities. • Salvage and stockpile topsoil (the surface material from 6 to 12 inches deep) and perennial plants for use in restoring native vegetation to all areas of temporary disturbance within the project area. • Revegetate with appropriate native vegetation following the completion of construction activities. • Complete habitat enhancement (e.g., through removal of non-native invasive wetland species	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-BIO-3(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant impacts on federally-protected wetlands that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects).. Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize impacts on federally protected wetlands, ensuring compliance with Section 404 of the Clean Water Act and regulations of the USACE, and other applicable federal, state and local regulations, as applicable and feasible. Such measures include but are not limited to the following: • Require review of construction drawings by a certified wetland delineator as part of each project-specific environmental analysis to determine whether wetlands will be affected and, if necessary, perform a formal wetland delineation. • Require project design to avoid federally protected wetlands consistent with the provisions of Section 404 of the Clean Water Act, wherever practicable and feasible. Where avoidance is determined to be infeasible, develop sufficient compensatory mitigation measures, consistent with EPA's and USACE's Final Compensatory Mitigation Rule to fulfill the requirements of the applicable authorization for impacts to federally protected wetlands to support issuance of a permit or other authorization under Section 404 of the Clean Water Act, ensuring no net loss of wetlands functions or values.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-BIO-4(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified economically-viable mitigation measures capable of avoiding or reducing the significant impacts on migratory fish or wildlife species or within established native resident and/or migratory wildlife corridors, and native wildlife nursery sites that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to ensure compliance with regulations of the USFWS, USFS, CDFW, and related regulations, as well as the goals and policies of counties and cities, as applicable and feasible. Such measures may include the following, or other comparable measures identified by the Lead Agency: • Consult with the USFWS, USFS, CDFW, Tulare County and cities in the County, where impacts to birds afforded protection pursuant to the Migratory Bird Treaty Act during the breeding season may occur. • Conduct a pre-activity nesting birds survey, by a qualified biologist, for active nests no more than 10 days prior to the start of ground disturbance activities, to maximize the probability of detecting nests that could potentially be impacted by the project. Such surveys should cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e. nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. • Prior to initiation of construction activities, conduct a survey, by a qualified biologist, to establish a behavioral baseline of all identified nests. • During construction, continuously monitor nests, by a qualified biologist, to detect behavioral changes resulting from the project. If behavioral changes occur, the work causing that change should cease and the Lead Agency should consult with CDFW for additional avoidance and minimization measures. If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors, is to be established. These buffers should remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no disturbance buffers is possible when there is a demonstrated biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. A qualified wildlife biologist should advise the applicant and notify CDFW in advance of implementing a variance. • Conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site. Analyze habitat linkages/wildlife movement corridors on a broader and cumulative impact analysis scale to avoid adverse impacts from linear projects that have potential for impacts on a broader scale, and to avoid critical narrow choke points that could reduce function of recognized movement corridors on a larger scale. Require review of project designs and habitat connectivity mapping provided by the CDFW or CNDDDB by a qualified biologist to determine the risk of habitat fragmentation.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
BIO-4(a): (continued) • Pursue mitigation banking to preserve habitat linkages and corridors (opportunities to purchase, maintain, and/or restore offsite habitat). • Design projects to avoid adverse effects on the movement of native resident or migratory fish or wildlife species, wildlife movement corridors, or wildlife nursery, wherever practicable and feasible. • Install wildlife fencing where appropriate to minimize the probability of wildlife injury due to direct interaction between wildlife and roads or construction. • Where avoidance is determined to be infeasible, design sufficient conservation measures through coordination with local agencies and the regulatory agency (i.e., USFWS or CDFW) and in accordance with applicable general plans to establish plans to mitigate for the loss of fish and wildlife movement corridors and/or wildlife nursery sites. The consideration of conservation measures may include the following measures, where applicable: – Wildlife movement buffer zones – Corridor realignment – Appropriately spaced breaks in center barriers – Stream rerouting – Culverts – Creation of artificial movement corridors such as freeway under- or overpasses – Other comparable measures		
MM-BIO-5(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects on biological resources protected by local ordinance that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential to significantly affect such biological resources, the Lead Agency can and should consider mitigation measures to minimize such impacts by encouraging compliance with the applicable ordinance and by facilitating mitigation as feasible at the regional level for example by facilitating mitigation banks.	Ongoing over the life of the plan	Lead Agency
MM-BIO-6(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects on areas within an HCP or NCCP that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential to significantly affect such areas, the Lead Agency can and should consider mitigation measures to minimize such impacts by encouraging avoidance of such areas and where avoidance is infeasible facilitating appropriate mitigation such as in kind land replacement and mitigation banking.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Impact- Cultural Resources		
MM-CR-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing significant effects on historic resources that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures. Such measures include but are not limited to the following: As part of planning, design, and engineering for projects, implementing and local agencies should ensure that historic resources are treated in accordance with applicable federal, state, and local laws and regulations. When a project has been identified as potentially affecting a historical resource, a historical resources inventory should be conducted by a qualified architectural historian. The study should comply with <i>State CEQA Guidelines</i> section 15064.5(b), and, if federal funding or permits are required, with section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 USC Sec. 470). As applicable, the study should consist of the following elements: • A records search at the Southern San Joaquin Valley Information Center (California State University, Bakersfield); • Contact with local historical societies, museums, or other interested parties as appropriate to help determine locations of known significant historical resources; • Necessary background, archival and historic research; • A survey of built environment/architectural resources that are 50 years old or older that may be directly or indirectly impacted by project activities; and • Recordation and evaluation of built environment/architectural resources that are 50 years old or older that may be directly or indirectly impacted by project activities; and • Buildings should be evaluated under CRHR and/or NRHP Criteria as appropriate and recorded on California Department of Parks and Recreation 523 forms.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-CR-2(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects of on archaeological resources within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures consistent with Section 15064.5 of the <i>State CEQA Guidelines</i> capable of avoiding or reducing significant impacts on archaeological resources, to ensure compliance with the National Historic Preservation Act, Section 5097.5 of the Public Resources Code (PRC), state programs pursuant to Sections 5024 and 5024.5 of the PRC, adopted county and city general plans, and other federal, state and local regulations. Such measures include but are not limited to the following, or other comparable measures identified by the Lead Agency: • Pursuant to <i>CEQA Guidelines</i> Section 15064.5, prior to construction activities, obtain a qualified archaeologist to conduct a record search at the appropriate Information Center to determine whether the project area has been previously surveyed and whether archaeological resources were identified. • Consult with the NAHC to determine whether known sacred sites are in the project area, and identify the Native American Tribe(s) to contact to obtain information about the project site. • Comply with Section 106 of the National Historic Preservation Act (NHPA) including, but not limited to, projects for which federal funding or approval is required for the individual project. • Prior to construction activities, obtain a qualified archaeologist to conduct archaeological 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 archaeological resources. • If a record search indicates that the project is located in an area rich with cultural materials, retain a qualified archaeologist to monitor any subsurface operations, including but not limited to grading, excavation, trenching, or removal of existing resources from the subject property.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-CR -2(a) (continued) - Design projects and conduct construction and excavation activities to avoid cultural resources (if identified). If avoidance is not feasible, further work may be needed to determine the importance of a resource. Retain a qualified archaeologist familiar with the local archaeology, who should make recommendations regarding the work necessary to determine importance. If the archaeological resource is determined to be important under state or federal guidelines, , impacts on the cultural resource should be mitigated consistent with the requirements of <i>State CEQA Guidelines</i> § 15126.4(b)(3), which requires that preservation in place be the preferred mitigation strategy if feasible, and that any data recovery plans meet certain requirements. - Stop construction and excavation activities in the area where cultural resources are found until a qualified archaeologist can determine the importance of these resources. Stabilize surface if necessary to preserve the resources until they can be evaluated. - Determine if security will be necessary for the area (if theft and/or vandalism is likely). Erecting physical barriers or other protective devices to protect from theft/disturbance.		
MM-CR-3(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects of on paleontological resources within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). . Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures consistent with Section 15064.5 of the <i>State CEQA Guidelines</i> capable of avoiding or reducing significant impacts on paleontological resources, to ensure compliance with the National Historic Preservation Act, Section 5097.5 of the Public Resources Code (PRC), state programs pursuant to Sections 5024 and 5024.5 of the PRC, adopted county and city general plans, and other federal, state and local regulations. Such measures include but are not limited to the following: During environmental review implementing and local agencies can and should retain a qualified paleontologist to identify, survey, and evaluate paleontological resources where potential impacts are considered high. All construction activities should avoid known paleontological resources, if feasible, especially if the resources in a particular lithologic unit formation have been determined to be unique or likely to contain paleontological resources. If avoidance is not feasible, paleontological resources should be excavated by a qualified paleontologist and given to a local agency, State University, or other applicable institution, where they could be curated and displayed for public education purposes.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-CR-4(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects to human remains that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency should consider mitigation measures capable of avoiding or reducing significant impacts on human remains, to ensure compliance with the California Health and Safety Code, Section 7060 and Sections 18950-18961, and Native American Heritage Commission requirements, as applicable and feasible, and all other applicable federal, state, and local laws. Such measures include but are not limited to the following: In the event of discovery or recognition of any human remains during construction or excavation activities, or any ongoing maintenance or operations, implementing and local agencies should cease further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until the following steps are taken: • The Tulare County Coroner has been informed and has determined that no investigation of the cause of death is required. • If the remains are determined or suspected by the County coroner to be of Native American origin, either of the following steps will be taken: – The coroner should 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, which may include obtaining a qualified archaeologist or team of archaeologists to properly excavate the human remains. – Implementing or local agencies or authorized representatives should retain a Native American monitor, and an archaeologist, if recommended by the Native American monitor, and reburial 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 when any of the following conditions occurs: 1. The Native American Heritage Commission is unable to identify a descendant. 2. The descendant identified fails to make a recommendation. 3. The implementing agency or its authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-TCR-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects of on tribal cultural resources within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). . Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures consistent with Section 15064.5 of the <i>State CEQA Guidelines</i> capable of avoiding or reducing significant impacts on tribal cultural resources, to ensure compliance with the National Historic Preservation Act, Section 5097.5 of the Public Resources Code (PRC), state programs pursuant to Sections 5024 and 5024.5 of the PRC, adopted county and city general plans, and other federal, state and local regulations. Such measures include but are not limited to the following: Where Tribal Cultural Resources have been identified (pursuant to the requirements of AB 52), appropriate mitigation shall be identified in concert with local tribes. Where excavation could extend below previously disturbed levels, notification shall be provided to California Native American tribes that are traditionally and culturally affiliated with the geographic area of the project site and have submitted a written request to the Department of City Planning to be notified of proposed projects in that area. If the potential for tribal resources exists, excavation in previously undisturbed soils shall be monitored by a qualified Tribal Monitor. If tribal resources are discovered during excavation, grading, or construction activities, work shall cease in the area of the find until an appropriate Tribal Representative has evaluated the find. Construction personnel shall not collect or move any tribal resources. Construction activity may continue unimpeded on other portions of the project site. Any tribal resources shall be treated with appropriate dignity and protected and preserved as appropriate.	Ongoing over the life of the plan	Lead Agency
Impact- Greenhouse Gases		
MM-GHG-1(a): TCAG shall, through its ongoing outreach and technical assistance programs, work with and encourage local governments to adopt policies and develop practices that lead to GHG emission reductions. These activities shall include, but are not limited to, providing technical assistance and information sharing on developing local Climate Action Plans.	Ongoing over the life of the plan	TCAG

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-GHG-1(b): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of reducing GHG emissions that are within the jurisdiction and responsibility of local agencies (land use projects). Local agencies should adopt, implement, and update Climate Action Plans consistent with 2017 Scoping Plan and General Plan Guidelines guidance that do the following: a) Quantify GHG emissions, both existing and projected over a specified period, resulting from activities within each agency's jurisdiction; b) Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable; c) Identify and analyze the GHG emissions resulting for specific actions or categories of actions anticipated within their respective jurisdictions; d) Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level; e) Establish a mechanism to monitor the plan's progress toward achieving that level and to require amendment if the plan is not achieving specified levels; and f) Be adopted in a public process following environmental review. CAPs should, when appropriate, incorporate planning and land use measures from the California Attorney General's latest list of example policies to address climate change at both the plan and project level. Specifically, at the plan level, land use plans can and should, when appropriate and feasible, incorporate planning and land use measures from the California Attorney General's latest list of example policies to address climate change (http://ag.ca.gov/globalwarming/pdf/GP_policies.pdf), including, but not limited to policies from that web page such as: • Smart growth, jobs/housing balance, transit-oriented development, and infill development through land use designations, incentives and fees, zoning, and public private partnerships • Create transit, bicycle, and pedestrian connections through planning, funding, development requirements, incentives and regional cooperation, and create disincentives for auto use • Energy and water-efficient buildings and landscaping through ordinances, development fees, incentives, project timing, prioritization, and other implementing tools	Ongoing over the life of the plan	Local Agencies

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-GHG-1(c): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of reducing GHG emissions that are within the jurisdiction and responsibility of local agencies (land use projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize land use project GHG emissions, including but not limited to those on the Attorney General's list of project-specific mitigation measures available at the following web site: http://ag.ca.gov/globalwarming/pdf/GW_mitigation_measures.pdf such as: • Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation • Build or fund a major transit stop within or near development • Provide public transit incentives such as free or low-cost monthly transit passes to employees, or free ride areas to residents and customers • Incorporate bicycle lanes, routes and facilities into street systems, new subdivisions, and large developments • Require amenities for non-motorized transportation, such as secure and convenient bicycle parking Additional measures from additional resources listed by the California Attorney General at the following webpage: https://oag.ca.gov/environment/ceqa/measures.	Ongoing over the life of the plan	Lead Agency
Impact- Land Use and Planning		
MM-LU-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects regarding the potential to conflict with any applicable land use plan, policy, or regulation (adopted for the purpose of avoiding or mitigating environmental effects) of an agency with jurisdiction over the project that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to avoid conflicts with, land use plans, policies, or regulations of an agency with jurisdiction over the project. Such measures include, but are not limited to, the following: • Modify the transportation or land use project to eliminate the conflict; or if an inconsistency with an adopted general plan policy or land use regulations (adopted for the purpose of avoiding or mitigating environmental effects) is identified, determine if the environmental, social, economic, and engineering benefits of the project or other factors warrant an amendment to the general plan or land use regulations.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-LU 2(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects related to the physical division of an established community in a project area within the jurisdiction and responsibility of local jurisdictions and Lead Agencies. Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to ensure compliance with the goals and policies established within the applicable adopted county and city general plans to avoid the creation of barriers that physically divide such communities, as applicable and feasible. Such measures may include the following, or other comparable measures identified by the Lead Agency: • Local jurisdictions can and should encourage local jurisdictions to facilitate good design for land use projects that builds upon and improves existing circulation patterns. • Local jurisdictions can and should encourage implementing agencies to orient transportation projects to minimize impacts on existing communities by: • Selecting alignments within or adjacent to existing public right-of-ways. • Designing sections above- or below-grade to avoid physical division of communities. • Providing for direct crossings, overcrossings, or undercrossings at regular intervals for various modes of travel (e.g. active transport).	Ongoing over the life of the plan	Lead Agency
Impact- Noise		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-NOISE-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing significant construction noise impacts that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to avoid or reduce construction noise impacts. Such measures include, but are not limited to, the following: • Equipment and trucks used for project construction can and should utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds), wherever feasible. • Tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction can and should be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust should 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, if such jackets are commercially available, and this could achieve a further reduction of 5 dBA. Quieter procedures should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. • Stationary noise sources during construction activities (e.g., noise generators and staging areas) can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-NOISE-1(a): (continued) • A procedure and phone numbers for notifying the Lead Agency staff and local Police Department of noise complaints; (during regular construction hours and off-hours). • A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign should also include a listing of both the Lead Agency and construction contractor's telephone numbers (during regular construction hours and off-hours). • The designation of an on-site construction complaint and enforcement manager for the project. • Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity. • A preconstruction meeting can and should be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed. • Use of portable barriers in the vicinity of sensitive receptors during construction. • Projects that require pile driving or other construction noise above 90 dBA in proximity to sensitive receptors, should reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90 dBA; a set of site-specific noise attenuation measures should be completed under the supervision of a qualified acoustical consultant. • Implement noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings (for instance by the use of sound blankets), and implement if such measures are feasible and would noticeably reduce noise impacts. • Monitor the effectiveness of noise attenuation measures by taking noise measurements. • 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. • Construct sound reducing barriers between noise sources and noise-sensitive land uses.		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-NOISE-1(b): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing significant operational noise impacts that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to avoid or reduce operational noise impacts. Such measures include, but are not limited to, the following: • Stationary noise sources can and should be located as far from adjacent sensitive receptors as possible and they should be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the Lead Agency (or other appropriate government agency) to provide equivalent noise reduction. • 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. • Utilize techniques such as grade separation, buffer zones, landscaped berms, dense plantings, sound walls, reduced-noise paving materials, and traffic calming measures. • Maximize the distance of new route alignments from sensitive receptors. • Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible. • Use land use measures such as zoning, site design, and buffers to ensure that future development is noise compatible with adjacent transportation facilities and land uses.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-NOISE-4(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing significant vibration impacts that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to avoid or reduce vibration impacts. Such measures include, but are not limited to, the following: • Retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that could damage any adjacent historic or other structure subject to damage, and design means and construction methods to not exceed the thresholds. • Where possible, smooth pavement to eliminate the discontinuities. • Where feasible, use soil mix wall for excavation. • Incorporate a comprehensive construction vibration specification into all construction bid documents. • Require contractor to assess potential for damage to buildings within 100 feet of a tunnel boring. • Require contractor to perform a physical survey to document existing condition of a building that might incur damage. • If pile driving and/or other vibration-generating construction activities are to occur within 60 feet of a historic structure whose integrity would be impaired by exceeding the vibration threshold for historic structures, implement measures to reduce vibration impacts, including but not limited to: – Retain a structural engineer or other appropriate professional to determine threshold levels of vibration and cracking that would damage any historic structure, and design construction methods to not exceed the thresholds. – Require groundborne vibration monitoring of nearby historic structures. Implement monitoring program to detect ground settlement or lateral movement of structures in the vicinity of pile-driving activities and identify corrective measures to be taken should monitored vibration levels indicate the potential for vibration damage to historic structures. – Require contractor to assess potential damage to buildings within 200 feet of areas where excavation requires the use of driven piles either by impact or vibratory methods. Smooth pavement to eliminate discontinuities that cause vibration from vehicle operations.	Ongoing over the life of the plan	Lead Agency
Impact- Population, Housing, and Employment		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-POP-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing significant effects of population growth that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects).. Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures. Such measures include but are not limited to the following: • Review capacities of available urban infrastructure and augment capacities as needed to accommodate demand in locations where growth is desirable and encouraged by the SCS (primarily TPAs, where applicable). • When General Plans and other local land use regulations are amended or updated, use the most recent growth projections and RHNA allocation plan.	Ongoing over the life of the plan	Lead Agency
MM-POP-2(a) Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects related to displacement that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to: (1) minimize the displacement of existing housing, people, and jobs; and (2) to ensure compliance with local jurisdiction's Housing Elements and local land use regulations, as applicable and feasible. Such measures may include but are not limited to the following: • Evaluate alternate route alignments, transportation facilities, and alternative site locations for development projects that minimize the displacement of homes and businesses. Use an iterative design and impact analysis where impacts to homes or businesses are involved to minimize the potential of impacts on housing and displacement of people. • Prioritize the use of existing ROWs, wherever feasible. • Develop a construction schedule that minimizes potential neighborhood deterioration and protracted waiting periods between right-of-way acquisition and construction.	Ongoing over the life of the plan	Lead Agency
Impact- Recreation		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-REC-2(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects on the integrity of recreation facilities, particularly neighborhood parks in the vicinity of TPAs that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects).. Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures capable of avoiding or reducing significant impacts on the use of existing neighborhood and regional parks or other recreational facilities to ensure compliance with county and city general plans and the Quimby Act.. Such measures include but are not limited to the following: • Prior to the issuance of permits, where projects require the construction or expansion of recreational facilities or the payment of equivalent Quimby fees, consider increasing the accessibility to natural areas and lands for outdoor recreation, in coordination with local and regional recreational planning and/or responsible management agencies. • Prior to the issuance of permits, where projects require the construction or expansion of recreational facilities or the payment of equivalent Quimby fees, encourage measures which reduce recreational facility costs and make better use of existing recreational facilities, using strategies such as: – Utilizing “green” development techniques; – Promoting water-efficient land use and development; – Encouraging multiple uses; and – Including trail systems and trail segments identified in General Plans. • Prior to the issuance of permits, where construction and operation of projects would require the acquisition or development of protected recreation lands, expand existing neighborhood parks or develop new neighborhood parks such that there is no net decrease in acres of neighborhood park area available per capita in the area.	Ongoing over the life of the plan	Lead Agency
Impact- Transportation and Traffic		
MM-TR-1(a): TCAG shall pursue funding for projects and programs, beyond the currently financially and institutionally feasible measures included in the 2018 RTP/SCS to further improve VMT/capita.	Ongoing over the life of the plan	TCAG

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-TR-1(b): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the potential for conflicts with the established measures of effectiveness for the performance of the circulation system that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize VMT, including compliance with 2018 RTP/SCS policies, and other adopted local plans and policies, as applicable and feasible. Such measures include, but are not limited to, the following: General: • Institute teleconferencing, telecommute and/or flexible work hour programs to reduce unnecessary employee transportation. • Create a ride-sharing program by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading for ride sharing vehicles, and providing a web site or message board for coordinating rides. • Provide a vanpool for employees. • Provide a Transportation Demand Management (TDM) plan containing strategies to reduce on-site parking demand and single occupancy vehicle travel. The TDM should include strategies to increase bicycle, pedestrian, transit, and carpools/vanpool use, including: • Inclusion of additional bicycle parking, shower, and locker facilities that exceed the requirement • Construction of bike lanes per the prevailing Bicycle Master Plan (or other similar document) • Signage and striping onsite to encourage bike safety • Installation of pedestrian safety elements (such as cross walk striping, curb ramps, countdown signals, bulb outs, etc.) to encourage convenient crossing at arterials • Installation of amenities such as lighting, street trees, trash and any applicable streetscape plan.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-TR-1(b) (continued) • Direct transit sales or subsidized transit passes • Guaranteed ride home program • Pre-tax commuter benefits (checks) • On-site car-sharing program (such as City Car Share, Zip Car, etc.) • On-site carpooling program • Distribution of information concerning alternative transportation options • Parking spaces sold/leased separately • Parking management strategies; including shared parking spaces. • 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. • Encourage bicycling to transit facilities by providing additional bicycle parking, locker facilities, and bike lane access to transit facilities when feasible. • 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. • Encourage bicycling and walking by incorporating 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. • Build or fund a major transit stop within or near transit development • Work with the school districts to improve pedestrian and bike access to schools and to restore or expand school bus service using lower-emitting vehicles. • Provide information on alternative transportation options for consumers, residents, tenants and employees to reduce transportation-related emissions. Transportation Project Selection: • Give priority to transportation projects that would contribute to a reduction in vehicle miles traveled per capita • Separate sidewalks whenever possible, on both sides of all new street improvement projects, except where there are severe topographic or natural resource constraints.		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-TR-1(b) (continued) Public Involvement: - Carry out a comprehensive public involvement and input process that provides information about transportation issues, projects, and processes to community members and other stakeholders, especially to those traditionally underserved by transportation services. Transit and Multimodal Impact Fees: - Assess transit and multimodal impact fees on new developments to fund public transportation infrastructure, bicycle infrastructure, pedestrian infrastructure and other multimodal accommodations - Implement traffic and roadway management strategies to improve mobility and efficiency, and reduce associated emissions. Arterial Traffic Management: - Modify arterial roadways to allow more efficient bus operation, including bus lanes and signal priority/preemption where necessary. - Implement and support employer and commercial trip reduction programs. - Support bicycle use as a mode of transportation by enhancing infrastructure to accommodate bicycles and riders, and providing incentives. - Establish standards for new development projects to support bicycle use, and require new development projects to include bicycle facilities, as appropriate with the new land use are as follows: Bicycle and Pedestrian Trails: - Establish a network of multi-use trails to facilitate safe and direct off-street bicycle and pedestrian travel, and will provide bike racks along these trails at secure, lighted locations. Bicycle Safety Program: - Develop and implement a bicycle safety educational program to teach drivers and riders the laws, riding protocols, routes, safety tips, and emergency maneuvers. - Pursue and provide enhanced funding for bicycle and pedestrian facilities and access projects. Bicycle Parking: - Adopt bicycle parking standards that ensure bicycle parking sufficient to accommodate 5 to 10 percent of projected use at all public and commercial facilities, and at a rate of at least one per residential unit in multiple-family developments (suggestion: check language with League of American Bicyclists).		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-TR-1(b) (continued) Vehicle Parking: • Reduce the available parking spaces for private vehicles while increasing parking spaces for shared vehicles, bicycles, and other alternative modes of transportation, as appropriate; • Eliminate or reduce minimum parking requirements for new buildings; • “Unbundle” parking (require that parking is paid for separately and is not included in the base rent for residential and commercial space); • Use parking pricing to discourage private vehicle use, especially at peak times; • Encourage shared parking programs in mixed-use and transit-oriented development areas; • Create parking benefit districts, which invest meter revenues in pedestrian infrastructure and other public amenities; • Establish performance pricing of street parking, so that it is expensive enough to promote frequent turnover and keep 15 percent of spaces empty at all times; • Encourage special event center operators to advertise and offer discounted transit passes with event tickets; • Encourage special event center operators to advertise and offer discount parking incentives to carpooling patrons, with four or more persons per vehicle for on-site parking; and • Promote the use of bicycles by providing space for the operation of valet bicycle parking service. • Establish policies and programs to reduce onsite parking demand and promote ride-sharing and public transit at large events, including: • Promote the use of peripheral parking by increasing on-site parking rates and offering reduced rates for peripheral parking; • Encourage special event center operators to advertise and offer discounted transit passes with event tickets; • Encourage special event center operators to advertise and offer discount parking incentives to carpooling patrons, with four or more persons per vehicle for on-site parking; • Promote the use of bicycles by providing space for the operation of valet bicycle parking service. Parking “Cash-out” Program: • Require new office developments with more than 50 employees to offer a Parking “Cash-out” Program to discourage private vehicle use. Pedestrian and Bicycle Promotion: • Work with local community groups and downtown business associations to organize and publicize walking tours and bicycle events, and to encourage pedestrian and bicycle modes of transportation.		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-TR-2(a): TCAG shall inform jurisdictions with projected LOS E and F roadway segments under the Plan of the potential need to develop a Deficiency Plan under the TCAG CMP TCAG shall work with these agencies to identify and implement changes that would increase use of alternative transportation and other means to reduce congestion.	Ongoing over the life of the plan	TCAG
MM-TR-2(b): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i> , TCAG has identified mitigation measures, capable of avoiding conflict with an applicable congestion management program that are within the jurisdictions of local agencies (land use projects) and implementing agencies (transportation projects), , Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to reduce congestion, ensuring compliance with the adopted Congestion Management Plan, and other adopted local plans and policies, as applicable and feasible. These measure include but are not limited to the following: • Encourage policies that prioritize system management, and increase telecommute opportunities, including investment in non-motorized transportation and discouraging private vehicle use, and maximizing the use of alternative transportation: – Advocate for a regional, market-based system to price or charge for auto trips during peak hours. – Ensure that new developments incorporate both local and regional transit measures into the project design that promote the use of alternative modes of transportation. – Coordinate controlled intersections so that traffic passes more efficiently through congested areas. Where traffic signals or streetlights are installed, require the use of LED technology. – Encourage the use of car-sharing programs. Accommodations for such programs include providing parking spaces for the car-share vehicles at convenient locations accessible by public transportation. – Reduce vehicle hours of delay (VHD), especially daily heavy-duty truck vehicle hours of delay, through goods movement capacity enhancements, system management, increasing rideshare and work-at-home opportunities to reduce demand on the transportation system, investments in non-motorized transportation, maximizing the benefits of the land use-transportation connection and key transportation investments targeted to reduce heavy-duty truck delay.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM TR-2(b) (continued) • Determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of projects. Develop a construction management plan that include at least the following items and requirements: – A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. – Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur. – Location of construction staging areas for materials, equipment, and vehicles at an approved location that minimizes congestion. – A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. The Lead Agency shall be informed who the Manager is prior to the issuance of the first permit. – Provision for accommodation of pedestrian flow. – As necessary, provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on street spaces. – No materials or equipment shall be stored on the traveled roadway at any time. – Promote “least polluting” ways to connect people and goods to their destinations. – Create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling and walking, by incorporating the following: – Ensure transportation centers are multi-modal to allow transportation modes to intersect; – Provide adequate and affordable public transportation choices, including expanded bus routes and service, as well as other transit choices such as shuttles, light rail, and rail; – To the extent feasible, extend service and hours of operation to underserved arterials and population centers or destinations such as colleges;		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM TR-2(b) (continued) – Focus transit resources on high-volume corridors and high-boarding destinations such as colleges, employment centers and regional destinations; – Coordinate schedules and routes across service lines with neighboring transit authorities; – Support programs to provide “station cars” for short trips to and from transit nodes (e.g., neighborhood electric vehicles); – Study the feasibility of providing free transit to areas with residential densities of 15 dwelling units per acre or more, including options such as removing service from less dense, underutilized areas to do so; – Provide safe and convenient access for pedestrians and bicyclists to, across, and along major transit priority streets; – Use park-and-ride facilities to access transit stations only at ends of regional transit ways or where adequate feeder bus service is not feasible. • Upgrade and maintain transit system infrastructure to enhance public use, including: – Ensure transit stops and bus lanes are safe, convenient, clean and efficient; – Ensure transit stops have clearly marked street-level designation, and are accessible; – Ensure transit stops are safe, sheltered, benches are clean, and lighting is adequate; – Place transit stations along transit corridors within mixed-use or transit-oriented development areas at intervals of three to four blocks, or no less than one-half mile. • Enhance customer service and system ease-of-use, including: – Develop a Regional Pass system to reduce the number of different passes and tickets required of system users; – Implement “Smart Bus” technology, using GPS and electronic displays at transit stops to provide customers with “real-time” arrival and departure time information (and to allow the system operator to respond more quickly and effectively to disruptions in service); – Investigate the feasibility of an on-line trip-planning program.		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM TR-2(b) (continued) • Prioritize transportation funding to support a shift from private passenger vehicles to transit and other modes of transportation, including: – Give funding preference to improvements in public transit over other new infrastructure for private automobile traffic; – Before funding transportation improvements that increase roadway capacity and VMT, evaluate the feasibility and effectiveness of funding projects that support alternative modes of transportation and reduce VMT, including transit, and bicycle and pedestrian access. • Support voluntary, employer-based trip reduction programs, including: – Provide assistance to regional and local ridesharing organizations; – Advocate for legislation to maintain and expand incentives for employer ridesharing programs; – Require the development of Transportation Management Associations for large employers and commercial/ industrial complexes; – Provide public recognition of effective programs through awards, top ten lists, and other mechanisms. • Implement a “guaranteed ride home” program for those who commute by public transit, ride-sharing, or other modes of transportation, and encourage employers to subscribe to or support the program. • Encourage and utilize shuttles to serve neighborhoods, employment centers and major destinations. • Create a free or low-cost local area shuttle system that includes a fixed route to popular tourist destinations or shopping and business centers. • Work with existing shuttle service providers to coordinate their services. • Facilitate employment opportunities that minimize the need for private vehicle trips, including: – Amend zoning ordinances and the Development Code to include live/work sites and satellite work centers in appropriate locations; – Encourage telecommuting options with new and existing employers, through project review and incentives, as appropriate.		
Impact- Energy		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-EN-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects of increased energy consumption that are in the jurisdiction and responsibility of local agencies (land use projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to reduce energy usage, ensuring compliance with CALGreen, local building codes, and other applicable laws and regulations governing residential building standards, as applicable and feasible. Such measures include but are not limited to the following: • Integrate green building measures consistent with CALGreen (California Building Code Title 24) into project design including: • Use energy efficient materials in building design, construction, rehabilitation, and retrofit. • Install energy-efficient lighting, heating, and cooling systems (cogeneration); water heaters; appliances; equipment; and control systems. • Reduce lighting, heating, and cooling needs by taking advantage of light colored roofs, trees for shade, and sunlight. • Incorporate passive environmental control systems that account for the characteristics of the natural environment. • Use high-efficiency lighting and cooking devices. • Incorporate passive solar design. • Use high-reflectivity building materials and multiple glazing. • Prohibit gas-powered landscape maintenance equipment. – Install electric vehicle charging stations. – Reduce wood burning stoves or fireplaces. • Provide bike lanes accessibility and parking at residential developments.	Ongoing over the life of the plan	Lead Agency
Impact – Wastewater		
MM-WW-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant impacts on wastewater system capacity that are in the jurisdiction and responsibility of local agencies (land use projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to provide adequate wastewater system capacity. Such measures include but are not limited to the following: • Work with wastewater service providers to assure that wastewater system capacity is available to serve projected demand. • Work with wastewater service providers implement mitigation measures to avoid or reduce significant environmental impacts associated with the construction of new or expanded wastewater facilities.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
Impact- Solid Waste		
MM-SW-1: Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant effects to landfill capacity that are within the responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project that has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize solid waste generation to ensure compliance with the County's Integrated Waste Management Plan. Such measures include but are not limited to the following: - Encourage project sponsors to 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, CALGreen (California Building Code Title 24), energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. These measures could include the following: - Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. - 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. - Require the reuse and recycle of construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard). - Integrate reuse and recycling into residential industrial, institutional and commercial projects. - Provide recycling opportunities for residents, the public, and tenant businesses.	Ongoing over the life of the plan	Lead Agency
Impact- Water Resources		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-W-1(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing significant impacts on water quality o related to violations of water quality standards or waste discharge requirements that are within the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to ensure compliance with all applicable laws, regulations, and health and safety standards set forth by regulatory agencies responsible for regulating water quality in a manner that conforms with applicable water quality standards or waste discharge requirements, as applicable and feasible. Such measures include but are not limited to the following: • Complete, and have approved, a SWPPP prior to initiation of construction. • Implement BMPs to reduce the peak stormwater runoff from the project site to the maximum extent practicable. • Comply with the Caltrans stormwater discharge permit as applicable; and identify and implement BMPs to manage site erosion, wash water runoff, and spill control. • Ensure adequate capacity of the surrounding stormwater system to support stormwater runoff from projects. • Install 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 stormwater runoff discharge permits, on new facilities. • Provide structural stormwater runoff treatment consistent with the applicable municipal stormwater permit. Where Caltrans is the operator, the statewide permit applies. • Provide and implement operational BMPs for street cleaning, litter control, and catch basin cleaning to prevent water quality degradation in compliance with applicable stormwater runoff discharge permits; and ensure 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. • Incorporate, as appropriate, treatment and control features such as detention basins, infiltration strips, porous paving, and other features to control surface runoff, and facilitate groundwater recharge 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.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-W-1(a): (continued) - Design projects to maintain volume of runoff, where any downstream receiving water body 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 should not be exceeded. This applies not only to increases in stormwater runoff from the project site, but also to hydrologic changes induced by floodplain encroachment. Projects should not cause or contribute to conditions that degrade the physical integrity or ecological function of any downstream receiving waters. - Provide 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. - Upgrade 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 shall be completed to eliminate increases in peak flow rates from current levels. - Encourage Low Impact Development (LID) and incorporation of natural spaces that reduce, treat, infiltrate and manage stormwater runoff flows in all new developments, where practical and feasible.		

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-W-2(a): Consistent with the provisions of the Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant impacts to groundwater resources that are within the jurisdiction and authority of local agencies (land use projects) and implementing agencies (transportation projects). Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to ensure compliance with applicable laws, regulations, and health and safety standards set forth by federal, state, regional, and local authorities that regulate groundwater management, consistent with the provisions of the Sustainable Groundwater Management Act and implementing regulations, including recharge in a manner that conforms with standards for sustainable management of groundwater basins, as applicable and feasible. Such measures may include the following, or other comparable measures: • For projects requiring 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 shall comply with appropriate building codes and standard practices, including the Uniform Building Code. • Maximize, where practical and feasible, permeable surface area in urbanized areas to protect water quality, reduce flooding, allow for groundwater recharge, and preserve wildlife habitat. . • Avoid designs that require continual dewatering where feasible. • Avoid construction and siting on groundwater recharge areas, to prevent conversion of those areas to impervious surface. • Reduce hardscape and impervious surfaces to the extent feasible to facilitate groundwater recharge. • Ensure that bioswales are installed, where feasible, to facilitate groundwater recharge using stormwater runoff from the project site.	Ongoing over the life of the plan	Lead Agency

Mitigation Measure	Mitigation Monitoring Timing	Responsible Monitoring Entity
MM-W-8(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant impacts of locating structures that would impede or redirect flood flows in a 100-year flood hazard area that are within the jurisdiction and authority of implementing agencies (transportation projects) . Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize the impacts of placing structures in floodplains. Such measures include but are not limited to the following: • Comply with Executive Order 11988 on Floodplain Management, which requires avoidance of incompatible floodplain development, and restoration and preservation of the natural and beneficial floodplain values. • Ensure that all roadbeds for new highway and rail facilities 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 also be evaluated and projects should be sited to avoid alluvial fan flooding. Delineation of floodplains and alluvial fan boundaries should attempt to account for future hydrologic changes caused by global climate change	Ongoing over the life of the plan	Lead Agency
MM-W-9(a): Consistent with the provisions of Section 15091 of the <i>State CEQA Guidelines</i>, TCAG has identified mitigation measures capable of avoiding or reducing the significant impacts on water supplies from existing entitlements and resources requiring new or expanded services that are in the jurisdiction and responsibility of local agencies (land use projects) and implementing agencies (transportation projects).. Where the Lead Agency has identified that a project has the potential for significant effects, the Lead Agency can and should consider mitigation measures to minimize water demands and increase water supplies, ensuring compliance with prevailing state, regional, and local government plans, laws, and policies regarding water conservation and efficiency.. Such measures include but are not limited to the following: • Reduce exterior consumptive uses of water in public areas, and 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. • Use drought-resistant landscaping options where applicable and feasible and provide information on where these can be purchased. • Use reclaimed water, especially in median landscaping and hillside landscaping, should be implemented where feasible. • Install drip or other water-conserving or weather-based irrigation systems for landscaping. • Implement water conservation best practices such as low-flow toilets, water-efficient clothes washers, water system audits, and leak detection and repair.	Ongoing over the life of the plan	Lead Agency