

# **Mitigation Monitoring and Reporting Program**

**for**

## **PLAN BAY AREA 2050+**

**Regional Transportation Plan (RTP)/  
Sustainable Communities Strategy (SCS)**

**State Clearinghouse Number SCH# 2025010348**

### **Prepared for:**

Metropolitan Transportation Commission  
375 Beale Street, Suite 800  
San Francisco, CA 94105

and

Association of Bay Area Governments  
375 Beale Street, Suite 700  
San Francisco, CA 94105

### **Prepared by:**

Ascent Environmental, Inc.  
455 Capitol Mall, Suite 300  
Sacramento, CA 95814

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# INTRODUCTION

This document constitutes the Mitigation Monitoring and Reporting Program (MMRP) for the Environmental Impact Report (EIR) on the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) Plan Bay Area (PBA) 2050+, the regional plan for transportation, housing, the economy, and the environment. PBA 2050+ serves as the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) for the nine county Bay Area.

The California Environmental Quality Act (CEQA) requires public agencies to report on and monitor measures adopted as part of the environmental review process (Public Resources Code section 21081.6 and CEQA Guidelines sections 15091(d) and 15097). This MMRP is designed to fulfill that requirement.

This MMRP is designed to ensure that the measures identified in the EIR are fully implemented. The MMRP describes the actions that must take place as a part of each measure, the timing of these actions, the entity responsible for implementation, and the agency responsible for enforcing each action. The implementation and monitoring responsibilities, as described in this MMRP, reflect the role of local agencies in making project-level determinations regarding the applicability and feasibility of particular measures based on project-specific circumstances.

As required by Section 21081.6(a)(2) of the Public Resources Code, the MTC and ABAG “custodian of documents and other material” which constitutes the “record of proceedings” upon which the decision to adopt the PBA 2050+ is based is identified below.

MTC/ABAG Public Information  
Bay Area Metro Center  
375 Beale Street, Suite 800  
San Francisco, California, 94105  
(415) 778-5262

The physical location of this information is:

Metropolitan Transportation Commission  
375 Beale Street, Suite 800  
San Francisco, CA 94105

## SUMMARY OF THE MITIGATION MONITORING AND REPORTING PROGRAM

To assist implementation of the mitigation measures, Table A-1 includes the following information:

**Mitigation Measure X.X-X(x):** The mitigation measures are taken verbatim from the Final EIR

### **Mitigation Monitoring:**

- ▲ **Timing.** This section specifies the point by which the measure should be completed.
- ▲ **Implementation of Measure.** This section describes how the mitigation measure is to be implemented and/or verified.
- ▲ **Oversite Responsibility.** This section indicates which entity will oversee implementation of the measure, conduct the actual monitoring and reporting, and take corrective actions when a measure has not been properly implemented.
- ▲ **Implementation Responsibility.** This section identifies the entity that will undertake the required action.

Pursuant to Public Resources Code Sections 21155.2(a) and (b)(2) and Section 21159.28(a), in order to take advantage of CEQA streamlining benefits allowed under Senate Bill 375, projects that seek to tier from the PBA 2050+ EIR must incorporate the mitigation measures identified in this MMRP or, if the identified mitigation is found to be infeasible based on substantial evidence, the project must incorporate equivalent measures that avoid or mitigate potential impacts of the project to a less-than-significant level.

**Table A-1: Summary of Impacts and Mitigation Measures**

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<b>3.2 Aesthetics and Visual Resources</b>				
<p><b>Mitigation Measure AES-1:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Reduce the visibility of construction staging areas by fencing and screening these areas with low contrast materials consistent with the surrounding environment, and by revegetating graded slopes and exposed earth surfaces at the earliest opportunity.</li> <li>▲ Site or design projects to minimize their intrusion into important viewsheds. Measures to achieve this could include, but are not limited to, requiring that the scale and massing of new development in higher-density areas provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights, and ensuring building heights are stepped back from sensitive adjoining uses to maintain appropriate transitions in scale and to protect scenic vistas and scenic resources.</li> <li>▲ Design projects to minimize the potential to obscure, detract from, or negatively affect the quality of views from state-designated scenic roadways or scenic highways.</li> <li>▲ Use see-through safety barrier designs (e.g., railings rather than walls).</li> <li>▲ Develop interchanges and transit lines at the grade of the surrounding land to limit view blockage.</li> <li>▲ Where highway screening is a required element of a development, design landscaping along all highways, including state-designated scenic highways, locally designated scenic highways, and highway corridors in rural and open space areas to add natural elements and visual interest to soften the hard-edged, linear travel experience that would otherwise occur. Retain or replace trees bordering highways so that clear-cutting is not evident.</li> <li>▲ Identify, preserve, and enhance scenic vistas to and from hillside areas and other visual resources.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AES-1 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant.</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure AES-2:</b> Implement Mitigation Measure AES-1.</p>	<p>Same as specified for Mitigation Measure AES-1, above.</p>	<p>Same as specified for Mitigation Measure AES-1, above.</p>	<p>Same as specified for Mitigation Measure AES-1, above.</p>	<p>Same as specified for Mitigation Measure AES-1, above.</p>
<p><b>Mitigation Measure AES-3:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Require that the scale, massing, and design of new development provide appropriate transitions in building height, bulk, and architectural style that are sensitive to the physical and visual character of surrounding areas.</li> <li>▲ Contour the edges of major cut and fill slopes to provide a finished profile that is appropriate to the surrounding context, using shapes, textures, colors, and scale to minimize contrasts between the project and surrounding areas.</li> <li>▲ Require project sponsors to conduct shadow studies for four-story high (and higher) buildings and roadway facilities to identify and implement development strategies for reducing the impact of shadows on public open space, where feasible. Study considerations shall include, but are not limited to, the placement, massing, and height of structures, surrounding land uses, time of day and seasonal variation, and reflectivity of materials. Study recommendations for reducing shadow impacts shall be incorporated into the project design as feasible based on project- and site-specific considerations.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AES-3 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure AES-4:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Design projects to minimize light and glare from lights, buildings, and roadways facilities.</li> <li>▲ Minimize and control glare from transportation projects through the adoption of project design features that reduce glare. These features include:                             <ul style="list-style-type: none"> <li>▼ planting trees along transportation corridors to reduce glare from the sun;</li> <li>▼ landscaping off-street parking areas, loading areas, and service areas; and</li> <li>▼ shielding transportation lighting fixtures to minimize off-site light trespass.</li> </ul> </li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AES-4 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Minimize and control glare from land use and transportation projects through the adoption of project design features that reduce glare. These features include:                             <ul style="list-style-type: none"> <li>▼ limiting the use of reflective materials, such as metal;</li> <li>▼ using non-reflective material, such as paint, vegetative screening, matte finish coatings, and masonry;</li> <li>▼ screening parking areas by using vegetation or trees; and</li> <li>▼ using low-reflective glass.</li> </ul> </li> <li>▲ Impose lighting standards that ensure that minimum safety and security needs are addressed and minimize light trespass and glare associated with land use development. These standards include the following:                             <ul style="list-style-type: none"> <li>▼ minimizing incidental spillover of light onto adjacent private properties and undeveloped open space;</li> <li>▼ directing luminaries away from habitat and open space areas adjacent to the project site;</li> <li>▼ installing luminaries that provide good color rendering and natural light qualities; and</li> <li>▼ minimizing the potential for sky glow into the nighttime sky and for incidental spillover of light onto adjacent private properties and undeveloped open space.</li> </ul> </li> </ul>				

**3.3 Agricultural and Forestry Resources**

<p><b>Mitigation Measure AGF-1:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Require project relocation or corridor realignment, where feasible, to avoid agricultural land, especially Prime Farmland, Farmland of Statewide Significance, Unique Farmland, and land under a Williamson Act contract.</li> <li>▲ Provide buffers, berms, setbacks, fencing, or other project design measures to protect surrounding agriculture, and to reduce conflict with farming that could result from implementation of transportation projects and/or the projected land use growth footprint included as a part of the RTP/SCS.</li> <li>▲ Maintain and expand agricultural land protections such as urban growth boundaries.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AGF-1 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
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Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Achieve compensatory mitigation in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning, as deemed appropriate by the permitting agencies.</li> <li>▲ Require acquisition of conservation easements on land in the same jurisdiction, if feasible, and at least equal in quality and size as mitigation for the loss of agricultural land.</li> <li>▲ Institute new protection of farmland in the project area or elsewhere through the use of long-term restrictions on use, such as 20-year Farmland Security Zone contracts (Government Code Section 51296 et seq.) or 10-year Williamson Act contracts (Government Code Section 51200 et seq.).</li> </ul>				
<p><b>Mitigation Measure AGF-2:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Require project relocation or corridor realignment, where feasible, to avoid land zoned for forest land or timberland.</li> <li>▲ Maintain and expand forest land protections such as urban growth boundaries.</li> <li>▲ Achieve compensatory mitigation in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning, as deemed appropriate by the permitting agencies.</li> <li>▲ Require acquisition of conservation easements on land at least equal in quality and size as mitigation for the loss of forest land or timberland.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AGF-2 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure AGF-3:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Implement Mitigation Measures AGF-1 and AGF-2.</li> <li>▲ Manage project operations to minimize the introduction of invasive species or weeds that may affect agricultural production on adjacent agricultural land. Where a project has the potential to introduce sensitive species or habitats or have other spill-over effects on nearby agricultural lands, the project proponents shall be responsible for acquiring easements on nearby agricultural land and/or financially compensating for indirect effects on nearby agricultural</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AGF-3 into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>land. Easements (e.g., flowage easements) shall be required for temporary or intermittent interruption in farming activities (e.g., because of seasonal flooding or groundwater seepage). Acquisition or compensation would be required for permanent or significant loss of economically viable operations.</p> <p>▲ Design project features to minimize fragmenting or isolating agricultural land. Where a project involves acquiring land or easements, ensure that the remaining agricultural land is of a size sufficient to allow economically viable farming operations. The project sponsors shall be responsible for acquiring easements, making lot line adjustments, and merging affected land parcels into units suitable for continued commercial agricultural management.</p>		<p>inclusion in construction contracts.</p>		
<p><b>3.4 Air Quality</b></p>				
<p><b>Mitigation Measure AQ-2:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable to reduce impacts to a less-than-significant level based on project- and site-specific considerations, that include those identified below:</p> <p>When applicable screening levels set by the relevant air district are exceeded, implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable to reduce impacts to a less-than-significant level based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <p><b>Construction Best Practices for Exhaust</b></p> <p>▲ The applicant or general contractor for the project shall submit a list of all off-road equipment greater than 25 horsepower (hp) that would be operated for more than 20 hours over the entire duration of project construction, including equipment from subcontractors, to the relevant air district (e.g., the Bay Area Air District, NSCAPCD, or YSAQMD) for review and certification. The list shall include all information necessary to ensure the equipment meets the following requirements:</p> <p>▸ Equipment shall be zero emission or have engines that meet or exceed either EPA or CARB Tier 4 off-road emission standards, and it shall have engines that are retrofitted with a CARB Level 3 Verified Diesel Emissions Control Strategy (VDECS), if one is available for the equipment being used. Equipment with engines that meet Tier 4 Interim or Tier 4 Final emission standards automatically meet this requirement; therefore, a VDECS would not be required.</p>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AQ-2 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>➤ Idling time of diesel-powered construction equipment and trucks shall be limited to no more than 2 minutes. Clear signage of this idling restriction shall be provided for construction workers at all access points.</li> <li>➤ All construction equipment shall be maintained and properly tuned in accordance with the manufacturers’ specifications.</li> <li>➤ Portable diesel generators shall be prohibited. Grid power electricity should be used to provide power at construction sites, or propane and natural gas generators may be used when grid power electricity is not feasible.</li> <li>➤ Current certificate(s) of compliance with CARB’s In-Use Off-Road Diesel-Fueled Fleets Regulation (CCR, Title 13, Sections 2449 and 2449.1) shall be provided.</li> </ul> <p><b>Construction Best Practices for Entrained Dust</b></p> <ul style="list-style-type: none"> <li>▲ All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. For projects over 5 acres in size, soil moisture should be maintained at a minimum of 12%. Moisture content can be verified by lab samples or a moisture probe.</li> <li>▲ All haul trucks transporting soil, sand, or other loose material off-site shall be covered.</li> <li>▲ All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. Dry power sweeping should only be performed in conjunction with thorough watering of the subject roads.</li> <li>▲ All vehicle speeds on unpaved roads and surfaces shall be limited to 15 miles per hour (mph).</li> <li>▲ All roadway, driveway, and sidewalk paving shall be completed as soon as possible. Building pads shall be paved as soon as possible after grading.</li> <li>▲ All construction sites shall provide a posted sign visible to the public with the telephone number and person to contact at the lead agency regarding dust complaints. The recommended response time for corrective action shall be within 48 hours. The Bay Area Air District’s Complaint Line (1.800.334.6367) shall also be included on posted signs to ensure compliance with applicable regulations.</li> <li>▲ All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Wind breaks (e.g., trees, fences) shall be installed on the windward side(s) of actively disturbed areas of construction. Wind breaks should have at maximum 50% air porosity.</li> <li>▲ Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.</li> <li>▲ The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.</li> <li>▲ All trucks and equipment, including their tires, shall be washed off before leaving the site.</li> <li>▲ Site accesses to a distance of 100 feet from the paved road shall be treated with a 6- to 12-inch compacted layer of wood chips, mulch, or gravel.</li> <li>▲ Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than 1%.</li> <li>▲ Hydroseed or apply nontoxic soil stabilizers to construction areas, including previously graded areas, that are inactive for at least 10 calendar days.</li> <li>▲ Minimize the amount of excavated material or waste materials stored at the site.</li> </ul> <p>Applicable mitigation measures shall be required at the time grading permits are issued.</p>				
<p><b>Mitigation Measure AQ-3(a):</b> MTC and ABAG, in partnership with the local air districts and implementing agencies, shall work together to support the use of existing air quality and transportation funds and seek additional funds to continue to implement the Bay Area Air District, NSCAPCD, YSAQMD, and CARB programs (e.g., Carl Moyer Program) intended to retrofit and replace trucks and locomotives.</p>	<p>Following plan approval.</p>	<p>Continue implementing projects related to retrofits and replacement of trucks and locomotives and develop strategies to seek additional funding to implement BAAQMD and California Air Resources Board (ARB) programs related to retrofits and replacement of trucks and locomotives.</p>	<p>MTC, ABAG, local air district</p>	<p>MTC, ABAG, local air districts</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure AQ-3(b):</b> MTC and ABAG, in partnership with the local air districts and the Port of Oakland, and other agency partners, shall work together to secure incentive funding to reduce mobile PM emissions from mobile exhaust and entrained PM sources, such as tire wear, brake wear, and roadway dust.</p>	<p>Following plan approval.</p>	<p>Develop strategies to secure additional funding to reduce mobile particulate matter (PM) emissions from mobile exhaust and entrained PM sources.</p>	<p>MTC, ABAG, local air districts, Port of Oakland</p>	<p>MTC, ABAG, local air districts, Port of Oakland</p>
<p><b>Mitigation Measure AQ-3(c):</b> MTC and ABAG, in partnership with local air districts, and implementing agencies shall:</p> <ul style="list-style-type: none"> <li>▲ support the advancement of corridor-level plans and implementation of projects located on severely congested (LOS F) facilities, and</li> <li>▲ incorporate transportation demand management (TDM) strategies into individual land use land transportation projects and plans, as part of the planning process; TDM strategies could include ridesharing, carsharing, telecommuting, adopting flexible working hours, implementing parking management and traffic-calming measures, and marketing TDM options (especially alternative commuting services).</li> </ul>	<p>Following plan approval. This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>Continue developing and implementing projects related to corridor-level plans on severely congested facilities. If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AQ-3(c) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>MTC, ABAG Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>MTC, ABAG Implementing/ lead agency and/or project applicant.</p>
<p><b>Mitigation Measure AQ-3(d):</b> When applicable screening levels set by the applicable air district are exceeded for a specific project, implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below or are updated by the applicable air district or within CalEEMod:</p> <ul style="list-style-type: none"> <li>▲ use of energy-efficient lighting and process systems (e.g., low-NOX water heaters and boiler units);</li> <li>▲ design streets to maximize pedestrian access to transit stops;</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AQ-3(d) into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ include bus shelters at transit access points where deemed appropriate by local public transit operator in large residential, commercial, and industrial projects;</li> <li>▲ equip residential structures with electric outlets in the front and rear of the structure to facilitate use of electrical lawn and garden equipment;</li> <li>▲ provide for, or contribute to, dedication of land for off-site Class I and Class II bicycle facilities linking the project to designated bicycle commuting routes in accordance with the regional bikeway master plan;</li> <li>▲ contribute to the provision of synchronized traffic signals on roadways affected by the project and as deemed necessary by the local public works department;</li> <li>▲ provide transit-enhancing infrastructure that includes bus turnouts or bulbs, passenger benches, street lighting, route signs and displays, and shelters as demand and service routes warrant, subject to review and approval by local transportation planning agencies;</li> <li>▲ provide pedestrian-enhancing infrastructure that includes sidewalks and pedestrian paths, direct pedestrian connections, street trees to shade sidewalks, pedestrian safety designs and infrastructure, street furniture and artwork, street lighting, pedestrian signalization and signage, and/or access between bus service and major transportation points within the project;</li> <li>▲ include neighborhood park(s) or other recreational options, such as trails, within the development to minimize vehicle travel to off-site recreational and/or commercial uses;</li> <li>▲ install solar water heaters;</li> <li>▲ incorporate mixed uses, where permitted by local development regulations, to achieve a balance of commercial, employment, and housing options on the project site;</li> <li>▲ contribute to traffic-flow improvements (e.g., right-of-way, capital improvements) that reduce traffic congestion and do not substantially increase roadway capacity;</li> <li>▲ provide preferential parking spaces for carpool and vanpool vehicles, implement parking fees for single-occupancy vehicle commuters, and implement parking cash-out program for employees;</li> <li>▲ use clean fuel vehicles in the vehicle fleet;</li> <li>▲ require all employment centers to include an adequate number of on-site shower/locker facilities for bicycling and pedestrian commuters (typically one shower and three lockers for every 25 employees per shift);</li> </ul>		<p>inclusion in construction contracts.</p>		

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ construct/contribute to bicycle and pedestrian facility improvements;</li> <li>▲ provide ancillary services (e.g., cafeterias, health clubs, automatic tellers, and post offices) within walking distance of proposed development (no further than 1,500 feet) as appropriate and in compliance with local development regulations;</li> <li>▲ provide park-and-ride lots as deemed feasible and appropriate by transportation planning agencies;</li> <li>▲ employment centers that exceed a designated size, as measured by the number of employees, shall provide on-site child care and after-school facilities or contribute to off-site construction of such facilities within walking distance of employment land uses (for employment centers on or adjacent to industrial land uses, on-site child daycare centers shall be provided only if supported by the findings of a comprehensive HRA performed in consultation with the local air district);</li> <li>▲ provide on-site pedestrian facility enhancements, such as walkways, benches, proper lighting, vending machines, and building access that are physically separated from parking lot traffic;</li> <li>▲ offer alternative work schedules, where practical, that allow for work hours that are compressed into fewer than 5 days (e.g., 9/80, 4/40, or 3/36 schedules), or allow flextime schedules;</li> <li>▲ provide transit amenities (e.g., on-site and off-site bus turnouts, passenger benches, or shelters) where deemed appropriate by local transportation planning agencies;</li> <li>▲ contribute to the provision of synchronized traffic signals on roadways affected by the proposed project and as deemed necessary by the local public works department;</li> <li>▲ provide video conferencing facilities;</li> <li>▲ commit to support programs that include guaranteed ride home, subsidized transit passes, and rideshare matching;</li> <li>▲ provide transportation (e.g., shuttles) to major transit stations and multimodal centers;</li> <li>▲ require each employer employment center (more than 25 employees) to assign a transportation coordinator for the applicable transportation management association (TMA);</li> <li>▲ require all employers to install a permanent display in employee common areas of alternate transit information, as determined by the requirements of the TMA;</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ require employers or employment centers (more than 25 employees) to implement a guaranteed ride home program;</li> <li>▲ require employers or employment centers (more than 25 employees) to implement an incentive program for riding transit, carpooling, vanpooling, biking, and walking instead of driving a single-occupancy vehicle to work, and design and locate buildings to facilitate transit access;</li> <li>▲ install Energy Star (or equivalent) cool roofing systems on all buildings;</li> <li>▲ design shuttle and transit exits to adjoining streets to reduce time to reenter traffic from the project site;</li> <li>▲ increase wall and attic insulation to 20% above Title 24 requirements (residential and commercial);</li> <li>▲ orient buildings to take advantage of solar heating and natural cooling, and use passive solar designs (residential, commercial, and industrial);</li> <li>▲ provide energy-efficient windows (double pane and/or Low-E) and awnings or other shading mechanisms for windows, porches, patios, and walkways;</li> <li>▲ include passive solar cooling and heating features in designs, as well as ceiling and whole house fans;</li> <li>▲ include programmable thermostats in the design of heating and cooling systems; and</li> <li>▲ use day lighting systems, such as skylights, light shelves, and interior transom windows.</li> </ul> <p>See also Chapter 3, “Measures to Reduce GHG Emissions,” in CAPCOA’s <i>Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity</i> (CAPCOA Handbook) for additional reduction measures (CAPCOA 2024). Although the CAPCOA Handbook focuses on GHG reduction measures, co-benefits of many measures include criteria pollutant emission reductions. Future project proponents shall use the CAPCOA Handbook to develop measures to reduce emissions to below thresholds if significant impacts are identified.</p>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure AQ-3(e):</b> Implementing agencies and/or project sponsors shall implement the following measures, where feasible and as applicable to reduce impacts to a less-than-significant level based on project- and site-specific considerations, to reduce criteria air pollutant emitted by natural gas combustion in buildings:</p> <ul style="list-style-type: none"> <li>▲ Prohibit natural gas infrastructure in new development.</li> <li>▲ Use, or design to support, microgrid electric systems to facilitate the resiliency of new developments prohibiting natural gas.</li> <li>▲ Equip residential structures containing front and rear yard area with electric outlets in the front and rear of the structure to facilitate use of electrical lawn and garden equipment.</li> <li>▲ Install ground-source heat pumps, solar, or other alternatively-fueled water heaters instead of natural gas or grid-based electric water heaters.</li> <li>▲ Install ground-source heat pump, or other alternative, heating and cooling systems.</li> <li>▲ Increase wall and attic insulation to 20% above Title 24 requirements (residential and commercial).</li> <li>▲ Orient buildings to take advantage of solar heating and natural cooling, and use passive solar designs (residential, commercial, and industrial).</li> <li>▲ Provide energy-efficient windows (double pane and/or Low-E) and awnings or other shading mechanisms for windows, porches, patios, and walkways.</li> <li>▲ Use passive solar cooling and heating designs, ceiling and whole house fans, and programmable thermostats in the design of heating and cooling systems.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AQ-3(e) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p>Implement Mitigation Measure AQ-2.</p> <p><b>Mitigation Measure AQ-4(a):</b> When locating sensitive receptors in TAC risk areas, as identified in <b>Figure 3.4-1</b>, implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ Install, operate and maintain in good working order a central heating, ventilation, and air conditioning (HVAC) system or other air intake system in the building, or in each individual unit, that meets or exceeds a minimum efficiency reporting value (MERV) of 13 (MERV-16 for projects located in the West Oakland Specific Plan area) or higher (BAAQMD 2016). The HVAC system shall include the following features: installation of a high-efficiency filter and/or carbon filter</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AQ-4(a) into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>to filter particulates and other chemical matter from entering the building; either high-efficiency particulate air (HEPA) filters or American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) certified 85% supply filters shall be used.</p> <ul style="list-style-type: none"> <li>▲ Reduce emissions from diesel trucks through implementing the following measures, if feasible:                             <ul style="list-style-type: none"> <li>▣ installing electrical hook-ups for diesel trucks at loading docks;</li> <li>▣ requiring trucks to use transportation refrigeration units that meet Tier 4 emission standards;</li> <li>▣ requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels;</li> <li>▣ prohibiting trucks from idling for more than 2 minutes;</li> <li>▣ establishing truck routes to avoid sensitive receptors in the project; and</li> <li>▣ implementing a truck route program, along with truck calming, parking, and delivery restrictions.</li> </ul> </li> <li>▲ Install passive electrostatic filtering systems with low air velocities (i.e., less than 1 mph).</li> <li>▲ Phase residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible.</li> <li>▲ Locate sensitive receptors as far away from truck activity areas, such as loading docks and delivery areas, as feasible.</li> <li>▲ Ensure that existing and new standby or emergency diesel generators meet CARB's Tier 4 emission standards, if feasible.</li> <li>▲ Locate individual and common exterior open space and outdoor activity areas proposed as part of individual projects as far away as possible from emission source within the project site boundary, face them away major freeways, and shield them from the source (i.e., the roadway) of air pollution with buildings or otherwise buffer them to further reduce air pollution for project occupants.</li> <li>▲ Locate air intakes and design windows to reduce PM exposure (e.g., windows nearest to the roadway do not open).</li> <li>▲ If sensitive receptors are located near a distribution center, do not locate residents immediately adjacent to a loading dock or where trucks concentrate to deliver goods.</li> <li>▲ Locate sensitive receptors in buildings in areas upwind of major roadway traffic to reduce exposure to reduce cancer risk levels and exposure to PM2.5.</li> </ul>		<p>inclusion in construction contracts.</p>		

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Plant trees and/or vegetation between sensitive receptors and pollution source. Trees that are best suited to trapping PM shall be planted, including one or more of the following species: pine (<i>Pinus nigra var. maritima</i>), cypress (<i>Cupressocyparis leylandii</i>), hybrid poplar (<i>Populus deltoids x trichocarpa</i>), California pepper tree (<i>Schinus molle</i>), and redwood (<i>Sequoia sempervirens</i>).</li> <li>▲ Reduce emissions from diesel trucks by establishing truck routes to avoid residential neighborhoods or other land uses serving sensitive populations, such as hospitals, schools, and child care centers. A truck route program, along with truck calming, parking and delivery restrictions, shall be implemented to direct traffic activity at non-permitted sources and large construction projects.</li> </ul> <p>These measures are consistent with recommendations in the Bay Area Air District’s CEQA Guidelines (BAAQMD 2023a) and Planning Healthy Places (BAAQMD 2016).</p>				
<p><b>Mitigation Measure AQ-4(b):</b> MTC and ABAG shall partner with the Bay Area Air District and local lead agencies to develop a program to install air filtration devices in existing residential buildings, and other buildings with sensitive receptors, located near freeways or sources of TACs and PM<sub>2.5</sub>.</p>	<p>Following plan approval.</p>	<p>MTC, ABAG, BAAQMD, and local agencies develop a program, per Mitigation Measure AQ-4(b).</p>	<p>MTC, ABAG, Bay Area Air District</p>	<p>MTC, ABAG, Bay Area Air District</p>
<p><b>Mitigation Measure AQ-4(c):</b> MTC and ABAG shall partner with the Bay Area Air District to develop a program to provide incentives to replace older locomotives and trucks in the region to reduce TACs and PM<sub>2.5</sub>.</p>	<p>Following plan approval.</p>	<p>MTC, ABAG, BAAQMD, and local agencies develop a program, per Mitigation Measure AQ-4(c).</p>	<p>MTC, ABAG, Bay Area Air District</p>	<p>MTC, ABAG, Bay Area Air District</p>
<p><b>Mitigation Measure AQ-4(d):</b> The implementing agency shall implement the strategies identified in the CARB Technical Advisory to reduce air pollution exposure near high-volume roadways to less-than-significant levels, where feasible. Examples of effective strategies include (CARB 2017):</p> <ul style="list-style-type: none"> <li>▲ using speed reduction mechanisms, such as roundabouts to reduce the frequency of stop-and-go driving common among streets that support stop signs;</li> <li>▲ using traffic signal management to limit the frequency of stop-and-go driving and vehicle idling;</li> <li>▲ establishing and enforcing speed limit reductions of high-speed roadways;</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure AQ-4(d) into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ using design elements that promote air flow and pollutant dispersion along street corridors to optimize air flow, building downwash, and pollution dispersal;</li> <li>▲ incorporating bike lanes and sidewalks to promote alternative, zero-pollution modes of transportation; and</li> <li>▲ constructing solid barriers directly adjacent to high-volume roadways, such as sound walls to improve downwash.</li> </ul>		inclusion in construction contracts.		
<b>3.5 Biological Resources</b>				
<p><b>Mitigation Measure BIO-(1a):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Implementing agencies shall require project sponsors to prepare biological resource assessments for specific projects proposed in areas known or likely to contain habitat suitable for special-status plants and wildlife, such as sites that are not surrounded by urban development and/or have not been previously disturbed or developed. The assessment shall be conducted by qualified professionals pursuant to adopted protocols and agency guidelines, where applicable. Where the biological resource assessments establish that mitigation is required to avoid and minimize direct and indirect adverse effects on special-status plant and wildlife species, or compensate for unavoidable effects, mitigation shall be developed consistent with the requirements or standards of CEQA, USFWS, CDFW, and local regulations and guidelines, in addition to requirements of any applicable and adopted HCP/NCCP or other applicable plans developed to protect species or habitat.</li> <li>▲ For proposed plan projects subject to CEQA or NEPA, or subject to permitting processes and review by CDFW, USFWS, and NOAA Fisheries, pre-project biological surveys shall be conducted as part of the CEQA/NEPA process to determine the presence and extent of sensitive habitats and species in the project vicinity. Surveys shall follow established methods and shall be conducted at times when the subject species is most likely to be identified. In cases where impacts on State- or federally listed plant or wildlife species are possible, formal protocol-level surveys may be required on a species-by-species basis to determine the local presence and distribution of these species. Coordination with CDFW, USFWS, and NOAA Fisheries, as appropriate, shall be conducted early in the planning process at an informal level for projects that could adversely affect federal or State candidate, proposed, threatened, or</li> </ul>	This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.	If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure BIO-1(a) into project-specific design plans or environmental review including possible inclusion in construction contracts.	Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.	Implementing/ lead agency and/or project applicant

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>endangered species to determine the need for consultation or permitting actions. Projects shall obtain incidental take authorization from the permitting agencies, as required, before project implementation.</p> <ul style="list-style-type: none"> <li>▲ A species and habitat compensation plan shall be prepared and implemented for unavoidable direct impacts on special-status plant species and shall be reviewed and approved by the resource agencies and lead agency prior to project approval. The plan shall identify effective methods for reestablishing the affected species and habitat, including but not limited to seed collection, salvage of root masses, and planting seeds and/or root masses in an area with suitable conditions. The plan shall also specify a monitoring program designed to evaluate success in reestablishing the affected species and habitat, and remedial measures that shall be followed if the project is not meeting specified performance criteria. The monitoring program shall be designed and implemented to evaluate the current and probable future health of the resources, and their ability to sustain populations in keeping with natural populations following the completion of the program. Remedial measures are highly dependent upon the species and habitats in question, but generally shall include but not be limited to invasive species management, predator control, access control, replanting and reseedling of appropriate habitat elements, regarding, and propagation and seed bulking programs.</li> <li>▲ Project designs shall be reconfigured, whenever practicable, to avoid special-status species and sensitive habitats. Projects shall minimize ground disturbances and transportation project footprints near sensitive areas to the extent practicable.</li> <li>▲ Temporary access roads and staging areas shall not be located within the areas containing sensitive plants or wildlife species wherever feasible, to avoid or minimize impacts on these species.</li> <li>▲ Project activities in the vicinity of sensitive resources shall be completed during the period that best avoids disturbance to plant and wildlife species present to the extent feasible.</li> <li>▲ Individual projects shall minimize the use of in-water construction methods in areas that support sensitive aquatic species, especially when listed species could be present.</li> <li>▲ If equipment needs to operate in any watercourse with flowing or standing water where special-status species may be affected, a qualified biological resource</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>monitor shall be present to alert construction crews to the possible presence of such special-status species.</p> <ul style="list-style-type: none"> <li>▲ If project activities involve pile driving or vibratory hammering in or near water, interim hydroacoustic threshold criteria for protected fish species shall be adopted as set forth by the Interagency Fisheries Hydroacoustic Working Group, as well as other avoidance methods to reduce the adverse effects of construction to sensitive fish, piscivorous birds, and marine mammal species.</li> <li>▲ A qualified biologist shall locate and fence off sensitive resources before construction activities begin and, where required, shall inspect areas to ensure that barrier fencing, stakes, and setback buffers are maintained during construction.</li> <li>▲ For work sites located adjacent to special-status plant or wildlife populations, a biological resource education program shall be provided for construction crews and contractors (primarily crew and construction foremen) before construction activities begin.</li> <li>▲ Biological monitoring shall be considered for areas near identified habitat for State- and federally listed species, and a “no take” approach shall be taken whenever feasible during construction near special-status plant and wildlife species.</li> <li>▲ Mitigation Measure NOISE-1 shall be implemented when permanent or temporary noise has been identified as having a potential impact on wildlife.</li> <li>▲ Impacts resulting from nighttime lighting associated with construction and future permanent lighting shall be assessed at the project level. This assessment shall include an analysis of current light sources in the vicinity of the project. All feasible measures to reduce impacts from nighttime lighting shall be considered and implemented at the project level based on site-specific conditions. They may include but shall not be limited to the following measures:                         <ul style="list-style-type: none"> <li>▼ To the extent feasible, nighttime lighting sources shall not be installed in areas that contain or are likely to contain habitat suitable for special-status species.</li> <li>▼ Nighttime lighting shall be directed at the construction or project site and away from sensitive habitats. Light glare shields shall be used to reduce the extent of illumination onto adjoining areas. Permanent lighting shall be shielded and directed at intended use areas.</li> </ul> </li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>➤ LEDs or bulbs installed as part of a project shall be rated to emit or produce light at or under 2700 Kelvin, which results in the output of a warm white color spectrum.</li> <li>➤ Physical barriers, including solid concrete barriers or privacy slats in cyclone fencing, shall be installed where they have the potential to reduce illumination from overhead lights and automobile lights. Barriers should only be utilized as a light pollution minimization measure if they do not create a substantial barrier to wildlife movement such that the height and/or width of the barrier do not allow wildfire to move through the area. Additional barrier types should be employed when feasible, such as privacy slats into the spacing of cyclone fencing to create light barriers for areas outside the roadway.</li> <li>➤ Reflective highway markers shall be used to reduce raptor collisions on roadways.</li> <li>➤ Projects on previously unlit roadways with adjacent sensitive habitat and open space shall explore design options that address safety needs without the use of artificial lighting.</li> <li>➤ If nighttime lighting has the potential to result in adverse effects on a listed or candidate wildlife species (e.g., a nest, den, or other important habitat feature is identified near the project site), then consultation with the appropriate natural resource agency may be required.</li> <li>▲ Fencing and/or walls shall be built to avoid temporary or permanent access of humans or domestic animals from development areas into areas occupied by special-status species. Spoils, trash, or any debris shall be removed offsite to an approved disposal facility.</li> <li>▲ Project activities shall comply with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of special-status species.</li> <li>▲ Compensatory mitigation for unavoidable loss of habitat or other impacts on special-status species may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through Regional Advance Mitigation Planning (RAMP) (i.e., Conservation and Mitigation Banking, natural community conservation planning, Regional Conservation Investment Strategies), as deemed appropriate by the permitting agencies. Projects will prioritize mitigation banking within the same county as the project, if possible (i.e., if mitigation banks or mitigation credits are available in a given county).</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure BIO-(1b):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, for projects that could affect designated critical habitat for federally listed plant and wildlife species that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Coordination with USFWS and NOAA Fisheries, as appropriate based on the species, shall be conducted early in the environmental review process to determine the need for further mitigation, consultation, or permitting actions. Formal consultation is required for any project with a federal nexus when a listed species or designated critical habitat is likely to be adversely affected. Any conservation measures required by USFWS or NOAA Fisheries as part of formal consultation (e.g., through issuance of a biological opinion) would be implemented.</li> <li>▲ Reconfigure project design to avoid or minimize adverse effects on protected species within designated critical habitats.</li> <li>▲ Implementing agencies and/or project sponsors shall comply with existing local regulations and policies, including applicable HCP/NCCPs.</li> <li>▲ Additionally, implementation of Mitigation Measure BIO-1(a), above, includes an initial biological resource assessment and, if necessary, compensatory mitigation for unavoidable loss of habitat or other impacts on special-status species. Compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through RAMP, as deemed appropriate by the permitting agencies.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure BIO-1(b) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure BIO-2:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Implementing agencies shall require project sponsors to prepare biological resource assessments for specific projects proposed in areas containing, or likely to contain, jurisdictional waters or other sensitive or special-status communities. These assessments shall be conducted by qualified professionals in accordance with agency guidelines and standards. Qualified professionals shall reference applicable regional data sources for wetland mapping, which may include, but not be limited to, the Adaptation Atlas (San Francisco Estuary Institute 2021), Recovery Plan for Tidal Marsh Ecosystems of Northern and</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure BIO-2 into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>Central California (USFWS 2013), and the 2015 Bay Ecosystem Habitat Goals Update (Goals Project 2015). Where the biological resource assessments establish that mitigation is required to avoid and minimize direct and indirect adverse effects on State- or federally protected wetlands, or compensate for unavoidable effects, mitigation shall be developed consistent with the requirements or standards of USACE, EPA, RWQCB, and CDFW, and local regulations and guidelines, in addition to requirements of any applicable and adopted HCP/NCCP or other applicable plans developed to protect these resources. In keeping with the “no net loss” policy for jurisdictional waters (i.e., wetlands and other waters of the United States or State), project designs shall be configured, whenever possible, to avoid wetlands and other waters and avoid disturbances to wetlands and riparian corridors to preserve both the habitat and the overall ecological functions of these areas. Projects shall minimize ground disturbances and transportation project footprints near such areas to the extent practicable.</p> <ul style="list-style-type: none"> <li>▼ Project sponsors shall consult with USFWS, NMFS, USFS, CDFW where State-designated sensitive or riparian habitats provide potential or occupied habitat for federally listed rare, threatened, and endangered species afforded protection pursuant to the ESA, the MBTA during the breeding season, CESA, or fully protected species afforded protection pursuant to the State Fish and Game Code and with the CDFW pursuant to the provisions of Section 1600 of the State Fish and Game Code as they relate to Lakes and Streambeds.</li> <li>▲ Where avoidance of jurisdictional waters is not feasible, project sponsors shall minimize fill and the use of in-water construction methods, and place fill only with express permit approval from the appropriate resource agencies (e.g., USACE, RWQCB, CDFW, BCDC, CCC) and in accordance with applicable existing regulations, such as the Clean Water Act or local stream protection ordinances.</li> <li>▲ Where avoidance of jurisdictional waters is not feasible, project sponsors shall arrange for compensatory mitigation in the form of mitigation bank credits; on-site or off-site enhancement of existing waters; or wetland creation in accordance with applicable existing regulations and subject to approval by USACE, RWQCB, CDFW, BCDC, and/or CCC. If compensatory mitigation is required, the project sponsor shall develop a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, specifics on</li> </ul>		<p>inclusion in construction contracts.</p>		

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>restoration/creation/enhancement (e.g., plant palette, soils, irrigation design standards and requirements), specific monitoring periods and reporting guidelines, and a maintenance plan. The following minimum performance standards (or other standards as required by the permitting agencies) shall apply to any wetland compensatory mitigation:</p> <ul style="list-style-type: none"> <li> <p>➤ Compensation shall be provided at a minimum 1:1 ratio for restoration, preservation, and creation but shall in all cases be consistent with mitigation ratios set forth in locally applicable plans (e.g., general plans, HCP/NCCPs) or in project-specific permitting documentation. Compensatory mitigation may be a combination of on-site restoration/creation/enhancement or off-site restoration, preservation, or enhancement. Compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through RAMP, as deemed appropriate by the permitting agencies.</p> </li> <li> <p>➤ In general, any compensatory mitigation shall be monitored for a minimum of 5 years and will be considered successful when at least 75% cover (or other percent cover considered appropriate for the vegetation type) of installed vegetation has become successfully established.</p> </li> <li> <p>➤ If the restoration is not meeting success criteria, remedial measures shall be implemented and can include, but are not limited to, replanting, reseeding, grading adjustments, supplemental irrigation, access control, increased weed control, and extended maintenance and monitoring periods. After final success criteria have been met and relevant permitting agencies have approved the mitigation project as complete, all mitigation areas shall be permanently conserved (e.g., conservation easement) and managed in perpetuity.</p> </li> <li> <p>▲ Salvage and stockpile topsoil (i.e., the surface material from 6 to 12 inches deep) and perennial native plants, when recommended by the qualified wetland biologist, for use in restoring native vegetation to areas of temporary disturbance within the project area. Salvage of soils containing invasive species, seeds and/or rhizomes shall be avoided as identified by the qualified wetland biologist.</p> </li> <li> <p>▲ In accordance with CDFW guidelines and other instruments protective of sensitive or special- status natural communities, project sponsors shall avoid and minimize impacts on sensitive natural communities and habitats when designing and permitting projects. Where applicable, projects shall conform to the provisions of special area management or restoration plans, such as the</p> </li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>Suisun Marsh Protection Plan and the East Contra Costa County HCP, which outline specific measures to protect sensitive vegetation communities. Where applicable, project sponsors shall consult standards established in the Regional Shoreline Adaptation Plan guidelines to avoid impacts on shoreline habitats.</p> <ul style="list-style-type: none"> <li>▲ If any portion of a sensitive natural community is permanently removed or temporarily disturbed, the project sponsor shall provide compensatory mitigation for the loss. If such mitigation is required by the implementing agency, the project sponsor shall develop a restoration and monitoring plan that describes how compensatory mitigation will be achieved, implemented, maintained, and monitored. At a minimum, the restoration and monitoring plan shall include clear goals and objectives, success criteria, specifics on restoration/creation/enhancement (e.g., plant palette, soils, irrigation design standards and requirements), specific monitoring periods and reporting guidelines, and a maintenance plan. The following minimum performance standards (or other standards as required by the permitting agencies) shall apply to any compensatory mitigation for sensitive natural communities:             <ul style="list-style-type: none"> <li>▼ Compensation shall be provided at a minimum 1:1 ratio for restoration and preservation but shall in all cases be consistent with mitigation ratios set forth in locally applicable plans (e.g., general plans, HCP/NCCPs) or in project-specific permitting documentation. Compensatory mitigation may be a combination of on-site restoration/creation/enhancement or off-site restoration, preservation, or enhancement. Compensatory mitigation may be achieved in advance of impacts through the purchase or creation of mitigation credits or the implementation of mitigation projects through RAMP, as deemed appropriate by the permitting agencies.</li> <li>▼ In general, any compensatory mitigation shall be monitored for a minimum of 5 years and will be considered successful when at least 75% cover (or other percent cover considered appropriate for the vegetation type) of installed vegetation has become successfully established.</li> <li>▼ If the restoration is not meeting success criteria, remedial measures shall be implemented and may include, but are not limited to, replanting, reseeding, grading adjustments, supplemental irrigation, access control, increased weed control, and extended maintenance and monitoring periods. After final success criteria have been met and relevant permitting agencies have approved the mitigation project as complete, all mitigation areas shall be permanently conserved (e.g., conservation easement) and managed in perpetuity.</li> </ul> </li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ All construction materials, staging, storage, dispensing, fueling, and maintenance activities shall be located in upland areas outside of sensitive habitat, and adequate measures shall be taken to prevent any potential runoff from entering jurisdictional waters. Fueling of equipment shall take place within existing paved roads. Contractor equipment shall be checked for leaks prior to operation and repaired, as necessary.</li> <li>▲ Construction activities shall be scheduled, to the extent feasible, to avoid sensitive times for biological resources and to avoid the rainy season when erosion and sediment transport is increased.</li> <li>▲ Compliance with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures protective of wetlands and other waters or sensitive natural communities.</li> </ul>				
<p><b>Mitigation Measure BIO-3(a):</b> Implementing agencies shall require project sponsors to prepare detailed analyses for specific projects affecting mapped critical linkages to determine the wildlife species that may use these areas and the habitats those species require. Projects that would not affect mapped critical linkages but that are located within or adjacent to open space lands, including wildlands and agricultural lands, or otherwise may contain land used as wildlife movement corridors (e.g., green belts in urban areas), shall also assess whether significant wildlife corridors are present, what wildlife species may use them, and what habitat those species require. The assessment shall be conducted by qualified professionals and according to applicable agency standards with consideration of the local, regional, and global context of landscape connectivity for a given project in a given area.</p> <p>Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Design projects to minimize impacts on wildlife movement and habitat connectivity and preserve existing and functional wildlife corridors.</li> <li>▲ Design projects to promote wildlife corridor redundancy by including multiple connections between habitat patches.</li> <li>▲ Consult relevant guidance documents regarding wildlife movement and habitat connectivity during the project design phase, including but not limited to statewide and Bay Area region guides (e.g., CLN mapping, CDFW’s California Wildlife Barriers 2020 [CDFW 2020], the California Department of Transportation’s Wildlife Crossings Guidance Manual [Meese et al. 2007],</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure BIO-3(a) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>Critical Linkages: Bay Area &amp; Beyond [Penrod et al. 2013]), and local guides (e.g., Gray et al. 2018; Diamond and Snyder 2016).</p> <ul style="list-style-type: none"> <li>▲ Conduct wildlife movement studies for projects that may fragment or constrict regional or local corridors and impede use to nursery sites. These studies will include, but would not be limited to, the following objectives: identify activity levels and directional wildlife movement trends within the study area, consult the California Fish Passage Assessment Database (CALFISH database) to identify potential fish barrier locations and conduct first pass and second pass fish assessments as necessary, assess current functionality of existing underpasses, and determine what species or groups of species exhibit sensitivity to the existing roadways. Movement studies shall identify project-specific measures to avoid or mitigate impacts on corridors and movement to nursery sites that may include, but are not limited to, developing alternative project designs that allow wider movement corridors to remain; provide for buffer zones adjacent to corridors, such as passive recreation zones; implement physical barriers that prevent human and/or domestic predator entry into the corridor or block noise and lighting from development; incorporate shielded and directed lighting in areas near corridors; implement a “natives only” landscaping policy within 200 feet of identified wildlife corridors; incorporate periodic larger habitat patches along a corridor’s length; minimize the number of road crossings of identified wildlife corridors; and replace roadway culverts with bridges to allow for wildlife movement.</li> <li>▲ For projects that cannot avoid significant impacts on wildlife movement corridors or native wildlife nursery areas, consult with CDFW to determine appropriate measures to minimize direct and indirect impacts and implement measures to mitigate impacts on wildlife corridors or native wildlife nursery sites.</li> <li>▲ Conduct site-specific analyses of opportunities to preserve or improve habitat linkages with areas on- and off-site. Preservation or improvements of habitat on both sides of a wildlife crossing shall be prioritized.</li> <li>▲ Analyze habitat linkages and wildlife movement corridors on a broad scale for long linear projects with the possibility of adversely affecting wildlife movement to avoid critical narrow choke points that could reduce function of recognized movement corridor.</li> <li>▲ Construct wildlife-friendly overpasses and culverts. These structures shall be designed to meet the needs of appropriate species, considering factors such as the size or diameter of the structure (e.g., large enough to allow a target species</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>to pass through/over or to allow sufficient stream flow), interval frequency, and/or physical design to allow conditions similar to the surrounding habitat (e.g., open-bottom culverts that provide natural substrate on the stream bottom).</p> <ul style="list-style-type: none"> <li>▲ Upgrade existing culverts or implement directional fencing to guide animals to existing culverts or underpasses when conducting expansion or enhancement projects on existing roads.</li> <li>▲ Fence major transportation corridors in the vicinity of identified wildlife corridors.</li> <li>▲ Use wildlife-friendly fences that allow larger wildlife, such as deer, to jump over (i.e., no greater than 4 to 5 feet tall on average) and smaller wildlife to move under (by leaving a gap under the fence).</li> <li>▲ For projects that require the placement of stream culverts in a fish spawning stream, follow USACE, NOAA Fisheries, USFWS, and CDFW permit conditions and design requirements to allow fish passage through the culverts.</li> <li>▲ Limit wildland conversions in identified wildlife corridors such that the function of the wildlife corridor is not impaired.</li> <li>▲ Retain wildlife-friendly vegetation in and around developments (e.g., native plant species; vegetation that provides sufficient cover, nesting, or foraging opportunities; mature trees; riparian vegetation).</li> <li>▲ Monitor and maintain fencing, under crossings, and/or other crossing structures as needed to ensure corridor permeability and functionality. Development and implementation of a fencing and wildlife crossing structure maintenance plan is recommended to maintain permeability for wildlife across corridors.</li> <li>▲ Prohibit construction activities within 500 feet of occupied breeding areas for wildlife afforded protection pursuant to Title 14 Section 460 of the CCR (protecting fur-bearing mammals), during the breeding season.</li> <li>▲ Comply with existing local regulations and policies, including applicable HCP/NCCPs, that exceed or reasonably replace any of the above measures to protect wildlife corridors.</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure BIO-3(b):</b> Implementing agencies and/or project sponsors shall implement the following measures, where feasible and as applicable based on project- and site-specific considerations:</p> <ul style="list-style-type: none"> <li>▲ Implement Mitigation Measures BIO-1(a) and BIO-2.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure BIO-3(b) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure BIO-5:</b> Implementing agencies and/or project sponsors shall implement the following measures (or other equally effective measures), where feasible and as applicable based on project- and site-specific considerations:</p> <ul style="list-style-type: none"> <li>▲ Implement Mitigation Measures BIO-1(a), BIO-1(b), BIO-2, and BIO-3(a).</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure BIO-5 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>3.6 Climate Change, Greenhouse Gases, and Energy</b></p>				
<p><b>Mitigation Measure GHG-1:</b> The applicable lead agency can and should implement, where feasible and as applicable to address site-specific construction climate change impacts, the following measures (or equally effective measures) to avoid or minimize impacts related to construction GHG emissions:</p> <ul style="list-style-type: none"> <li>▲ Project proponents shall require its contractors to restrict the idling of on- and off-road diesel equipment to no more than 5 minutes while the equipment is on-site.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure GHG-1 into project-</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Project proponents of new facilities shall implement waste, disposal, and recycling strategies (i.e., 10% recycled content for Tier 1 and 15% recycled content for Tier 2) in accordance with the voluntary measures for nonresidential land uses contained in Section A5.405 of the 2022 CALGreen Code or in accordance with any update to these requirements in future iterations of the CALGreen Code in place at the time of project construction.</li> <li>▲ Project proponents of new facilities shall achieve or exceed the enhanced Tier 2 target for nonresidential land uses of recycling or reusing 80% of the construction waste as described in Section A5.408 of the 2022 CALGreen Code or in accordance with any update to these requirements in future iterations of the CALGreen Code in place at the time of project construction.</li> <li>▲ Project proponents shall require all diesel-powered, off-road construction equipment meet EPA’s Tier 3 or Tier 4 emissions standards as defined in 40 CFR 1039 and comply with the exhaust emission test procedures and provisions of 40 CFR Parts 1065 and 1068. This measure can also be achieved by using battery-electric off-road equipment as it becomes available.</li> <li>▲ Project proponents shall implement a program that incentivizes construction workers to carpool and use public transit or EVs to commute to and from the project site.</li> </ul>		<p>specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>documents prepared for projects consistent with PBA 2050+.</p>	
<p><b>Mitigation Measure GHG-3:</b> ABAG and MTC, in partnership with air districts in the plan area, shall work with the counties and cities in the plan area to adopt qualified GHG reduction plans (e.g., CAPs), develop GHG-reducing planning policies, and implement local climate initiatives, with the ultimate completion date to be achieved by the proposed plan’s horizon year. These reductions can be achieved through a combination of programs, including zero net energy in new construction, retrofits of existing buildings, incentivizing the development of renewable energy sources that serve both new and existing land uses, and other measures. Notably, the development and implementation of GHG reduction plans would ultimately occur at the discretion of local agencies, counties, and municipalities. Nevertheless, ABAG and MTC shall contribute relevant data and protocols to assist in the development of inventories, forecasts, and GHG reduction strategies.</p> <ul style="list-style-type: none"> <li>▲ Implement Mitigation Measures AQ-3(a) through AQ-3(d), TRA-2(a), and TRA-2(b).</li> </ul>	<p>Following plan approval.</p>	<p>MTC, ABAG, local air districts, and local agencies develop plans and policies, per Mitigation Measure GHG-3</p>	<p>MTC, ABAG, local air districts</p>	<p>MTC, ABAG, local air districts</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<b>3.7 Cultural Resources and Tribal Cultural Resources</b>				
<p><b>Mitigation Measure CUL/TCR-1:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ Require a survey and evaluation of buildings and structures greater than 50 years in age within the area of potential effect to determine their eligibility for recognition under federal, State, and/or local historic preservation criteria. The evaluation shall be prepared by an architectural historian or historical architect meeting the Secretary of the Interior’s Standards and Guidelines for Archeology and Historic Preservation-Professional Qualification Standards (SOI PQS). The evaluation shall comply with CEQA Guidelines Section 15064.5(b) and, if federal funding or permits are required, with Section 106 of the National Historic Preservation Act of 1966 (16 US Code Section 470 et seq.). Study recommendations shall be implemented.</li> <li>▲ Realign or redesign projects to avoid impacts on known historical resources where possible.</li> <li>▲ If avoidance of impacts to a significant historical resource is not feasible, implement additional mitigation options that include specific design plans for historic districts or plans for alteration or adaptive reuse of a historical resource that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. The application of the standards shall be overseen by an architectural historian or historic architect meeting the SOI PQS. Prior to any construction activities that may affect the historical resource, a report meeting industry standards shall identify and specify the treatment of character-defining features and construction activities and be provided to the lead agency for review and approval.</li> <li>▲ If a project would result in the demolition or significant alteration of a historical resource, the resource shall be recorded prior to demolition or alteration. Recordation shall take the form of Historic American Buildings Survey (HABS), Historic American Engineering Record (HAER), or Historic American Landscape Survey (HALS) documentation and shall be performed by an architectural historian or historian who meets the SOI PQS. The documentation package shall be archived in appropriate public and secure repositories. The specific scope</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure CUL/TCR-1 into project specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>and details of documentation shall be developed at the project level in coordination with the lead agency.</p> <ul style="list-style-type: none"> <li>▲ Comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect historical resources.</li> </ul>				
<p><b>Mitigation Measure CUL/TCR-2:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below:</p> <ul style="list-style-type: none"> <li>▲ Before construction activities, project sponsors shall retain 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 resources were identified; the record search shall include contacting the NAHC to request a Sacred Lands File search and a list of relevant Native American contacts who may have additional information. If a survey of the project area has not been conducted in the last 5 years, project sponsors shall retain a qualified archaeologist to conduct archaeological surveys prior to construction activities. Project sponsors shall follow recommendations identified in the survey, which may include activities such as subsurface testing, designing and implementing a Worker Environmental Awareness Program, construction monitoring by a qualified archaeologist, avoidance of sites, or preservation in place.</li> <li>▲ Areas determined to be of cultural significance shall be monitored during the grading, excavation, trenching, and removal of existing features by a qualified archeologist and culturally affiliated California Native American tribal monitor.</li> <li>▲ To ensure that new transportation facilities do not adversely affect potentially buried archaeological deposits, an underwater archaeological survey shall be conducted to identify, evaluate, and protect significant submerged cultural resources prior to activities that would disturb the shoreline or the floor of the bay. Additionally, the archaeologist shall request a search of California State Lands Commission’s Shipwreck Database.</li> <li>▲ When a project would impact a known archaeological site, the project sponsor and/or implementing agency shall determine whether the site is a historical resource (CEQA Guidelines Section 15064.5[c][1]). If archaeological resources identified in the project area are considered potentially significant, the project sponsor and/or responsible implementing agency shall undertake additional studies overseen by a qualified archaeologist (36 CFR Section 61) to evaluate the resources eligibility for listing in the CRHR, NRHP, and/or local register and</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure CUL/TCR-2 into project specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>to recommend further mitigative treatment. Evaluations shall be based on, but not limited to, surface remains, subsurface testing, or archival and ethnographic resources, on the framework of the historic context and important research questions of the project area, and on the integrity of the resource. If a site to be tested is precontact, culturally affiliated California Native American tribal representatives shall be afforded the opportunity to monitor the ground-disturbing activities. Appropriate mitigation may include curation of artifacts removed during subsurface testing.</p> <ul style="list-style-type: none"> <li>▲ If precontact archeological resources are identified through survey or discovered in the project area, the culturally affiliated California Native American tribe shall be notified. Both the archeologist and tribal monitor or tribal representative should strive for agreement on the determined significance of an artifact or cultural resource.</li> <li>▲ If significant archaeological resources that meet the definition of historical or unique archaeological resources are identified in the project area, the preferred mitigation of impacts is preservation in place (CEQA Guidelines Section 15126.4[b]; PRC Section 21083.2). Preservation in place may be accomplished by, but is not limited to, avoidance by project design, incorporation within parks, open space or conservation easements, covering with a layer of sterile soil, or similar measures. If preservation in place is feasible, mitigation is complete. Additionally, where the implementing agency determines that an alternative mitigation method is superior to in-place preservation, the project sponsor and/or implementing agency may implement such alternative measures.</li> <li>▲ When preservation in place or avoidance of historical or unique archaeological resources are infeasible, data recovery through excavation shall be required (CEQA Guidelines Section 15126.4[b]). Data recovery would consist of approval of a Data Recovery Plan and archaeological excavation of an adequate sample of site contents so that research questions applicable to the site can be addressed. For precontact sites, the culturally affiliated California Native American tribe shall be afforded the opportunity to monitor the ground-disturbing activities. If only part of a site would be impacted by a project, data recovery shall only be necessary for that portion of the site. Data recovery shall not be required if the implementing agency determines prior testing and studies have adequately recovered the scientifically consequential information from the resources. Confidential studies and reports resulting from the data recovery shall be deposited with the Northwest Information Center. Mitigation may include curation for artifacts removed during data recovery excavation.</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ If archaeological resources are discovered during construction, all work near the find shall be halted and the project sponsor and/or implementing agency shall follow the steps described under CEQA Guidelines Section 15064.5(f), including an immediate evaluation of the find by a qualified archaeologist (36 CFR Section 61) and implementation of avoidance measures or appropriate mitigation if the find is determined to be a historical resource or unique archaeological resource. If the find is a precontact archaeological site, the culturally affiliated California Native American tribe shall be notified and afforded the opportunity to monitor mitigative treatment. During evaluation or mitigative treatment, ground disturbance and construction work could continue on other parts of the project area.</li> <li>▲ Integrate curation of all historical resources or an archaeological nature or unique archaeological resources and associated records in a regional center focused on the care, management, and use of archaeological collections. All Native American human remains and associated grave goods discovered shall be returned to their Most Likely Descendent and repatriated. The final disposition of artifacts not directly associated with Native American graves will be negotiated during consultation with the culturally affiliated California Native American tribes. Artifacts include material recovered from all phases of work, including the initial survey, testing, indexing, data recovery, and monitoring. Curated materials shall be maintained with respect for cultures and available to future generations for research.</li> <li>▲ Project sponsors shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect archaeological resources.</li> </ul>				
<p><b>Mitigation Measure CUL/TCR-4(a):</b> If the implementing agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process required under PRC Section 21080.3.2, implementing agencies and/or project sponsors shall implement the following measures (or equally effective measures), where feasible and as applicable, to address site-specific impacts and avoid or minimize the significant adverse impacts:</p> <ul style="list-style-type: none"> <li>▲ Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource (PRC Section 21084.3[a]). If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process,</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure CUL/TCR-4(a) into project specific design plans or environmental review including</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>provisions in the PRC describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts (PRC Section 21084.3[b]). Examples include:</p> <ul style="list-style-type: none"> <li>➤ avoiding and preserving the resources in place, including planning and constructing to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria;</li> <li>➤ treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including:                             <ul style="list-style-type: none"> <li>- protecting the cultural character and integrity of the resource,</li> <li>- protecting the traditional use of the resource, and</li> <li>- protecting the confidentiality of the resource;</li> </ul> </li> <li>➤ establishing permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places; and</li> <li>➤ protecting the resource.</li> </ul> <p>▲ The implementing agency shall determine whether or not implementation of a project would indirectly affect tribal cultural resources by increasing public visibility and ease of access. If it would, the implementing agency shall take measures to reduce the visibility or accessibility of the tribal cultural resource to the public. Visibility of the resource can be reduced through the use of decorative walls or vegetation screening. Accessibility can be reduced by installing fencing or vegetation barriers, particularly noxious vegetation, such as poison oak or blackberry bushes. It is important to avoid creating an attractive nuisance when protecting tribal cultural resources. Conspicuous walls or signs indicating that an area is restricted may result in more attempts to access the excluded area.</p>		<p>possible inclusion in construction contracts.</p>		

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure CUL/TCR-4(b):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable a based on project- and site-specific considerations, that include those identified below:</p> <ul style="list-style-type: none"> <li>▲ Implement Mitigation Measure CUL/TCR-2.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure CUL/TCR-4(b) into project specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>3.8 Geology, Seismicity, and Mineral Resources</b></p>				
<p><b>Mitigation Measure GEO-7:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Ensure compliance with the Paleontological Resources Preservation Act, the Federal Land Policy and Management Act, the Antiquities Act, Section 5097.5 of the PRC, adopted county and city general plans, and other federal, state, and local regulations, as applicable and feasible, by adhering to and incorporating the performance standards and practices for the assessment and mitigation of adverse impacts on paleontological resources.</li> <li>▲ Obtain review by a qualified paleontologist to determine whether the project has the potential to require ground disturbance of parent material with potential to contain unique paleontological resources or to require the substantial alteration of a unique geologic feature. The assessment should include museum records searches, a review of geologic mapping and the scientific literature, geotechnical studies (if available), and potentially a pedestrian survey if units with paleontological potential are present at the surface.</li> <li>▲ Avoid exposure or displacement of parent material with potential to yield unique paleontological resources.</li> <li>▲ Implement the following measures where avoidance of parent material with the potential to yield unique paleontological resources is not feasible:</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure GEO-7 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>➤ All on-site construction personnel shall receive Worker Education and Awareness Program training before the commencement of excavation work to understand the regulatory framework that provides for protection of paleontological resources and become familiar with diagnostic characteristics of the materials with the potential to be encountered.</li> <li>➤ A qualified paleontologist shall prepare a paleontological resource management plan (PRMP) to guide the salvage, documentation, and repository of unique paleontological resources encountered during construction. If unique paleontological resources are encountered during construction, qualified paleontologist shall oversee the implementation of the PRMP.</li> <li>➤ Ground-disturbing activities in parent material with a moderate to high potential to yield unique paleontological resources shall be monitored using a qualified paleontological monitor to determine whether unique paleontological resources are encountered during such activities, consistent with the specified or comparable protocols.</li> <li>▲ Identify where ground disturbance is proposed in a geologic unit having the potential to contain fossils, and specify the need for a paleontological monitor to be present during ground disturbance in these areas.</li> <li>▲ Avoid routes and project designs that would permanently alter unique geological features.</li> <li>▲ Salvage and document adversely affected resources sufficient to support ongoing scientific research and education.</li> <li>▲ If paleontological resources are discovered during earthmoving activities, the construction crew will be directed to immediately cease work and notify the implementing agencies and/or project sponsors. The project sponsor will retain a qualified paleontologist for identification and salvage of fossils so that construction delays can be minimized. The paleontologist will be responsible for implementing a recovery plan which could include the following:             <ul style="list-style-type: none"> <li>➤ in the event of discovery, salvage of unearthened fossil remains, typically involving simple excavation of the exposed specimen but possibly also plaster-jacketing of large and/or fragile specimens, or more elaborate quarry excavations of richly fossiliferous deposits;</li> <li>➤ recovery of stratigraphic and geologic data to provide a context for the recovered fossil remains, typically including description of lithologies of fossil-bearing strata, measurement and description of the overall</li> </ul> </li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>stratigraphic section, and photographic documentation of the geologic setting;</p> <ul style="list-style-type: none"> <li>➤ laboratory preparation (cleaning and repair) of collected fossil remains to a point of curation, generally involving removal of enclosing rock material, stabilization of fragile specimens (using glues and other hardeners), and repair of broken specimens;</li> <li>➤ cataloging and identification of prepared fossil remains, typically involving scientific identification of specimens, inventory of specimens, assignment of catalog numbers, and entry of data into an inventory database;</li> <li>➤ transferal, for storage, of cataloged fossil remains to an appropriate repository, with consent of property owner;</li> <li>➤ preparation of a final report summarizing the field and laboratory methods used, the stratigraphic units inspected, the types of fossils recovered, and the significance of the curated collection; and</li> <li>➤ project sponsors shall comply with existing local regulations and policies that exceed or reasonably replace any of the above measures that protect paleontological or geologic resources.</li> </ul> <p>▲ Prepare significant recovered fossils to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and deposited in a designated paleontological curation facility.</p> <ul style="list-style-type: none"> <li>➤ Following the conclusion of the paleontological monitoring, ensure that the qualified paleontologist prepares a report stating that the paleontological monitoring requirement has been fulfilled and summarizes the results of any paleontological finds. The report should be submitted to the CEQA lead agency and to the repository curating the collected artifacts and should document the methods and results of all work completed under the PRMP, including the treatment of paleontological materials; results of specimen processing, analysis, and research; and final curation arrangements.</li> </ul>				

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<b>3.9 Hazards and Wildfire</b>				
<p><b>Mitigation Measure HAZ-4:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ The project proponent shall perform a records review to determine whether there is existing permitted use of hazardous materials or documented evidence of hazardous waste contamination on the project site and provide the results of this investigation to the implementing agency.</li> <li>▲ For any project located on or near a hazardous materials and/or waste site pursuant to Government Code Section 65962.5 or sites that have the potential for residual hazardous materials as a result of historic land uses, project proponents shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials’ E1527-05 standard.</li> <li>▲ For any project located on or near sites that are not listed and do not have the potential for residual hazardous materials as a result of historic land uses, no action is required unless unknown hazards are discovered during development. In that case, the implementing agency shall discontinue development until DTSC, RWQCB, the local air district, and/or other responsible agency issues a determination, which would likely require a Phase I ESA as part of the assessment.</li> <li>▲ Develop, train, and implement worker awareness and protective measures to minimize worker and public exposure to an acceptable level and to prevent environmental contamination as a result of construction.</li> <li>▲ Projects preparing a Phase I ESA, where required, shall fully implement the recommendations contained in the report. If a Phase I ESA indicates the presence or likely presence of contamination, the project proponent shall prepare a Phase II ESA, and recommendations of the Phase II ESA shall be fully implemented.</li> <li>▲ Consult with the appropriate local, State, and federal environmental regulatory agencies to ensure sufficient minimization of risk to human health and environmental resources, both during and after construction, posed by soil contamination, groundwater contamination, or other surface hazards including, but not limited to, underground storage tanks, fuel distribution lines, waste pits and sumps.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure HAZ-4 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure HAZ-6:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Continue to participate in the San Francisco Bay Area Regional Transportation Emergency Management (RTEMP), review the plan annually, and update as appropriate.</li> <li>▲ Develop new methods of conveying projected and real time evacuation information to citizens using emerging electronic communication tools including social media and cellular networks.</li> <li>▲ Adopt and/or revise, as appropriate, local emergency response and evacuation plans that address growth and potential for congestion on evacuation routes. Include contingencies for lower private automobile ownership and reliance on public transit for evacuation, consistent with the RTEMP.</li> <li>▲ Require specific projects to demonstrate consistency with all applicable emergency response and evacuation plans. Where temporary road closures would be required during construction, prepare traffic mitigation plans that address traffic control and establish alternate emergency response and evacuation routes in coordination with emergency service providers.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure HAZ-6 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure HAZ-7:</b> Implementing agencies and/or project sponsors shall implement measures, as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Ensure that development of areas mapped by CAL FIRE as high and very high fire hazard severity zones complies with Title 14 of the California Code of Regulations minimum wildfire protection standards.</li> <li>▲ Implementing agencies shall improve and educate residents and businesses regarding local emergency communications and notifications.</li> <li>▲ Implementing agencies shall enforce defensible space regulations to keep overgrown and unmanaged vegetation, accumulations of trash and other flammable material away from structures.</li> <li>▲ Implementing agencies shall provide public education about wildfire risk and fire prevention measures, and safety procedures and practices to allow for safe evacuation and/or options to shelter-in-place.</li> <li>▲ Implementing agencies shall plan for and promote rapid revegetation of burned areas to help prevent erosion and protect bare soils.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure HAZ-7 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Implementing agencies shall develop a regulatory mechanism for permitting an aggressive hazardous fuels management program.</li> <li>▲ Implementing agencies shall establish standards for fuel breaks that can slow or stop a wildfire advancing into a community or into the wildlands. Fuel breaks shall be strategically located to protect a community, structures, or routes of access and egress. Strategic locations may include ridgelines, greenbelts, or other locations to manage embers or support community-level fire suppression tactics.</li> <li>▲ MTC shall facilitate minimizing future impacts to fire protection services through information sharing regarding fire-wise land management (vegetation data, fire-resistant building materials, locations where development is vulnerable to wildfire, and best practices for safe land management) with county and city planning departments.</li> <li>▲ MTC, in partnership with technical experts and stakeholders, shall launch or continue existing initiatives to help local cities and counties to protect Bay Area communities and economies from the disruption of wildfire occurrences. Initiatives could include but not be limited to seminars that review the risk of wildfire and approaches for preparation, including strengthening of infrastructure, emergency services, emergency evacuation plans and reviewing building safety codes.</li> </ul>				
<b>3.11 Land Use, Population, and Housing</b>				
<p><b>Mitigation Measure LU-1:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Orient transportation projects to minimize impacts on existing communities by:                             <ul style="list-style-type: none"> <li>➤ selecting alignments within or adjacent to existing public rights-of-way;</li> <li>➤ designing sections above or below grade to maintain viable vehicular, cycling, and pedestrian connections between portions of communities where existing connections are disrupted by the transportation project; and</li> <li>➤ wherever feasible incorporating direct crossings, overcrossings, or undercrossings at regular intervals for multiple modes of travel (e.g., pedestrians, bicyclists, vehicles).</li> </ul> </li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure LU-1 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Where it has been determined that it is infeasible to avoid creating a barrier in an established community, encourage implementing agencies to consider other measures to reduce impacts, including but not limited to:                             <ul style="list-style-type: none"> <li>▼ shifting alignments to minimize the area affected;</li> <li>▼ reducing the proposed right-of-way take to minimize the overall area of impact; and</li> <li>▼ providing for bicycle, pedestrian, and vehicle access across improved roadways.</li> </ul> </li> </ul>				
<p><b>Mitigation Measure LU-4:</b> Implementing agencies and/or project sponsors shall implement, where feasible and as applicable based on project- and site-specific considerations, the mitigation measures described throughout this EIR to address the effects of displacement that could result in the construction of replacement housing, including:</p> <ul style="list-style-type: none"> <li>▲ Mitigation Measures AES-1 through AES-4</li> <li>▲ Mitigation Measures AGF-1 through AGF-3</li> <li>▲ Mitigation Measures AQ-2 through AQ-4</li> <li>▲ Mitigation Measures BIO-1 through BIO-3 and BIO-5</li> <li>▲ Mitigation Measures GHG-1 and GHG-3</li> <li>▲ Mitigation Measures CUL/TCR-1, CUL/TCR-2, and CUL/TCR-4</li> <li>▲ Mitigation Measure GEO-7</li> <li>▲ Mitigation Measures HAZ-4, HAZ-6 and HAZ-7</li> <li>▲ Mitigation Measure LU-1</li> <li>▲ Mitigation Measures NOISE-1 through NOISE-4</li> <li>▲ Mitigation Measures PSR-1 and PSR-2</li> <li>▲ Mitigation Measures PUF-1 through PUF-4</li> <li>▲ Mitigation Measure TRA-2</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure LU-4 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>3.12 Noise</b></p>				
<p><b>Mitigation Measure NOISE-1:</b> To reduce construction noise levels to achieve the applicable noise standards of the relevant jurisdiction in the plan area, implementing agencies and project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ Comply with local construction-related noise standards, including restricting construction activities to permitted hours as defined under local jurisdiction regulations.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-1 into project-</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Notify residents and occupants within 294 feet of the project construction area at least 30 days in advance of anticipated times when noise levels are expected to exceed limits established in the noise element of the general plan or noise ordinance.</li> <li>▲ Designate an on-site construction complaint and enforcement manager for the project.</li> <li>▲ Post procedures and phone numbers at the construction site for notifying the implementing agency staff and construction contractor (during regular construction hours and off-hours), along with permitted construction days and hours, complaint procedures, and who to notify in the event of a problem.</li> <li>▲ Properly maintain construction equipment and outfit construction equipment with the best available noise suppression devices (e.g., mufflers, silencers, wraps). Equipment engine shrouds shall be closed during equipment operation.</li> <li>▲ Prohibit the idling of construction equipment for extended periods of time in the vicinity of sensitive receptors.</li> <li>▲ Locate all stationary equipment (e.g., generators, compressors, rock crushers, and cement mixers) and staging areas as far as possible from nearby noise-sensitive receptors, or locate such equipment to the extent feasible such that an existing or constructed noise attenuating feature (e.g., temporary noise wall or blanket) blocks the line of sight between affected noise-sensitive receptors and construction staging areas.</li> <li>▲ Use hydraulically or electrically powered tools (e.g., jack hammers, pavement breakers, and rock drills) for project construction 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. External jackets on the tools themselves should be used, if such jackets are commercially available.</li> <li>▲ Quieter procedures should be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.</li> <li>▲ For construction activity that would occur within a clear line of sight of an adjacent off-site sensitive receptor (as defined by the local jurisdiction), take place outside of hours during which construction activity is exempt from local noise standards, and exceed applicable construction noise standards or thresholds, the construction contractor shall install temporary sound barriers to attenuate noise, such as temporary noise curtains, sound walls, or similar</li> </ul>		<p>specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>documents prepared for projects consistent with PBA 2050+.</p>	

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>products that provide a barrier to construction noise. The temporary sound barrier shall be located between the project construction noise sources and receptors to shield the receptors from construction noise. When installed properly, acoustic barriers can reduce construction noise levels by approximately 8–10 dB (EPA 1971). The installation of any temporary sound barrier shall meet all the following criteria:</p> <ul style="list-style-type: none"> <li>➤ be installed as close as feasible to the boundary of the construction site within the direct line of sight path of the nearby sensitive receptor(s);</li> <li>➤ consist of durable, flexible composite material featuring a noise barrier layer bound to sound-absorptive material on one side; and</li> <li>➤ consist of rugged, impervious material with a surface weight of at least 1 pound per square foot, such that a minimum of 10 dBA reduction is achieved on the receiving side of the sound barrier.</li> </ul>				
<p><b>Mitigation Measure NOISE-2(a):</b> To reduce exposure from traffic noise when significant and to achieve the applicable noise thresholds for each roadway type (i.e., 70 dBA CNEL for major roads/freeways, 65 dBA CNEL for all other roads, or as otherwise defined in applicable local noise standards), implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations to achieve noise levels in accordance with applicable local noise standards. Measures shall include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Design adjustments to proposed roadway or transit alignments to reduce noise levels in noise-sensitive areas (e.g., below-grade roadway alignments can effectively reduce noise levels in nearby areas by providing a barrier between the source and receptor).</li> <li>▲ Use techniques such as landscaped berms, reduced-noise paving materials, and traffic-calming measures in the design of transportation projects.</li> <li>▲ Use rubberized asphalt or “quiet pavement” to reduce road noise for new roadway segments, roadways in which widening or other modifications require re-pavement, or normal reconstruction of roadways where re-pavement is planned.</li> <li>▲ Maximize the distance between existing noise-sensitive land uses and new noise-generating facilities and transportation systems.</li> <li>▲ Contribute to the insulation of buildings or construction of noise barriers around sensitive receptor properties adjacent to the transportation project.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-2(a) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Use land use planning measures, such as zoning, restrictions on development, site design, and buffers, to ensure that future development is noise compatible with adjacent transportation facilities and land uses.</li> <li>▲ Monitor the effectiveness of noise-reduction measures by taking noise measurements and installing adaptive mitigation measures to achieve the standards for ambient noise levels established by the noise element of the general plan or noise ordinance.</li> </ul>				
<p><b>Mitigation Measure NOISE-2(b):</b> To reduce the exposure of existing sensitive receptors to non-transportation noise associated with the forecasted development pattern, implementing agencies and/or project sponsors shall, for projects with features that generate stationary noise that are near sensitive receptors, implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Local agencies approving land use projects shall require that routine testing and preventive maintenance of emergency electrical generators be conducted during the less sensitive daytime hours (per the applicable local municipal code). Electrical generators or other mechanical equipment shall be equipped with noise control (e.g., muffler) devices in accordance with manufacturers’ specifications.</li> <li>▲ Maximize the distance between noise-sensitive land uses and new noise-generating facilities.</li> <li>▲ Improve the acoustical insulation, window quality, and/or other soundproofing of dwelling units (existing or proposed) where setbacks do not sufficiently reduce noise.</li> <li>▲ Local agencies approving land use projects shall require that external mechanical equipment, including HVAC units, associated with buildings and other stationary sources (e.g., commercial loading docks) incorporate features designed to reduce noise to below 70 dBA CNEL or the local applicable noise standard. These features may include locating equipment or activity areas in equipment rooms or enclosures that incorporate noise-reduction features, such as acoustical louvers and exhaust and intake silencers. Enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors. Site design considerations shall also incorporate appropriate setback distances, to the extent practical, from the noise and existing sensitive receptors to minimize noise exposure.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-2(b) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure NOISE-2(c):</b> To reduce transit-related noise exposure to existing receptors within 50 feet of a rail transit line to below 70 dBA CNEL, or other applicable standard, implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ When finalizing development project site plans or transportation project design, sufficient setback between occupied structures and the railroad tracks shall be provided to minimize noise exposure to the extent feasible.</li> <li>▲ When finalizing development project site plans, noise-sensitive outdoor use areas shall be sited as far away from adjacent noise sources as possible, and site plans shall be designed to shield noise-sensitive spaces with buildings or noise barriers whenever possible.</li> <li>▲ Prior to project approval, the implementing agency for a transportation project shall ensure that the transportation project sponsor applies the following mitigation measures (or other technologically feasible measures) to achieve a site-specific exterior noise level of 70 dBA CNEL (or other applicable local noise standard) and interior noise level of 45 dBA CNEL at sensitive land uses, as applicable for transit projects:                             <ul style="list-style-type: none"> <li>✔ use sound reduction barriers, such as landscaped berms and dense plantings;</li> <li>✔ locate rail extension below grade as feasible;</li> <li>✔ use damped wheels on railway cars;</li> <li>✔ use vehicle skirts;</li> <li>✔ use undercar acoustically absorptive material; and</li> <li>✔ install sound insulation treatments for affected structures.</li> </ul> </li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-2(c) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure NOISE-3(a):</b> To reduce construction vibration levels to acceptable levels (i.e., 65 VdB to 80 VdB depending on the frequency of the event and 0.1 to 0.6 PPV in/sec depending on building type), implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or other equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ To minimize disturbance of receptors within 545 feet of pile-driving activities, implement “quiet” pile-driving technology (such as predrilling of piles and the use of more than one pile driver to shorten the total pile-driving duration), where</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-3(a) into project-specific design plans or</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>feasible and as applicable, in consideration of geotechnical and structural requirements and conditions.</p> <ul style="list-style-type: none"> <li>▲ To reduce structural damage, where pile driving is proposed within 55 feet of an existing structure, engage a qualified geotechnical engineer and qualified historic preservation professional (for designated historic buildings only) and/or structural engineer to conduct a preconstruction assessment of existing subsurface conditions and the structural integrity of nearby (i.e., within 55 feet) structures that would be exposed to pile-driving activity. If recommended by the preconstruction assessment, for structures or facilities within 55 feet of pile-driving activities, the project sponsors shall require ground vibration monitoring of nearby structures. Such methods and technologies shall be based on the specific conditions at the construction site. Conditions will be determined through activities such as the preconstruction surveying of potentially affected structures and underpinning of foundations of potentially affected structures, as necessary. The preconstruction assessment shall include a 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 building damage. In the event of unacceptable ground movement with the potential to cause structural damage, all impact work shall cease, and corrective measures shall be implemented to minimize the risk to the subject, or adjacent, structure.</li> <li>▲ Use cushion blocks to dampen impact noise from pile driving.</li> <li>▲ Restrict high-impact construction activities (i.e., vibratory activities that generate 0.20 in/sec PPV or more at 25 feet) within 545 feet of sensitive receptors to permitted hours in accordance with local jurisdiction regulations.</li> </ul>		<p>environmental review including possible inclusion in construction contracts.</p>	<p>projects consistent with PBA 2050+.</p>	
<p><b>Mitigation Measure NOISE-3(b):</b> To reduce vibration effects from rail operations, implementing agencies and/or project sponsors shall undertake a detailed evaluation of vibration and groundborne noise impacts and identify project-specific mitigation measures as necessary to reduce vibration to a level that complies with applicable local standards or FTA standards. To minimize the effects of vibration and groundborne noise from rail operations, the following measures (or other equally effective measures) shall be implemented where feasible and as applicable based on project- and site-specific considerations:</p> <ul style="list-style-type: none"> <li>▲ Ensure that project sponsors apply the following measures to achieve FTA-recommended vibration levels of 72 VdB at residential land uses, or other applicable standard, for rail extension projects:</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-3(b) into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>➤ Use high-resilience (soft) direct fixation fasteners for embedded track.</li> <li>➤ Install ballast mat, or other approved technology for the purpose of reducing vibration, for ballast and tie track.</li> <li>➤ Conduct regular rail maintenance, including rail grinding and wheel truing to recontour wheels, to provide smooth running surfaces.</li> <li>➤ Maximize the distance between tracks and sensitive uses.</li> <li>➤ Implement operational changes, such as limiting train speed and reducing nighttime operations.</li> </ul>		inclusion in construction contracts.		
<p><b>Mitigation Measure NOISE-4:</b> Local lead agencies for all new development proposed to be located within an existing airport influence zone, as defined by the locally adopted ALUCP or local general plan, shall require a site-specific noise compatibility study. The study shall consider and evaluate existing aircraft noise, based on specific aircraft activity data for the airport in question, and shall include recommendations for site design and building construction to ensure compliance with interior noise levels of 45 dBA CNEL, such that the potential for sleep disturbance is minimized.</p>	This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.	If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure NOISE-4 into project-specific design plans or environmental review including possible inclusion in construction contracts.	Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.	Implementing/ lead agency and/or project applicant
<b>3.13 Public Services and Recreation</b>				
<p><b>Mitigation Measure PSR-1:</b> Implementing agencies and/or project sponsors shall implement the following measure, where feasible and as applicable based on project- and site-specific considerations:</p> <ul style="list-style-type: none"> <li>▲ For projects that could increase demand for public services facilities, implementing agencies and/or project sponsors shall coordinate with relevant service providers to ensure that the existing public services could accommodate the increase in demand. If existing facilities are found to be inadequate to maintain adequate capital capacity, equipment, personnel, and/or response times, facility improvements for the appropriate public service shall be identified in each project’s CEQA documentation. Implementing agencies and/or project sponsors shall implement, where feasible and necessary, the mitigation measures described throughout this EIR to address</li> </ul>	This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.	If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PSR-1 into project-specific design plans or environmental review including possible inclusion in construction contracts.	Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.	Implementing/ lead agency and/or project applicant

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>the environmental effects related to the construction of new or expanded public service facilities:</p> <ul style="list-style-type: none"> <li>✔ Mitigation Measures AES-1 through AES-4</li> <li>✔ Mitigation Measures AGF-1 through AGF-3</li> <li>✔ Mitigation Measures AQ-2 through AQ-4</li> <li>✔ Mitigation Measures BIO-1 through BIO-3 and BIO-5</li> <li>✔ Mitigation Measures GHG-1 and GHG-3</li> <li>✔ Mitigation Measures CUL/TCR-1, CUL/TCR-2, and CUL/TCR-4</li> <li>✔ Mitigation Measure GEO-7</li> <li>✔ Mitigation Measures HAZ-4, HAZ-6 and HAZ-7</li> <li>✔ Mitigation Measures LU-1 and LU-4</li> <li>✔ Mitigation Measures NOISE-1 through Noise-4</li> <li>✔ Mitigation Measures PSR-2</li> <li>✔ Mitigation Measures PUF-1 through PUF-4</li> <li>✔ Mitigation Measure TRA-2</li> </ul>				
<p><b>Mitigation Measure PSR-2:</b> Implementing agencies and/or project sponsors shall implement, where feasible and as applicable, the mitigation measures described throughout this EIR to address the environmental effects related to the construction of new or expanded recreational facilities:</p> <ul style="list-style-type: none"> <li>▲ Mitigation Measures AES-1 through AES-4</li> <li>▲ Mitigation Measures AGF-1 through AGF-3</li> <li>▲ Mitigation Measures AQ-2 through AQ-4</li> <li>▲ Mitigation Measures BIO-1 through BIO-3 and BIO-5</li> <li>▲ Mitigation Measures GHG-1 and GHG-3</li> <li>▲ Mitigation Measures CUL/TCR-1, CUL/TCR-2, and CUL/TCR-4</li> <li>▲ Mitigation Measure GEO-7</li> <li>▲ Mitigation Measures HAZ-4, HAZ-6 and HAZ-7</li> <li>▲ Mitigation Measures LU-1 and LU-4</li> <li>▲ Mitigation Measures NOISE-1 through Noise-4</li> <li>▲ Mitigation Measures PSR-1</li> <li>▲ Mitigation Measures PUF-1 through PUF-4</li> <li>▲ Mitigation Measure TRA-2</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PSR-2 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<b>3.14 Public Utilities and Facilities</b>				
<p><b>Mitigation Measure PUF-1(a):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ For projects that could increase demand on water and wastewater treatment facilities, coordinate with the relevant service provider to ensure that the existing public services and utilities could accommodate the increase in demand. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility shall be identified in each project’s CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-1(a) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure PUF-1(b):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ During the design and CEQA review of individual future projects, determine whether sufficient stormwater drainage facilities exist for a proposed project. These CEQA determinations must ensure that the proposed development can be served by its existing or planned drainage capacity. If adequate stormwater drainage facilities do not exist, project sponsors shall coordinate with the appropriate utility and service provider to ensure that adequate facilities could accommodate the increased demand, and if not, infrastructure and facility improvements shall be identified in each project’s CEQA determination. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.</li> <li>▲ For projects of greater than 1 acre in size, reduce stormwater runoff caused by construction by implementing stormwater control best practices, based on those required for a SWPPP.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-1(b) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure PUF-1(c):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below (or equally effective measures):</p>	<p>This mitigation measure will be considered by the implementing/ lead</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents,</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>▲ For transportation projects, incorporate stormwater control, retention, and infiltration features, such as detention basins, bioswales, vegetated median strips, and permeable paving, early into the design process to ensure that adequate acreage and elevation contours are planned.</p>	<p>agency for applicability at the project level.</p>	<p>incorporation of the measures listed in Mitigation Measure PUF-1(c) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	
<p><b>Mitigation Measure PUF-1(d):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below, (or equally effective measures):</p> <p>▲ For transportation projects implemented by Caltrans or subject to Caltrans review, adhere to Caltrans’ Stormwater Management Plan, which includes best practices to reduce the volume of stormwater runoff and pollutants in the design, construction, and maintenance of highway facilities.</p>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-1(d) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure PUF-1(e):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those identified below or equally effective measures):</p> <p>▲ Consider the use of on site electric generation and storage systems that produce all or a portion of the energy used by a land use, sea level rise adaptation, or transportation project.</p>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-1(e) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure PUF-1(f):</b> Implementing agencies and/or project sponsors shall implement, where feasible and as applicable based on project- and site-specific considerations, the mitigation measures described throughout this EIR to address the effects related to the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, including:</p> <ul style="list-style-type: none"> <li>▲ Mitigation Measures AES-1 through AES-4</li> <li>▲ Mitigation Measures AGF-1 through AGF-3</li> <li>▲ Mitigation Measures AQ-2 through AQ-4</li> <li>▲ Mitigation Measures BIO-1 through BIO-3 and BIO-5</li> <li>▲ Mitigation Measures GHG-1 and GHG-3</li> <li>▲ Mitigation Measures CUL/TCR-1, CUL/TCR-2, and CUL/TCR-4</li> <li>▲ Mitigation Measure GEO-7</li> <li>▲ Mitigation Measures HAZ-4, HAZ-6 and HAZ-7</li> <li>▲ Mitigation Measures LU-1</li> <li>▲ Mitigation Measures NOISE-1 through NOISE-4</li> <li>▲ Mitigation Measures PSR-1 and PSR-2</li> <li>▲ Mitigation Measures PUF-2 through PUF-4</li> <li>▲ Mitigation Measure TRA-2</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-1(f) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure PUF-2(a):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ For projects that could increase demand for water, coordinate with the relevant water service provider to ensure that the provider has adequate supplies to accommodate the increase in demand. This can and should be documented in the form of an SB 610 Water Supply Assessment, where applicable; an SB 221 Water Supply Verification; or other capacity analysis.</li> <li>▲ Implement water conservation measures which result in reduced demand for potable water. This could include reducing the use of potable water for landscape irrigation (such as through drought-tolerant plantings, water-efficient irrigation systems, the capture and use of rainwater) and the use of water-conserving fixtures (such as dual-flush toilets, waterless urinals, reduced flow faucets).</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-2(a) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>▲ Coordinate with the water provider to identify an appropriate water consumption budget for the size and type of project and designing and operating the project accordingly.</li> <li>▲ For projects located in an area with existing reclaimed water conveyance infrastructure and excess reclaimed water capacity, use reclaimed water for non-potable uses, especially landscape irrigation. For projects in a location planned for future reclaimed water service, projects should install dual plumbing systems in anticipation of future use. Large developments could treat wastewater onsite to tertiary standards and use it for non-potable uses onsite.</li> <li>▲ Where applicable, apply Tier 1 or Tier 2 CALGreen standards as mandatory local requirements, which reduce water use by 12% and 20%, respectively, and require additional qualifying elective actions.</li> </ul>				
<p><b>Mitigation Measure PUF-2(b):</b> Implementing agencies and/or project sponsors shall require the construction phase of transportation projects to connect to reclaimed water distribution systems for non-potable water needs, when feasible based on project- and site-specific considerations.</p>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-2(b) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>
<p><b>Mitigation Measure PUF-2(c):</b> Implementing agencies and/or project sponsors shall require transportation projects with landscaping to use drought-resistant plantings or connect to reclaimed water distribution systems for irrigation and other non-potable water needs when available and feasible based on project- and site-specific considerations.</p>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-2(c) into project-specific design plans or environmental review including possible</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p><b>Mitigation Measure PUF-3:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ During the design and CEQA review of individual future projects, determine whether sufficient wastewater treatment capacity exists for a proposed project. These CEQA determinations must ensure that the proposed development can be served by its existing or planned treatment capacity. If adequate capacity does not exist, project sponsors shall coordinate with the relevant service provider to ensure that adequate public services and utilities could accommodate the increased demand, and if not, infrastructure improvements for the appropriate public service or utility shall be identified in each project’s CEQA documentation. The relevant public service provider or utility shall be responsible for undertaking project-level review as necessary to provide CEQA clearance for new facilities.</li> <li>▲ Require compliance with Mitigation Measure PUF-2(a), and MTC shall require implementation of Mitigation Measures PUF-2(b) and PUF-2(c), as feasible based on project- and site-specific considerations to reduce water usage and, subsequently, some wastewater flows.</li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level. Same as specified for Mitigation Measure PUF-2(a), PUF-2(b), and PUF-2(c), above.</p>	<p>inclusion in construction contracts.</p> <p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-3 into project-specific design plans or environmental review including possible inclusion in construction contracts. Same as specified for Mitigation Measure PUF-2(a), PUF-2(b), and PUF-2(c), above.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+. Same as specified for Mitigation Measure PUF-2(a), PUF-2(b), and PUF-2(c), above.</p>	<p>Implementing/ lead agency and/or project applicant MTC</p>
<p><b>Mitigation Measure PUF-4:</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, that include those (or equally effective measures) identified below:</p> <ul style="list-style-type: none"> <li>▲ Provide an easily accessible area that is dedicated to the collection and storage of non-hazardous recycling materials.</li> <li>▲ Maintain or reuse existing building structures and materials during building renovations and redevelopment.</li> <li>▲ Use salvaged, refurbished, or reused materials to help divert such items from landfills.</li> <li>▲ Divert construction waste from landfills, where feasible, through means such as: <ul style="list-style-type: none"> <li>▼ submitting and implementing a construction waste management plan that identifies materials to be diverted from disposal;</li> </ul> </li> </ul>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure PUF-4 into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<ul style="list-style-type: none"> <li>➤ establishing diversion targets, possibly with different targets for different types and scales of development; and</li> <li>➤ helping developments share information on available materials with one another, to aid in the transfer and use of salvaged materials.</li> <li>▲ Apply the specifications developed by the Construction Materials Recycling Association (CMRA) to assist contractors and developers in diverting materials from construction and demolition projects, where feasible (CalRecycle 2006).</li> </ul>				
<b>3.15 Transportation</b>				
<p><b>Mitigation Measure TRA-2(a):</b> MTC shall work with State and local agencies to ensure implementation of components of the plan that will help to reduce regional VMT, particularly projects that improve or expand transit service, as well as bicycle and pedestrian facilities. These transportation projects, in conjunction with land use policies included in the plan, will help the region to achieve the projected decreases in regional VMT per capita and achieve the region’s SB 375 targets for GHG emissions. MTC will collaborate with State and other agencies to explore the feasibility of new programs for reducing VMT, such as VMT fees, banks, and exchanges.</p>	<p>Following plan approval.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure TRA-2(a) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>MTC and implementing/lead agency</p>	<p>MTC and implementing/lead agency</p>
<p><b>Mitigation Measure TRA-2(b):</b> Implementing agencies and/or project sponsors shall implement measures, where feasible and as applicable based on project- and site-specific considerations, consistent with MTC’s “Key SB 743 Implementation Steps for Land Use Projects” that consist of but are not limited to those identified below (or equally effective measures):</p> <p>TDM strategies shall be incorporated into individual land use and transportation projects and plans, as part of the planning process. These TDM measures are strategies not included in EN9, rather they are measures that could and should be implemented by the local agency based on land use authority that neither MTC nor ABAG has. Local agencies shall incorporate strategies identified in the Federal Highway Administration’s (FHWA’s) publication: <i>Integrating Demand Management into the Transportation Planning Process: A Desk Reference</i> (August 2012) into the planning process (FHWA 2012). For example, the following strategies may be</p>	<p>This mitigation measure will be considered by the implementing/ lead agency for applicability at the project level.</p>	<p>If found to be feasible by the implementing/ lead agency, this measure would result in incorporation of the measures listed in Mitigation Measure TRA-2(b) into project-specific design plans or environmental review including possible inclusion in construction contracts.</p>	<p>Implementing/ lead agency. Compliance will be reflected in subsequent CEQA compliance documents, including Sustainable Communities Environmental Assessments (SCEAs) or other tiered CEQA documents prepared for projects consistent with PBA 2050+.</p>	<p>Implementing/ lead agency and/or project applicant</p>

Mitigation Measures	Timing	Implementation of Measure	Oversight Responsibility	Implementation Responsibility
<p>included, as applicable, to encourage use of transit and nonmotorized modes of transportation and reduce VMT on the region’s roadways:</p> <ul style="list-style-type: none"> <li>▲ include TDM mitigation requirements for new developments;</li> <li>▲ incorporate supporting infrastructure for nonmotorized modes, such as bike lanes, secure bike parking, sidewalks, and crosswalks;</li> <li>▲ provide incentives to use alternative modes and reduce driving, such as universal transit passes, road and parking pricing;</li> <li>▲ implement parking management programs, such as parking cash-out, priority parking for carpools and vanpools;</li> <li>▲ develop TDM-specific performance measures to evaluate project-specific and system-wide performance;</li> <li>▲ incorporate TDM performance measures in the decision-making process for identifying transportation investments;</li> <li>▲ implement data collection programs for TDM to determine the effectiveness of certain strategies and to measure success over time; and</li> <li>▲ set aside funding for TDM initiatives.</li> </ul>				
<p><b>Mitigation Measure TRA-2(c):</b> Implementing agencies and/or project sponsors shall implement the following measure, where applicable and necessary based on project- and site-specific considerations (or equally effective measures):</p> <ul style="list-style-type: none"> <li>▲ Implement Mitigation Measure GHG-3.</li> </ul>	<p>Same as specified for Mitigation Measure GHG-3, above.</p>	<p>Same as specified for Mitigation Measure GHG-3, above.</p>	<p>Same as specified for Mitigation Measure GHG-3, above.</p>	<p>Same as specified for Mitigation Measure GHG-3, above.</p>

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