





# REGIONAL TRANSPORTATION PLAN

Sustainable Communities Stragegy

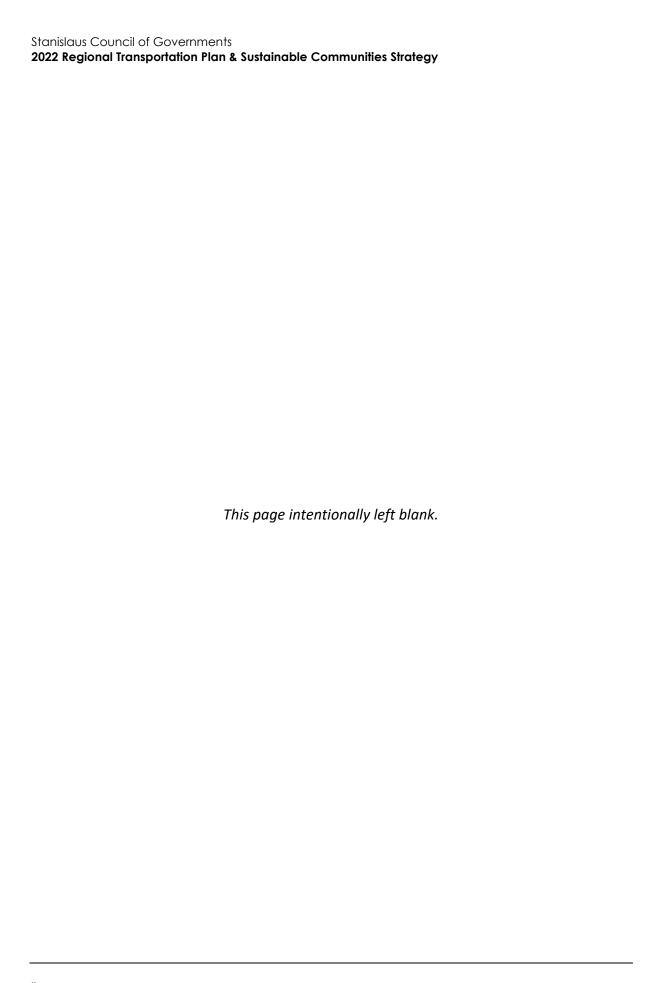
Final Program Environmental Impact Report SCH#2022010019





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## 1 Introduction

#### 1.1 Final EIR Contents

This Final Environmental Impact Report (Final EIR) is an informational document prepared by the Stanislaus Council of Governments (StanCOG) to evaluate the potential environmental impacts of the proposed 2022 Regional Transportation Plan Sustainable Communities Strategy (2022 RTP/SCS) ("Plan" or "project").

As prescribed by the California Environmental Quality Act (CEQA) *Guidelines* Sections 15088 and 15132, the lead agency, StanCOG, is required to evaluate comments on environmental issues received from persons/agencies who have reviewed the Draft EIR and to prepare written responses to those comments. This document, together with the Draft EIR, as revised, comprise the Final EIR for this project. This Final EIR includes individual responses to each letter received during the public review period for the Draft EIR. In accordance with CEQA *Guidelines* Section 15088(c), the written responses describe the disposition of significant environmental issues raised.

The Final EIR also includes amendments to the Draft EIR consisting of changes suggested by certain comments, as well as minor clarifications, corrections, or revisions to the Draft EIR. The Final EIR includes the following contents:

- Section 1: Introduction
- Section 2: Responses to Comments on the Draft EIR, which also includes a list of all commenters and public comment letters
- Section 3: Amendments to the Draft EIR
- Section 4: Mitigation Monitoring and Reporting Program

#### 1.2 Draft EIR Public Review Process

The Draft EIR was circulated for a 45-day public review period in accordance with *CEQA Guidelines* Section 15087 on June 10, 2022. The public comment period closed on July 25, 2022. The Draft EIR was made available on the StanCOG website. Additional options were made available to the public to view the Draft EIR by contacting StanCOG, in accordance with COVID-19 pandemic recommendations and requirements.

## 1.3 EIR Certification Process and Project Approval

In accordance with the requirements of CEQA (*CEQA Guidelines* Section 15090), StanCOG will consider certifying the Final EIR as having been prepared in compliance with CEQA. Following Final EIR certification, StanCOG will consider making findings of fact for each significant impact (*CEQA Guidelines* Section 15091) and approving the project or an alternative (*CEQA Guidelines* Section 15092).

### 1.4 Draft EIR Recirculation Not Required

CEQA Guidelines Section 15088.5 requires Draft EIR recirculation when "significant new information" is added to the EIR after public notice is given of the availability of the Draft EIR for public review but before certification. Significant new information is defined as including:

- 1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- 2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
- 3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it.
- 4. The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The comments, responses, and Draft EIR revisions presented in this document do not constitute such "significant new information." Instead, they clarify, amplify, or make insignificant modifications to the Draft EIR. For example, none of the comments, responses, and Draft EIR amendments disclose new or substantially more severe significant environmental effects of the project, or new feasible mitigation measures or alternatives considerably different than those analyzed in the Draft EIR that would clearly lessen the project's significant effects.

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# STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE REFERRAL RESPONSE FORM

TO:	Stanislaus County Planning & Community Development 1010 10 <sup>th</sup> Street, Suite 3400 Modesto, CA 95354				
FROM:	Stanislaus County, Department of Environmental Resources - Hazardous Materials Division				
SUBJECT:	ENVIRONMENTAL REFERRAL – StanCOG EIR 2022 RTP/SCS AND 2023 FTIP				
Based on this	s agency's particular field(s) of expertise, it is our position the above described project:				
X	<ul><li>Will not have a significant effect on the environment.</li><li>May have a significant effect on the environment.</li><li>No Comments.</li></ul>				
	are specific impacts which support our determination (e.g., traffic general, carrying types, air quality, etc.) – (attach additional sheets if necessary)				
INCLUDE W	are possible mitigation measures for the above-listed impacts PLEASE BE SURE TO HEN MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO BE A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):				
= =	ur agency has the following comments (attach additional sheets if necessary).				
Response pre	epared by:				
Stephanie F	Freier Senior Hazardous Materials Specialist 6/27/2022				
Name	Title Date				
ATTACHMENTS					

EMAIL TO ERC

GAVIN NEWSOM, Governor



July 25, 2022

Emma Goldsmith Stanislaus Council of Governments 1111 I Street, Suite 308 Modesto, California 95354 egoldsmith@stancog.org

Subject: 2022 Regional Transportation Plan/Sustainable Communities Strategy

Letter 2

(RTP/SCS) (Project)

**Draft Environmental Impact Report (DEIR)** 

SCH No.: 2022010019

Dear Ms. Goldsmith:

The California Department of Fish and Wildlife (CDFW) received a DEIR from the Stanislaus Council of Governments (StanCOG) for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.1

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

#### **CDFW ROLE**

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on

<sup>&</sup>lt;sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

#### PROJECT DESCRIPTION SUMMARY

**Proponent:** StanCOG

**Objective:** The proposed Project is a long-range planning document required by both State and federal law that will guide the development of transportation improvements throughout Stanislaus County. The Project contains a compilation of the transportation system improvement projects proposed by StanCOG, as the State-designated Regional Transportation Planning Agency for the County. The Project includes the Sustainable Communities Strategy (SCS) pursuant to the requirements of Senate Bill (SB) 375. Accordingly, the Project identifies transportation improvement projects and a land use scenario that would effectively meet SB 375 greenhouse gas emission requirements.

**Location:** Throughout Stanislaus County.

**Timeframe:** To the horizon year of 2046.

#### **COMMENTS AND RECOMMENDATIONS**

CDFW understands that the Project seeks to develop a transportation planning document to guide transportation development projects throughout Stanislaus County. The Project will consist of subsequent projects that may impact biological resources. Given the county-wide implications of this RTP/SCS, CDFW is concerned that subsequent projects tiering from this Program EIR (projects) could impact special-status

1 (cont'd)

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plant and animal species that have been documented in Stanislaus County per the California Natural Diversity Database (CNDDB; CNDDB 2022). These species include, but are not limited to, the State and federally threatened California tiger salamander (Ambystoma californiense), the State threatened Swainson's hawk (Buteo swainsoni), the State threatened tricolored blackbird (Agelaius tricolor), the State endangered foothill yellow-legged frog (Rana boylii), the State fully protected golden eagle (Aquila chrysaetos) and white-tailed kite (Elanus leucurus), the State endangered and fully protected bald eagle (Haliaeetus leucocephalus), the State threatened and federally endangered San Joaquin kit fox (Vulpes macrotis mutica), the State and federally endangered Harweg's golden sunburst (Pseudobahia bahiifolia), the State endangered and federally endangered hairy Orcutt grass (Orcuttia pilosa), the State endangered and federally threatened succulent owl's clover (Castilleja campestris var. succulenta), and the State species of special concern burrowing owl (Athene cunicularia), western pond turtle (Actinemys marmorata), and western spadefoot toad (Spea hammondii). While this list may not include all special-status species present in the Project area, it does provide a robust source of information as to which species could potentially be impacted.

(cont'd)

#### **Mitigation Measure BIO-1(f)**

Mitigation Measure BIO-1(f) states that if any listed species are found within the Project site during surveys prior to project ground-disturbing activities, the ITP issued by CDFW will be implemented. If an ITP was not issued, CDFW would be contacted to determine the appropriate course of action.

If biological surveys are conducted and listed species are found to be present, implementation of project activities without obtaining an ITP may result in take, as defined by Fish and Game Code section 86. Therefore, prior to ground-disturbing activities, it is recommended to contact CDFW to determine if full avoidance of listed species is possible. Full avoidance measures are necessary to avoid unauthorized take as a result of the Project; full avoidance for CTS is achieved by maintaining a minimum 50-foot no-disturbance buffer from all small mammal burrows; full avoidance for SWHA is achieved by following the City of Turlock General Plan's mitigation measure 7.4-f "Swainson's Hawk protection"; full avoidance for tricolor blackbird is achieved by implementation of a minimum 300-foot no-disturbance buffer in accordance with CDFW's "Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015" (CDFW 2015); mitigation measure BIO-1(h) and the City of Turlock General Plan's mitigation measure 7.4-e "Identify and protect nesting habitat" is acceptable for full avoidance of nesting fully protected birds; and full avoidance for SJKF is achieved by implementing the exclusion buffers and survey methods found in the USFWS's "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011).

If full avoidance is not possible, acquisition of an ITP, issued by CDFW, pursuant to Fish and Game Code section 2081 subdivision (b), may be warranted.

CDFW recommends that StanCOG encourage project proponents contact CDFW as soon as possible for early consultation prior to application for an ITP to help streamline the permit application and process.

## 4 (cont'd)

#### Lake or Streambed Alteration Agreement (LSA Agreement)

As stated in our previous comment letter dated February 3, 2022, it is likely that some project activities will be subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. If an LSA Agreement is needed, CDFW is required to comply with CEQA in the issuance or the amendment of an LSA Agreement. Therefore, for efficiency in environmental compliance, we recommend that any potential lake or stream disturbance that may result from project activities be described, and mitigation for the disturbance be developed as part of the EIR. This will reduce the need for CDFW to require extensive additional environmental review for a LSA Agreement in the future. If inadequate or no environmental review has occurred for project activities that are subject to notification under Fish and Game Code section 1602, CDFW will not be able to issue the Final LSA Agreement until CEQA analysis for the project is complete. This may lead to considerable project delays.

#### **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be found at the following link:

https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address:

CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: <a href="https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals">https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals</a>.

#### **FILING FEES**

It has been determined that the Project has the potential to impact biological resources, therefore an assessment of filing fees will be necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

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CDFW appreciates the opportunity to comment on the Project to assist StanCOG in identifying and mitigating the Project's impacts on biological resources. If you have any questions, please contact Jim Vang, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 580-3203, or by electronic mail at Jim.Vang@wildlife.ca.gov.

6 (cont'd)

Sincerely,

Bob Stafford for Julie A. Vance Regional Manager

ec: California Department of Fish and Wildlife:

LSA Program; R4LSA@wildlife.ca.gov

United States Fish and Wildlife Service Patricia Cole; Patricia\_Cole@fws.gov

#### LITERATURE CITED

- California Department of Fish and Wildlife (CDFW). 2015. Staff Guidance Regarding Avoidance of Impacts to Tricolored Blackbird Breeding Colonies on Agricultural Fields in 2015. March 19, 2015.
- CDFW. 2022. Biogeographic Information and Observation System (BIOS). https://www.wildlife.ca.gov/Data/BIOS.
- U.S. Fish and Wildlife Service. 2011. Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. United States Fish and Wildlife Service, January 2011.



#### DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

1010 10<sup>TH</sup> Street, Suite 3400, Modesto, CA 95354 Planning Phone: (209) 525-6330 Fax: (209) 525-5911 Fax: (209) 525-7759

Building Phone: (209) 525-6557

Letter 3

July 25, 2022

Emma Goldsmith 111 I Street, No. 308 Modesto, CA 95354 Address Line 4

SUBJECT: **ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE 2022 STANCOG REGIONAL** TRANSPORTATION PLAN/SUSTAINABLE COMMUNITY STRATEGIES (RTP/SCS)

SCH: 2022010019.

Stanislaus County appreciates the opportunity to review the EIR for the 2022 StanCOG RTP/SCS Planning staff has reviewed the document and provides the following comments:

#### **Executive Summary and Introduction**

Includes multiple references to Tulare County.

#### 4.2 – Agriculture & Forestry Resources

 Section 9.32.050 of the County Code, the Right to Farm Notice, would only apply to discretionary approvals of parcel maps or subdivision maps involving agricultural land, or real property located adjacent to agricultural land.

#### 4.5 - Cultural Resources

• CR-2(a) references the Northwest Information Center instead of Central California Information Center, which serves Stanislaus County.

#### 4.8 - Geology and Soils

This section contains multiple references to "I-5I-5" when referring to Interstate 5.

#### 4.12 - Land Use

• Goal 6 cited to the Land Use Element of the County's General Plan appears to be Goal 7. Goal 6 is to "Promote and protect healthy living environments."

#### 4.14 - Housing

 Goals cited to land use element of the general plan is incorrect. The goals cited are located within the County's Housing Element.

#### 4.15 - Transportation

- The County's Crows Landing Business Park (CLIBP) is referred to as closed in multiple areas of the section, which is incorrect. CLIBP has been decommissioned from military usage, however, a specific plan for a variety of light industrial and commercial uses have been adopted for the site, including the use of an existing runway for air transportation.
- Impact T-2 references a 16% VMT reduction. The remainder of the section utilizes a 15% reduction in VMT as part of the analysis, which would be consistent with OPR guidelines.

#### 4.18 - Less Than Significant Environmental Factors

 This section should reference the Appendix III-A of the County's Conservation and Open Space Element of the General Plan when discussing location of mineral resources in the unincorporated Stanislaus County.

Sincerely,

Jeremy Ballard

Jeremy Ballard, Associate Planner
Planning and Community Development Department

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#### **CHIEF EXECUTIVE OFFICE**

Jody L. Hayes CHIEF EXECUTIVE OFFICER

Patrice M. Dietrich
ASSISTANT EXECUTIVE OFFICER

Tina M. Rocha ASSISTANT EXECUTIVE OFFICER

#### STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

July 25, 2022

Ms. Emma Goldsmith, Associate Planner Stanislaus Council of Governments (StanCOG) 111 I Street #308 Modesto, CA 95354

SUBJECT:

**ENVIRONMENTAL REFERRAL – STANISLAUS COUNCIL OF GOVERNMENTS** 

DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE 2022 REGIONAL

TRANSPORTATION PLAN / SUSTAINABLE COMMUNITIES STRATEGY AND

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM

Ms.Goldsmith:

Thank you for the opportunity to review the Draft Environment Impact Report for the above-referenced project.

The Stanislaus County Environmental Review Committee (ERC) has reviewed the subject project and has no comments at this time.

The ERC appreciates the opportunity to comment on this project.

Sincerely,

Patricia Lord

Management Consultant

**Environmental Review Committee** 

PL:pl

CC:

**ERC Members** 



1010 10<sup>TH</sup> STREET, STE. 6800, MODESTO, CA 95354 POST OFFICE BOX 3404, MODESTO, CA 95353 PHONE: 209.525.6333, FAX: 209.558.4423

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## 2 Responses to Comments on the Draft EIR

This section includes comments received during the circulation of the Draft Environmental Impact Report prepared for the 2022 RTP/SCS (project).

The Draft EIR was circulated for a 45-day public review period that began on June 10, 2022 and ended on July 25, 2022. StanCOG received four (4) comment letters on the Draft EIR. In addition, StanCOG received two (2) oral comments at the StanCOG Policy Board Meeting held on June 16, 2022 at 6:00 p.m. to receive comments on the Draft RTP/SCS and EIR. The meeting was conducted in person at the StanCOG Policy Board Room, 1111 I Street, Suite 308, Modesto, CA and via Zoom. Attendees from the public included Bianca Lopez, Gavin Bruce, Patricia Lord, Perfecto Munoz, Vivian Lopez, and Matt Beekman. Responses to verbal comments from the meeting are provided after the written comment responses.

The commenters and the page number on which each commenter's letter/comment appear are listed below.

Letter/ Comment No.	Commenter	Date
1	Stephanie Freier, Senior Hazardous Materials Specialist, Stanislaus County Department of Environmental Resources – Hazardous Materials Division	6/27/2022
2	Bob Stafford for Julie A. Vance, Regional Manager, California Department of Fish and Wildlife	7/25/2022
3	Jeremy Ballard, Stanislaus County Department of Planning and Community Development	7/25/2022
4	Patricia Lord, Management Consultant, Stanislaus County Environmental Review Committee	7/25/2022
5	Bianca Lopez (Oral comments at 6/22/22 Hearing)	6/22/2022

Written responses to each comment received on the Draft EIR are provided in this section. All letters received during the public review period on the Draft EIR are provided in their entirety. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1.2, for example, indicates that the response is for the second issue raised in comment Letter 1).

Revisions to the Draft EIR necessary in light of the comments received and responses provided, or necessary to amplify or clarify material in the Draft EIR, are included in the responses. <u>Underlined</u> text represents language that has been added to the Draft EIR; text with <del>strikeout</del> has been deleted from the Draft EIR.

#### Letter 1

**COMMENTER:** Stephanie Freier, Senior Hazardous Materials Specialist, Stanislaus County

Department of Environmental Resources – Hazardous Materials Division

**DATE:** 6/27/2022

#### Response 1.1

The commenter did not have any specific comments regarding the document. The comment does not raise an environmental issue related EIR adequacy, and no further response is required.

#### Letter 2

**COMMENTER:** Bob Stafford for Julie A. Vance, Regional Manager, California Department of Fish

and Wildlife – Central Region

**DATE**: 7/25/2022

#### Response 2.1

The commenter summarizes the role and responsibilities of the California Department of Fish and Wildlife (CDFW) as a Trustee Agency and Responsible Agency. The commenter states they expect CDFW may need to exercise regulatory authority in relation to lake and streambed alterations or the "take" of species protected under the California Endangered Species Act. The commenter further explains that the CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. The commenter notes CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

The comment does not raise an environmental issue related to EIR adequacy, and no further response is required.

#### Response 2.2

The commenter summarizes the Draft EIR's project description of the proposed 2022 RTP/SCS including the project proponent, objective, location, and timeframe.

The commenter correctly summarizes the proposed project. Because the comment does not pertain to the adequacy of the EIR or CEQA process, no response is required.

#### Response 2.3

The commenter states understanding that the proposed project would implement a transportation planning document to guide transportation development projects in Stanislaus County. The commenter acknowledges that the 2022 RTP/SCS contains subsequent projects that may impact biological resources. The commenter then expresses a concern that these subsequent projects tiering from the programmatic EIR could impact special-status species that have been documented by the California Natural Diversity Database (CNDDB) in Stanislaus County. The commenter goes on to list several special-status species which have been documented by the CNDDB in the County.

Impact BIO-1 under Section 4.4.3(b) of the Draft EIR discusses potential impacts to special-status plant and animal species, including those listed under federal Endangered Species Act (ESA) and California Endangered Species Act (CESA). All species listed by the commenter are addressed by the Draft EIR, and are presented as species that have some potential to occur within the region in Appendix B. As discussed under Impact BIO-1, Mitigation Measures BIO-1(a) through BIO-1(j) would reduce impacts to special-status species habitat but would not necessarily reduce all project level impacts to a less than significant level for all species.

The commenter's concern about impacts to special-status species are noted and were taken into consideration as a part of the analysis for this Draft Programmatic EIR. Further CEQA analysis will be conducted at the sub-project level which may result in additional mitigation measures. However,

the comment does not raise an environmental issue related to Programmatic EIR adequacy or CEQA process. Therefore, no further response is required.

#### Response 2.4

The commenter summarizes Mitigation Measure BIO-1(f) and continues to recommend that, in addition to Mitigation Measure BIO-1(f) and to streamline the permit application process, StanCOG encourage the project proponent to pursue early consultation with CDFW to determine whether take authorization through acquisition of an ITP pursuant to Fish and Game Code section 2081 subdivision (b) is necessary.

The 2022 RTP/SCS EIR determines compliance with all biological resource mitigation measures, including Mitigation Measure BIO-1(f), would reduce impacts to special-status species and their habitat, but would not necessarily reduce all project level impacts to a less than significant level for all species. Complete avoidance is the only mitigation for fully protected species, which may not be feasible under some circumstances. Lastly, state and federal law already require an ITP for take of state or federally listed species, and as such, the commenter's suggestion is already assumed in the impact analysis and thus, it is unnecessary to require such a mitigation measure.

Mitigation Measures BIO-1(f) is considered adequate and enforceable. However, to address the commenter's concern regarding listed species, the following edits have been made to page 4.4-26 of the Draft EIR to clarify ITPs requirements:

Due to the programmatic nature of the 2022 RTP/SCS, a precise, project-level analysis of the specific impacts of individual transportation projects on special-status species is not possible at this time. As future transportation system improvement projects identified in the 2022 RTP/SCS are planned and designed, site-specific environmental review will be conducted by the agencies responsible for implementing such projects. In the event that impacts to listed species would occur, an incidental take permit would be required from CDFW, USFWS, and NMFS (where applicable) in compliance with CESA and ESA. However, some special-status species are expected to be encountered at the locations where projects administered under the 2022 RTP/SCS would occur. Thus, it is assumed that some resources would not be avoided and that potentially significant impacts would occur.

#### Response 2.5

The commenter restates a concern noted in their Notice of Preparation (NOP) comment letter dated February 3, 2022, that some project activities under the 2022 RTP/SCS will be subject to CDFW's regulatory authority pursuant to Fish and Game section 1600 et seq. and may require a Lake and Streambed Alternation Agreement. The commenter recommends that for efficiency in environmental compliance, potential lake or stream disturbance resulting from project activities be described and mitigated as a part of the project's EIR.

Mitigation Measure BIO-2(a) requires an aquatic resources delineation for projects that occur within or adjacent to wetland, drainage, or riparian habitat, or other areas that may fall under the jurisdiction of the CDFW, USACE and/or RWQCB. This measure also requires the results of the aquatic resources delineation be submitted to the relevant agency (e.g., CDFW) for review and approval, and requires the project be designed to minimize impacts to jurisdictional areas to the extent feasible.

State law already requires project sponsors to notify CDFW's Lake and Streambed Alteration Program pursuant to Fish and Game Code section 1600 et seq., prior to conducting any project activities that affect waters regulated under this program; thus, it is unnecessary to require such as a mitigation measure.

#### Response 2.6

The commenter restates Public Resources Code section 21003(e) and requests that any special-status species or natural communities detected during project surveys be reported to the CNDDB, provides a weblink to the CNDDB field survey form, and information regarding form submittal. The commenter also notes that filing fees, which help defray the cost of environmental review by CDFW, are payable upon filing of the NOD. The commenter additionally provides contact information, should StanCOG have any questions regarding project activities.

This comment does not raise an environmental issue related to EIR adequacy, and no further response is required.

#### Letter 3

**COMMENTER:** Jeremy Ballard, County of Stanislaus Planning and Community Development

Department

**DATE:** July 25, 2022

#### Response 3.1

This comment is introductory and states that Stanislaus County Planning staff have reviewed the Draft EIR. Responses to the County Planning staff comments are provided below in responses 3.2 through 3.10. The comment does not raise an environmental issue related to EIR adequacy, and no further response is required.

#### Response 3.2

This comment states that the Executive Summary and Introduction sections of the Draft EIR include multiple references to Tulare County. The typographical errors referencing Tulare County were corrected to Stanislaus County in the Executive Summary section of the Final EIR as detailed below. There were no references to Tulare County in Section 1.0, *Introduction*; therefore, no revisions to that section were required.

The first bullet on pages ES-1 of the Executive Summary was revised as follows:

 Provide an efficient, integrated, multi-modal transportation system for the movement of people and goods that enhances the physical, economic, and social environment in the <u>Tulare Stanislaus</u> county region.

The sixth bullet on pages ES-1 of the Executive Summary was revised as follows:

 Goods Movement: Provide a transportation system that efficiently and effectively transports goods to, from, within, and through <del>Tulare</del> Stanislaus County.

#### Response 3.3

This comment states that the Right to Farm Notice would only apply to discretionary approvals of parcel maps or subdivision maps involving or adjacent to agricultural land. The following text on page 4.2-16 in Section 4.2, *Agriculture and Forestry Resources*, of the Final EIR was revised to clarify that the Right to Farm Notice is only applicable to discretionary approvals of parcel maps or subdivision maps:

.... According to the County's Right-to-Farm Ordinance (Section 9.32.050 of the Stanislaus County Code), the County would condition projects requiring discretionary approval of parcel maps or subdivision maps permits for special uses and residential development within or adjacent to agriculture al upon recording to require a Right-to Farm statement be included on the final recorded maps. In addition, the County is required to provide a Right-to-Farm Notice to all applicants requesting a building permit for new residential or mobile home development adjacent to agricultural land. Thus, residents moving into these areas in the vicinity of existing agricultural activities should be prepared to experience discomfort or inconveniences arising from typical agricultural operations, and that an established agricultural operation shall not be considered a nuisance due to changes in the surrounding

area. The right-to-farm ordinance promotes understanding and cooperation between urban residents and agricultural operators.

#### Response 3.4

This comment states that Mitigation Measure CR-2(a) in the Draft EIR references the Northwest Information Center instead of the Central California Information Center. The information center was corrected as follows in Mitigation Measure CR-2(a) on page ES-23 in the Executive Summary and on page 4.5-20 in Section 4.5, *Cultural Resources*, of the Final EIR:

#### CR-2(a) Archaeological Resources Impact Minimization

Before construction activities, implementing agencies shall, or can and should, retain a qualified archaeologist to conduct a record search at the Northwest Central California Information Center to determine whether the project area has been previously surveyed and whether resources were identified...

#### Response 3.5

This comment states that Interstate 5 is misnamed as I-5I-5 in Section 4.8, *Geology and Soils*, of the Draft EIR. The references to Interstate 5 were corrected to I-5 as follows:

Page 4.8-4:

#### **Earthquake Faults**

....Although no active faults are known to exist in the San Joaquin Valley floor, several known active faults exist in the Diablo Range west of I-5I-5 and in the eastern part of the StanCOG region (Stanislaus County 2016a). In particular, the Ortigalita Fault, located in the Diablo Range approximately 13.4 miles southwest of the City of Newman, is designated as an Alquist-Priolo Earthquake Fault Zone. Two faults that have experienced displacement within the last 1.6 million years have also been identified in the San Joaquin Valley. The San Joaquin Fault crosses I-5I-5 approximately seven miles southwest of the City of Newman...

Page 4.8-4:

#### **Ground-shaking**

...The most intense ground-shaking potential occurs in the western half of the StanCOG region, particularly to the east of I-5<del>I-5</del>, through Patterson and Newman...

Page 4.8-6:

#### Slope Stability

Unstable geologic formations that are susceptible to landslides in the County occur in the Diablo Range to the west of I-5I-5 and along river bluffs (Stanislaus County 2016a; OES 2017). Virtually the entire area located west of I-5I-5-is composed of geological formations that, due to structure, slope, runoff, lack of vegetation, earthquake and human activity, are considered extremely susceptible to failure and sliding...

Page 4.8-19:

#### Stanislaus County General Plan

...Additionally, Policy Four requires development west of I-5<del>I-5-</del>in areas susceptible to landslides to present a geological report and follow any mitigation measures necessary to reduce potential impacts regarding landslides.

#### Response 3.6

This comment states that Goal 7 of the County General Plan Land Use Element was mis-cited as Goal 6 in Section 4.12, *Land Use*, of the Draft EIR. The list of goals from the Land Use Element was corrected as follows on page 4.12-6 of Section 4.12, *Land Use*, of the Final EIR:

Stanislaus County General Plan

- Goal Six: Promote and protect healthy living environments.
- Goal <u>Seven</u> <del>Six.</del> Provide for direct citizen participation in land-use decisions involving
  the expansion of residential uses into agricultural and open-space areas in order to
  encourage compact urban form and to preserve agricultural land.

#### Response 3.7

This comment states that Section 4.14, *Population and Housing*, of the Draft EIR mis-cites Housing Element goals as Land Use Element goals. It is unclear which goals the commenter is referring to. The Housing Element goals are correctly cited on in Section 4.14.1.c of the Draft EIR. Therefore, no revisions to the Final Program EIR are required.

#### Response 3.8

This comment states that Section 4.15, *Transportation*, of the Draft EIR incorrectly states that the County's Crows Landing Business Park is closed. The comment also states that the CLIBP was decommissioned for military use; however, a specific plan was adopted which allows the re-use of the existing runway for air transportation. The discussion of County airports was revised on page 4.15-7 of the Final EIR to clarify the future plans to reopen the Crows Landing airport. Additionally, as part of this response, two sources were added to Section 7.0, *References*, on page 7.0-25.

Page 4.15-7:

#### Air Transportation

Stanislaus County currently has nine eight operational private and public airports and heliports (Federal Aviation Administration [FAA] 2018). Stanislaus County also contains the publicly owned and privately used Crows Landing Airport, formerly the Crows Landing Naval Auxiliary Landing Field (County of Stanislaus 2016b); however, this airport is currently closed but is planned for future reuse closed indefinitely, according to the FAA (FAA 2018). In 2018, the County Board of Supervisors adopted an Airport Layout Plan for the 370-acre Crows Landing Airport, which is part of the planned Crows Landing Industrial Business Park and Airfield Specific Plan. Airport improvements are anticipated to be completed by 2038 (Crows Landing Industrial Business Park and Airfield 2020 and 2022). As shown in Table 4.15-3, one

of the nine eight operational aeronautical facilities in the StanCOG region one is a heliport: the privately owned and privately used Emanuel Medical Center heliport. The eight operational airports in Stanislaus County, and their affiliated ownership and use, are also listed in Table 4.15-3, below.

Table 4.15-1 Airports and Heliports in StanCOG Region

Name of Facility	Type of Facility	Ownership <sup>1</sup>	Use <sup>1</sup>	Airport Status Code <sup>2</sup>
Crows Landing	Airport	PU	PR	CI
Flying Bull	Airport	PR	PR	0
Mapes Ranch	Airport	PR	PR	0
Modesto City-County Airport	Airport	PU	PU	0
Oakdale Municipal Airport	Airport	PU	PU	0
Del Mar Farms	Airport	PR	PR	0
Emanuel Medical Center	Heliport	PR	PR	0
Turlock Airpark	Airport	PR	PR	0
Valley Crop Dusters, Inc	Airport	PR	PR	0
Crows Landing	Airport	PU	PR	Cl

<sup>1.</sup> PU = Public; PR = Private

Source: FAA 2018

Page 7.0-25:

#### Transportation

<u>Crows Landing Industrial Business Park and Airfield. 2020. Short Fact Sheet.</u>
<a href="https://www.crowsbizpark.biz/pdf/factsheet\_short.pdf">https://www.crowsbizpark.biz/pdf/factsheet\_short.pdf</a> (accessed July 27, 2022)

2022. A New Airport for Stanislaus County. https://www.crowsbizpark.biz/airport.shtm (accessed July 27, 2022)

#### Response 3.9

This comment states that Impact T-2 in Section 4.15, *Transportation*, of the Draft EIR references a 16 percent reduction in Vehicle Miles Travelled (VMT) but the analysis refers to a 15 percent reduction. The 16 percent was a typographical error, and this change does not alter the Draft EIR conclusion. The threshold for VMT reduction has been corrected to read 15 percent as follows on page 4.15.24 in Section 4.15, *Transportation*, of the Final EIR:

<sup>2.</sup> CI = Closed. Planned for reopening by 2038. Closed Indefinitely; O = Operational

# **Threshold 2:** The project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), specifically resulting in

- An overall increase in total regional VMT above baseline (2020) conditions would be considered a significant impact;
- A change in VMT per capita in the region that fails to reach <u>15</u> <u>16</u> percent below baseline (2020) VMT per capita conditions would be considered a significant impact; or
- c. A substantial increase in induced travel due to roadway capacity expansions would be considered a significant impact.

#### Response 3.10

This comment states that references to mineral resources in Section 4.18, *Less than Significant Environmental Factors*, of the Draft EIR should reference Appendix III-A of the County General Plan Conservation and Open <u>Space</u> Element. The analysis of Section 4.18.3, *Mineral Resources*, is consistent with the Mineral Resources section of the County General Plan Land Use Element (page I-31 and I-32). Therefore, no revisions to the Final Program EIR are required.

#### Letter 4

**COMMENTER:** Patricia Lord, Management Consultant, Stanislaus County Environmental Review

Committee

**DATE:** 7/25/2022

#### Response 4.1

The commenter expressed appreciation for the opportunity to review the document and had no specific comments. The comment does not raise an environmental issue related EIR adequacy, and no further response is required.

#### Comment 5

**COMMENTER:** Bianca Lopez

**DATE:** 6/22/2022

#### Verbal Comment 1

The commenter states that some public presentations were translated into Spanish, however, asks if the Environmental Impact Report, being a large, dense document, will be translated into Spanish.

Federal and/or state funding is not provided for a translation of this document and would be an expense beyond the scope of the allotted budget. Outreach was made for public participation and live translations were provided for public meetings. The comment does not raise issue with the adequacy of EIR or CEQA process, and no further action is required.

#### Verbal Comment 2

The commenter mentions that Section 4.7, *Environmental Justice*, states that no mitigation measures are feasible, and impacts would remain significant and unavoidable. The commenter stated that this is unacceptable.

The commenter correctly identifies Impact EJ-1 as a significant and unavoidable impact. As discussed in the impact section starting on page 4.7-8, short term impacts to air quality and noise from construction may disproportionally affect minority and/or low-income populations living near transportation and land use projects and the identified mitigation for those impacts would not necessarily mitigate impacts to a less than significant level. This section also identifies potential long-term impacts from diesel exhaust as potentially significant and states that no feasible mitigation measures exist that would reduce this impact. The StanCOG Board will be required to adopt a statement of overriding considerations for this significant impact. The commenter's opinion about this significant and unavoidable impact being unacceptable is noted and hereby shared with decision makers for their consideration.

Because the commenter reiterates a significant and unavoidable impact already described in the Draft EIR, this comment does not require a revision to the Draft EIR.

2-12

## 3 Amendments to the Draft EIR

This section provides a summary record of all text amendments to the Draft EIR. Most amendments are the result of comments received during the public review period, and directly respond to those comments, or correct typographical errors within the Draft EIR. None of the changes would warrant recirculation of the EIR pursuant to CEQA Guidelines Section 15088.5. The amendments serve to clarify and strengthen the content of the EIR, but do not introduce significant new information.

Changes in text are signified by strikeouts (strikeouts) where text is removed and by underlined font (underline font) where text is added. Other minor clarifications and corrections to typographical errors are also shown as corrected in this format, including corrections not based on responses to comments.

#### **Executive Summary**

#### Pages ES-1 and ES-2

The first bullet on pages ES-1 of the Executive Summary was revised as follows:

 Provide an efficient, integrated, multi-modal transportation system for the movement of people and goods that enhances the physical, economic, and social environment in the <u>Tulare Stanislaus</u> county region.

The sixth bullet on pages ES-1 of the Executive Summary was revised as follows:

 Goods Movement: Provide a transportation system that efficiently and effectively transports goods to, from, within, and through <u>Tulare Stanislaus</u> County.

#### Section 4.2, Agriculture and Forestry Resources

#### Page 4.2-16

.... According to the County's Right-to-Farm Ordinance (Section 9.32.050 of the Stanislaus County Code), the County would condition <u>projects requiring</u> discretionary <u>approval of parcel maps or subdivision maps permits for special uses and residential development</u> within or adjacent to agriculture al upon recording to require a Right-to Farm statement be included on the final recorded maps. In addition, the County is required to provide a Right-to-Farm Notice to all applicants requesting a building permit for new residential or mobile home development adjacent to agricultural land.

#### Section 4.5, Cultural Resources

#### Page 4.5-20

CR-2(a) Archaeological Resources Impact Minimization

Before construction activities, implementing agencies shall, or can and should, retain a qualified archaeologist to conduct a record search at the Northwest-Central California Information Center to determine whether the project area has been previously surveyed and whether resources were identified...

#### Section 4.8, Geology and Soils

#### Page 4.8-4

....Although no active faults are known to exist in the San Joaquin Valley floor, several known active faults exist in the Diablo Range west of I-5I-5 and in the eastern part of the StanCOG region (Stanislaus County 2016a). In particular, the Ortigalita Fault, located in the Diablo Range approximately 13.4 miles southwest of the City of Newman, is designated as an Alquist-Priolo Earthquake Fault Zone. Two faults that have experienced displacement within the last 1.6 million years have also been identified in the San Joaquin Valley. The San Joaquin Fault crosses I-5I-5 approximately seven miles southwest of the City of Newman...

#### Page 4.8-4

...The most intense ground-shaking potential occurs in the western half of the StanCOG region, particularly to the east of I-5<del>I-5</del>, through Patterson and Newman...

#### Page 4.8-6

Unstable geologic formations that are susceptible to landslides in the County occur in the Diablo Range to the west of I-5I-5 and along river bluffs (Stanislaus County 2016a; OES 2017). Virtually the entire area located west of I-5I-5-is composed of geological formations that, due to structure, slope, runoff, lack of vegetation, earthquake and human activity, are considered extremely susceptible to failure and sliding...

#### Page 4.8-19

...Additionally, Policy Four requires development west of I-5<del>I-5</del>-in areas susceptible to landslides to present a geological report and follow any mitigation measures necessary to reduce potential impacts regarding landslides.

#### Section 4.12, Land Use

#### Page 4.12-6

Stanislaus County General Plan

- Goal Six: Promote and protect healthy living environments.
- Goal <u>Seven</u> <u>Six</u>. Provide for direct citizen participation in land-use decisions involving
  the expansion of residential uses into agricultural and open-space areas in order to
  encourage compact urban form and to preserve agricultural land.

#### Section 4.15, Transportation

#### Page 4.15-7

#### Air Transportation

Stanislaus County currently has nine eight operational private and public airports and heliports (Federal Aviation Administration [FAA] 2018). Stanislaus County also contains the publicly owned and privately used Crows Landing Airport, formerly the Crows Landing Naval Auxiliary Landing Field (County of Stanislaus 2016b); however, this airport is currently closed but is planned for future reuse closed indefinitely, according to the FAA (FAA 2018). In 2018, the County Board of Supervisors adopted an Airport Layout Plan for the 370-acre Crows

Landing Airport, which is part of the planned Crows Landing Industrial Business Park and Airfield Specific Plan. Airport improvements are anticipated to be completed by 2038 (Crows Landing Industrial Business Park and Airfield 2020 and 2022). As shown in Table 4.15-3, one of the nine operational aeronautical facilities in the StanCOG region is a heliport: the privately owned and privately used Emanuel Medical Center heliport. The eight operational airports in Stanislaus County, and their affiliated ownership and use, are also listed in Table 4.15-3, below.

Table 4.15-1 Airports and Heliports in StanCOG Region

Name of Facility	Type of Facility	Ownership <sup>1</sup>	Use <sup>1</sup>	Airport Status Code <sup>2</sup>
Crows Landing	Airport	PU	PR	CI
Flying Bull	Airport	PR	PR	0
Mapes Ranch	Airport	PR	PR	0
Modesto City-County Airport	Airport	PU	PU	0
Oakdale Municipal Airport	Airport	PU	PU	0
Del Mar Farms	Airport	PR	PR	0
Emanuel Medical Center	Heliport	PR	PR	0
Turlock Airpark	Airport	PR	PR	0
Valley Crop Dusters, Inc	Airport	PR	PR	0
Crows Landing	Airport	PU	PR	CI

<sup>1.</sup> PU = Public; PR = Private

Source: FAA 2018

Page 4.15-24

# **Threshold 2:** The project would conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), specifically resulting in

- a. An overall increase in total regional VMT above baseline (2020) conditions would be considered a significant impact;
- A change in VMT per capita in the region that fails to reach <u>15</u> <del>16</del> percent below baseline (2020) VMT per capita conditions would be considered a significant impact; or
- c. A substantial increase in induced travel due to roadway capacity expansions

would be considered a significant impact.

#### Section 7.0, References

Page 7.0-25

#### **Transportation**

<sup>2.</sup> CI = Closed. Planned for reopening by 2038. Closed Indefinitely; O = Operational

#### 2022 Regional Transportation Plan & Sustainable Communities Strategy

<u>Crows Landing Industrial Business Park and Airfield. 2020. Short Fact Sheet.</u>
<a href="https://www.crowsbizpark.biz/pdf/factsheet\_short.pdf">https://www.crowsbizpark.biz/pdf/factsheet\_short.pdf</a> (accessed July 27, 2022)

. 2022. A New Airport for Stanislaus County. https://www.crowsbizpark.biz/airport.shtm (accessed July 27, 2022)

# 4 Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Final Environmental Impact Report (Final EIR), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
Aesthetic and Visual Resources				
AES-1 (a) Discouragement of Architectural Fea	tures that Block Science Views			
The implementing agency shall, or can and should, design projects to minimize contrasts in scale and massing between the project and surrounding natural forms and development. Setbacks and acoustical design of adjacent structures shall be preferentially used as mitigation for potential noise impacts arising from increased traffic volumes associated with adjacent land development. The use of sound walls, or any other architectural features that could block views from the scenic highways or other view corridors, shall be discouraged to the extent possible. Where use of sound walls is found to be necessary, walls shall incorporate offsets, accents, and landscaping to prevent monotony. In addition, sound walls shall be complementary in color and texture to surrounding natural features	Confirm that architectural plans, noise walls, and building plans satisfy the design standards, components and materials incorporate offsets, accents, and landscaping to prevent monotony. In addition, confirm sound walls shall be complementary in color and texture to surrounding natural features  Confirm structures and walls are constructed consistent with plans.	During project permitting and environmental review.	Site Plan Review and during construction.	Implementing agencies/ project sponsor.
AES-1 (b) Tree Protection and Replacement				
The implementing agency for new roadways, extensions and widenings of existing roadways, trails and facility improvement projects shall, or can and should, avoid the removal of existing mature trees to the extent possible consistent with adopted local City and County policies as applicable. The implementing agency of a particular proposed	Grading and site plans shall avoid the removal of existing mature trees to the extent possible.  Place conditions of approval on project to require tree replacement at a minimum 2:1 ratio.	During project permitting and environmental review for roadway extensions and widening projects.	Monitor survivability of replacement trees periodically following construction.	Implementing agencies/ project sponsor.

Mitigation Measure 2022 RTP/SCS project shall replace any trees lost at a minimum 2:1 basis and incorporate them into the landscaping design for the roadway when feasible, or as required by local or County requirements. The implementing agency also shall ensure the continued vitality of replaced trees through periodic maintenance.	Action Required  Maintain replacement trees to ensure their success.	Timing	Monitoring Requirements	Responsible Agency
AES-2 (a) Recontouring for Adjacent Landforms Where a particular 2022 RTP/SCS project affects adjacent landforms, the local jurisdiction in which the project is located should ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade. This requirement can be accomplished through the placement of conditions on the project by the implementing agency during the project specific environmental review.	Smooth and gradual transitions between modified landforms and existing structures.	During project permitting and environmental review.	Site Plan Review and during construction.	Implementing agencies/ project sponsor.
AES-2 (b) Landscaping for Landform Variation  The local jurisdiction in which a particular project is located should ensure that associated landscape materials and design enhance landform variation, provide erosion control and blend with the natural setting. This requirement can be accomplished through the placement of conditions on the project by the local jurisdiction during individual environmental review. To ensure compliance with approved landscape plans,	Ensure that landscape materials and design enhance landform variation, provide erosion control and blend with natural setting.  Confirm structures and walls are constructed consistent with plans.	During project permitting and environmental review.	Site Plan Review and during construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
the implementing agency should provide a performance security equal to the value of the landscaping/irrigation installation.				
AES-2 (c) Design Measures for Visual Compatib	pility			
The implementing agency shall, or can and should, require measures that minimize contrasts in scale and massing between the project and surrounding natural forms and developments. Strategies to achieve this include:  Siting or designing projects to minimize their intrusion into important viewsheds; Avoiding large cuts and fills when the visual environment (natural or urban) would be substantially disrupted; Ensuring that re-contouring provides a smooth and gradual transition between modified landforms and existing grade; Developing transportation systems to be compatible with the surrounding environments (e.g., colors and materials of construction material; scale of improvements); Designing and installing landscaping to add natural elements and visual interest to soften hard edges, as well as to restore natural features along corridors where possible after widening, interchange modifications, re-alignment, or construction of ancillary facilities; and	Ensure grading plans and landscape plans avoid large cut and fills, provide re-contouring, replace trees, and restore vegetation cover.  Confirm that architectural plans and building plans incorporate design compatible with surrounding existing structures.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>Designing new structures to be compatible in scale, mass, character, and architecture with existing structures.</li> </ul>				
AES-3(a) Roadway and Project Lighting				
The implementing shall, or can and should, minimize roadway lighting to the extent possible, consistent with safety and security objectives, and shall not exceed the minimum height requirements of the local jurisdiction in which the project is proposed. This may be accomplished through the use of back shields, hoods, low intensity lighting, and using as few lights as necessary to achieve the goals of the project. As part of planning, design, and engineering for projects, project sponsors shall ensure that projects proposed near light sensitive uses avoid substantial spillover lighting. Potential design measures include, but are not limited to, the following:  Lighting shall consist of cutoff-type fixtures that cast low-angle illumination to minimize incidental spillover of light into adjacent properties and undeveloped open space. Fixtures that project light upward or horizontally shall not be used.  Lighting shall be directed away from habitat and open space areas adjacent to the project site. Light mountings shall be downcast, and the	Confirm that site plans satisfy the lighting requirements listed in the mitigation measure.  Confirm lights are installed as described and shown on site plans.	During project permitting and environmental review.	Once during plan review. Once at completion of construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
height of the poles minimized to reduce potential for backscatter into the nighttime sky and incidental spillover of light onto adjacent private properties and undeveloped open space. Light poles will be 20 feet high or shorter. Luminary mountings shall have non-glare finishes.  Exterior lighting features shall be directed downward and shielded in order to confine light to the boundaries of the subject project. Where more intense lighting is necessary for safety purposes, the design shall include landscaping to block light from sensitive land uses, such as residences.				
AES-3(b) Glare Reduction Measures				
<ul> <li>Implementing agencies shall, or can and should, minimize and control glare from transportation and land use projects near glare-sensitive uses through the adoption of project design features such as:</li> <li>Creating tree wells in existing sidewalks;</li> <li>Planting trees along transportation corridors to reduce glare from the sun;</li> <li>Adding trees in new curb extensions and traffic circles;</li> <li>Adding trees to public parks and greenways;</li> </ul>	Confirm that development and building plans satisfy the lighting requirements listed in the mitigation measure.  Confirm lights are installed as described and shown on plans.	During project permitting and environmental review.	Once during plan review. Once at completion of construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>Landscaping off-street parking areas, loading areas, and service areas;</li> <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;</li> <li>Using low-reflective glass;</li> <li>Complying with applicable general plan policies, municipal code regulations, city or local controls related to glare; and</li> <li>Tree species planted to comply with this measure shall provide substantial shade cover when mature. Utilities shall be installed underground along these routes wherever feasible to allow trees to grow and provide shade without need for severe pruning.</li> </ul>				
Agriculture and Forestry Resources				
AG-1 Agricultural Land Impact Avoidance and N	Minimization			
<ul> <li>Implementing agencies shall implement measures, where feasible based on project-and site-specific considerations that include but are not limited to those identified below.</li> <li>Require project relocation or corridor realignment, where feasible, to avoid Important Farmland, agriculturally zoned</li> </ul>	Require project relocation or corridor realignment into project-specific design plans or environmental review.  Require use of BMPs to minimize invasive species introduction during construction.	During project permitting and environmental review.	Once	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>land and/or land under Williamson Act contract.</li> <li>Manage project construction to minimize the introduction of invasive species or weeds that may affect agricultural production on agricultural land adjacent to project sites. Managing project construction may include washing construction equipment before bringing equipment on-site, using certified weedfree straw bales for construction Best Management Practices (BMPs), and other similar measures.</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 improvements and/or</li> </ul>	Require the use of design features to protect surrounding agriculture. Require acquisition of conservation easements at a minimum 1:1 ratio.	Timing	Requirements	Agency
development included as a part of the RTP/SCS.  Air Quality				
AQ-1 PM Emissions Reduction.				
the maximum extent feasible, that the	Review projects for conformance and implementation of the listed measures Conduct forums and workshops	During project permitting and environmental review.	Once during plan review Periodically conduct forums and workshops	Implementing agencies/ project sponsor

during

construction

review.

Prior to issuance of

during construction

grading permits;

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
implementation of the CARB Carl Moyer Program, which is intended to retrofit and replace trucks and locomotives to reduce particulate matter.  b. Incentivize the reduction of mobile PM emissions from mobile exhaust and entrained PM sources such as tire wear, brake wear, and roadway dust through funding.  c. Hold forums and workshops to encourage land use projects to incorporate transportation demand management (TDM) strategies as part of the project design to reduce the number of vehicular trips across the transportation network. Potential strategies could include ridesharing, carpooling, subsidized public transit, flexible work hours, and parking management measures				
AQ-2 (a) Application of SJVAPCD Feasible Mit	tigation Measures			
For all projects, the implementing agency shall incorporate the most recent SJVAPCD feasible construction mitigation measures	Construction plans shall show SJVAPCD standard dust control measures; implementing agency shall	During project permitting and environmental	Once during plan review; periodically	Implementing agencies/ project

ensure implementation.

and/or technologies for reducing inhalable

modified measures may be adopted by

SJVAPCD prior to implementation of

particles based on analysis of individual sites

and project circumstances. Additional and/or

individual projects under the proposed 2022

sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
RTP/SCS; therefore, the most current list of				
feasible mitigation measures at the time of				
project implementation shall be used. The				
current SJVAPCD feasible mitigation measures				
include the following (SJVAPCD 2015b):				
<ul> <li>All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively</li> </ul>				
stabilized of dust emissions using water, chemical stabilizer/suppressant, covered				
with a tarp or other suitable cover or				
vegetative ground cover.				
<ul> <li>All land clearing, grubbing, scraping,</li> </ul>				
excavation, land leveling, grading, cut and				
fill, and demolition activities shall be				
effectively controlled of fugitive dust				
emissions utilizing application of water or				
by presoaking.				
<ul> <li>When materials are transported off-site, all</li> </ul>				
material shall be covered, or effectively				
wetted to limit visible dust emissions, and				
at least six inches of freeboard space from				
the top of the container shall be maintained.				
<ul><li>Following the addition of materials to, or</li></ul>				
the removal of materials from, the surface				
of outdoor storage piles, said piles shall be				
effectively stabilized of fugitive dust				

emissions utilizing sufficient water or chemical stabilizer/suppressant.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.</li> <li>Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use.</li> </ul>				
AQ-2 (b) Diesel Equipment Emissions Standard	s			
The implementing agency shall ensure, to the maximum extent feasible, that diesel construction equipment meeting CARB Tier 4 emission standards for off-road heavy-duty diesel engines is used. If use of Tier 4 equipment is not feasible, diesel construction equipment meeting Tier 3 (or if infeasible, Tier 2) emission standards shall be used. These measures shall be noted on all construction plans, and the implementing agency shall perform periodic site inspections.	Construction plans shall ensure that that construction equipment is subject to the CARB Regulation for Inuse Off-road Diesel Vehicles and, if feasible, construction equipment meets Tier 4 standards or at least Tier 2 standards with retrofitted Level 3 VDECS, if available; and perform periodic site inspections.	During project permitting and environmental review. Prior to issuance of grading permits; during construction.	Once during project plan review; periodically during construction	Implementing agencies/ project sponsor.
AQ-2 (c) Electric Construction Equipment				
The implementing agency shall ensure that to the extent feasible, construction equipment utilizes electricity from power poles rather than temporary diesel power generators and/or gasoline power generators.	Construction plans shall ensure that electricity from power poles is used to the extent possible.	During project permitting and environmental review. Prior to issuance of grading permits; during construction	Once during project plan review; periodically during construction	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
AQ-3 Long-term Regional Operational Emission	ns			
<ul> <li>Implementing agencies can and should implement long-term operational emissions reduction measures. Such reduction measures include the following:         <ul> <li>Require that all interior and exterior architectural coatings for all developments utilize coatings following SJVAPCD Rule 4601, Architectural Coatings.</li> <li>Increase building envelope energy efficiency standards in excess of applicable building standards and encourage new development to achieve zero net energy use.</li> <li>Install energy-efficient appliances, interior lighting, and building mechanical systems. Encourage installation of solar panels for new residential and commercial development.</li> <li>Locate sensitive receptors more than 500 feet of a freeway, 500 feet of urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.</li> <li>Locate sensitive receptors more than 1,000 feet of a major diesel rail service or railyards. Where adequate buffer cannot be implemented, implement the following:</li></ul></li></ul>	Require coatings compliant with SJVAPCD Rule 4601.	During project permitting and environmental review. Periodically during operation.	Once during project-level environmental review; periodically during operation.	Implementing agencies/ project sponsor.

Mitigation Measure Action Required Timing Requirements Agency			Monitoring	Responsible
	Mitigation Measure	Action Required		Agency

reduce pollution exposure for residents and other sensitive populations in buildings that are close to transportation network improvement projects.

- ☐ Use air filtration devices rated MERV-13 or higher.
- Plant trees and/or vegetation suited to trapping roadway air pollution and/or sound walls between sensitive receptors and the pollution source. The vegetation buffer should be thick, with full coverage from the ground to the top of the canopy Install higher efficacy public street and exterior lighting.
- Use daylight as an integral part of lighting systems in buildings.
- Use passive solar designs to take advantage of solar heating and natural cooling.
- Install light colored "cool" roofs, cool pavements.
- Install solar and tankless hot water heaters.
- Exclude wood-burning fireplaces and stoves.
- Incorporate design measures and infrastructure that promotes safe and efficient use of alternative modes of transportation (e.g., neighborhood electric

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
vehicles, bicycles) pedestrian access, and public transportation use. Such measures may include incorporation of electric vehicle charging stations, bike lanes, bicycle-friendly intersections, and bicycle parking and storage facilities.  Incorporate design measures that promote ride sharing programs (e.g., by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides).				
AQ-1 PM Emissions Reduction				
The implementing agency shall ensure, to the maximum extent feasible, that the following measures are implemented:  a. Support the use of existing air quality and transportation funds and seek additional funds to continue the implementation of the CARB Carl Moyer Program, which is intended to retrofit and replace trucks and locomotives to reduce particulate matter.  b. Incentivize the reduction of mobile PM emissions from mobile exhaust and entrained PM sources such as tire wear, brake wear, and roadway dust through funding.	Ensure PM emissions are reduced using measures in this mitigation such as such as continued implementation of CARB.	During construction as applicable; during operation.	Periodically during construction	Implementing agencies/ project sponsor.

Mitigation Measure  c. Hold forums and workshops to encourage land use projects to incorporate transportation demand management (TDM) strategies as part of the project design to reduce the number of vehicular trips across the transportation network. Potential strategies could include ridesharing, carpooling, subsidized public transit, flexible work hours, and parking management measures.	Action Required	Timing	Monitoring Requirements	Responsible Agency
AQ-5 Health Risk Reduction Measures				
Transportation project sponsor agencies shall implement the following measures:  ■ During project-specific design and CEQA review, the potential localized particulate (PM₁0 and PM₂.5) impacts and their health risks shall be evaluated for individual projects. Localized particulate matter concentrations shall be estimated using procedures and guidelines consistent with U.S. EPA 2015's Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM₂.5 and PM₁0 Nonattainment and Maintenance Areas. If required based on the project-level hotspot analysis, project-specific mitigation shall be added to the project design concept or scope to ensure that local particulate (PM₁0 and PM₂.5) emissions would not reach a concentration at any location that would	Retain air quality consultant to conduct project-level hot spot analysis.  Ensure a project-level HRA is prepared by a qualified air quality consultant.  Ensure project-level environmental review and site plans incorporate the measures to reduce particulate impacts, as listed in this mitigation measure	During project permitting and environmental review; during construction as applicable; during operation.	Once during project-level environmental review; periodically during construction; following construction, during operation.	Implementing agencies/project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

cause estimated cancer risk to exceed the SJVAPCD threshold of 20 in one million. Per the U.S. EPA guidance (2015), potential mitigation measures to be considered may include but shall not be limited to: providing a retrofit program for older higher emitting vehicles, anti-idling requirements or policies, controlling fugitive dust, routing traffic away from populated zones and replacing older buses with cleaner buses. These measures can and should be implemented to reduce localized particulate impacts as needed.

- Retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with CARB and OEHHA requirements to determine the exposure of nearby residents to TAC concentrations.
- If impacts result in increased risks to sensitive receptors above significance thresholds, plant trees and/or vegetation suited to trapping TACs and/or sound walls between sensitive receptors and the pollution source.

In addition, consistent with the general guidance contained in CARB's Air Quality and Land Use Handbook (2005) and Technical Advisory on Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways (2017), appropriate and feasible measures

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

shall be incorporated into project building design for land use projects including residential, school and other sensitive uses located within 500 feet (or other appropriate distance as determined by the lead agency) of freeways, heavily travelled arterials, railways and other sources of diesel particulate matter, including roadways experiencing significant vehicle delays. The appropriate measures shall include one or more of the following methods, as appliable and as determined by a qualified professional. The implementing agency shall incorporate health risk reduction measures based on an analysis of individual sites and project circumstances. These measures may include:

- Avoid siting new sensitive land uses within 500 feet of a freeway or railway.
- Require development projects for new sensitive land uses to be designed to minimize exposure to roadway-related pollutants to the maximum extent feasible through inclusion of design components including air filtration and physical barriers.
- Do not locate sensitive receptors near the entry and exit points of a distribution center.
- Locate structures and outdoor living areas for sensitive uses as far as possible from the source of emissions. As feasible, locate

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
doors, outdoor living areas and air intake				
vents primarily on the side of the building away from nearby high volume roadways				
or other pollution source. As feasible,				
incorporate dense, tiered vegetation that				
regains foliage year-round and has a long				
life span between the pollution source and				
the project.				
<ul> <li>Maintain a 50-foot buffer from a typical</li> </ul>				
gas dispensing facility (under 3.6 million				
gallons of gas per year).				
<ul> <li>Install, operate, and maintain in good working order a central heating and</li> </ul>				
ventilation (HV) system or other air take				
system in the building, or in each individual				
residential unit, that meets the efficiency				
standard of the MERV 13. The HV system				
should include the following features:				
☐ Installation of a high efficiency filter				
and/or carbon filter-to-filter particulates and other chemical matter from				
entering the building.				
☐ Use of either HEPA filters or ASHRAE 85				
percent supply filters.				
<ul> <li>Completion of ongoing maintenance.</li> </ul>				
<ul> <li>Retain a qualified HV consultant or Home</li> </ul>				
Energy Rating Systems rater during the				
design phase of the project to locate the				
HV system based on exposure modeling				

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
from the mobile and/or stationary pollutant sources.  Maintain positive pressure within the building.  Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air.  Achieve a performance standard of at least four air exchanges per hour of recirculation. Achieve a performance standard of 0.25 air exchanges per hour of unfiltered infiltration if the building is not positively pressurized.  Require project owners to provide a disclosure statement to occupants and buyers summarizing technical studies that reflect health concerns about exposure to	Treation recipients			
highway/freeway exhaust emissions.				
Biological Resources				
BIO-1 (a) Biological Resources Screening and As			_	
The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. On a project-by-project basis, a preliminary biological resource screening shall be performed to determine whether the project has any potential to impact biological resources. If it is determined that the project has no potential to impact biological resources, no further	Ensure preliminary biological resource screening to determine whether the project has any potential to impact biological resources and incorporate measures listed in this mitigation measure if impacts are found. Retain a qualified biologist to conduct a biological resources assessment (BRA) if the	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

Monitoring Responsible
Mitigation Measure Action Required Timing Requirements Agency

action is required. If the project would have the potential to impact biological resources, prior to construction, a qualified biologist shall conduct a biological resources assessment (BRA) or similar type of study to document the existing biological resources within the project footprint plus an appropriate buffer determined by a qualified biologist and to determine the potential impacts to those resources. The BRA shall evaluate the potential for impacts to all sensitive biological resources including, but not limited to special-status species, nesting birds, wildlife movement, sensitive plant communities/critical habitat and other resources judged to be sensitive by local, state, and/or federal agencies. Pending the results of the BRA, design alterations, further technical studies (i.e., protocol surveys) and/or consultations with the USFWS, CDFW and/or other local, state, and federal agencies may be required. The following Mitigation Measures [BIO-1(b) through BIO-1(i)] shall be incorporated, only as applicable, into the BRA and/or the project CEQA document for projects where specific resources are present, or may be present, and may be impacted by the project. Note that specific surveys described in the mitigation measures below may be completed as part of the BRA where suitable habitat is present

project would have potential to impact biological resources.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
BIO-1(b) Special-Status Plant Species Surveys				
If completion of the project-specific biological resources assessment determines that special-status plant species have potential to occur on-site, the implementing agency shall contract a qualified biologist to complete surveys for special-status plants prior to any vegetation removal, grubbing, or other construction activity of each project (including staging and mobilization). The surveys shall be floristic in nature and shall be seasonally timed to coincide with the target species identified in the project-specific BRA. Whenever practicable, surveys shall be conducted in accordance with the most current protocols established by the CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the implementing agency for review. If special-status plant species are identified, mitigation measure BIO-1(c) shall apply.	If there is a potential for special-status plant species to occur on site, surveys for special status plants shall be completed.  Ensure a report of the survey is provided to the implementing agency for review.	During project permitting and environmental review; prior to construction but no earlier than one year before construction commences.	Once.	Implementing agencies/ project sponsor.
BIO-1(c) Special-Status Plant Species Avoidance	e, Minimization, and Mitigation			
If state or federally listed and/or CRPR 1 and 2 species are found during special-status plant surveys [pursuant to mitigation measure BIO-1(b)], then the implementing agency shall redesign the project to avoid impacting these plant species to the maximum extent feasible. Occurrences of these species that are not	Ensure redesign of the project to avoid impacting rare plant species if state or federally listed and/or CRPR 1 and 2 species are found.  Ensure biologist evaluates CRPR 3 and 4 species to determine whether special-status.	During project permitting and environmental review; prior to issuance of project construction	Once.	Implementing agencies/ project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency
within the immediate disturbance footprint	If avoidance is not possible, mitigation	permits and		
but are located within 50 feet of disturbance	to fully offset project impacts shall be	approvals.		
limits shall have bright orange protective	required pursuant to a qualified			
fencing installed at least 30 feet beyond their	biologist.			
extent, or other distance as approved by a	Ensure a restoration plan be			
qualified biologist, to protect them from	developed for the project.			
harm. If CRPR 3 and 4 species are found, the				
qualified biologist contracted to conduct the				
plant surveys [pursuant to mitigation measure				
BIO-1(b)] shall evaluate to determine if they				
meet criteria to be considered special-status,				
and if so, the same process as identified for				
CRPR 1 and 2 species shall apply.				
If special-status plants species cannot be				
avoided and would be impacted by a project				
implemented under the proposed 2022				
RTP/SCS, the implementing agency shall				
require all impacts shall be mitigated at an				
appropriate ratio to fully offset project				
impacts, as determined by a qualified				
biologist for each species as a component of				
habitat restoration. A restoration plan shall be				
prepared and submitted to the implementing				
agency.				

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
BIO-1(d) Endangered/Threatened Animal Speci	ies Habitat Assessment and Protocol Su	rveys		
If the results of the BRA determine that suitable habitat may be present for federally and/or state endangered or threatened animal species, the implementing agency shall require habitat assessments/surveys.  Whenever practicable the surveys shall be completed in accordance with CDFW and/or USFWS/NMFS protocols prior to issuance of any construction permits/project approvals.  Alternatively, in lieu of conducting protocol surveys, the implementing agency may choose to assume presence within the project footprint and proceed with development of appropriate avoidance measures, consultation, and permitting, as applicable. If the target species is detected during protocol surveys, or protocol surveys are not conducted and presence assumed based on suitable habitat, mitigation measure BIO-1(e) shall apply	If suitable habitat for federally and/or state endangered or threatened animal species exists, protocol habitat assessments/ surveys shall be completed in accordance with CDFW and/or USFWS/MNFS protocols.	During project permitting and environmental review; prior to commencement of project construction.	Once.	Implementing agencies/ project sponsor.
BIO-1 (e) Endangered/Threatened Animal Spec	ies Avoidance and Compensatory Mitig	ation		
If habitat is occupied or presumed occupied by federal and/or state listed species and would be impacted by the project, the implementing agency shall redesign the project in coordination with a qualified biologist to avoid impacting occupied/presumed occupied habitat to the extent feasible. If occupied or presumed	If habitat is occupied by federal and/or state listed species, implementing agency shall require project plans include project-specific mitigation measures to avoid and minimize impacts to habitat for endangered or threatened species.	During project permitting and environmental review; prior to issuance of construction permits and approvals.	In accordance with project HMMP, as applicable.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
occupied habitat cannot be avoided, the	If avoidance is not possible, credits			
implementing agency shall estimate the total acreages for habitat that would be impacted	shall be purchased according to the mitigation measure, and a qualified			
prior to the issuance of construction	biologist must provide a HMMP.			
permits/approvals.	biologist must provide a mivilvii .			
Compensatory mitigation shall be achieved				
through purchase of credits at a USFWS,				
NMFS and/or CDFW approved conservation				
bank if available for the affected species,				
and/or through providing compensatory				
mitigation to offset impacts to federal and/or				
state listed species habitat. Compensatory				
mitigation shall be provided at an appropriate ratio to fully offset project impacts, as				
determined by a qualified biologist for				
permanent impacts. Compensatory mitigation				
may be combined/nested with special-status				
plant species and sensitive community				
restoration where applicable. Temporary				
impact areas shall be restored to pre-project				
conditions.				
If on and/or off-site compensatory mitigation				
sites are identified, the implementing agency				
shall retain a qualified biologist to prepare a				
Habitat Mitigation and Monitoring Plan				
(HMMP) to ensure the success of				
compensatory mitigation sites that are to be				
conserved for compensation of permanent impacts to federal and/or state listed species.				
The HMMP shall identify long term site				
management needs, routine monitoring				

Mitigation Measure techniques, techniques, and success criteria, and shall determine if the conservation site has restoration needs to function as a suitable mitigation site. If restoration is required on the conservation site, the HMMP shall contain the restoration components outlined under the Restoration Plan listed in measure BIO-1(c). The HMMP shall be submitted to the implementing agency.	Action Required	Timing	Monitoring Requirements	Responsible Agency
The implementing agency shall apply the following measures to aquatic and terrestrial species, where appropriate. Implementing agencies shall select from these measures as appropriate depending on site conditions, the species with potential for occurrence and the results of the biological resources screening and assessment (Measure BIO-1[a]).  Preconstruction surveys for federal and/or state listed species with potential to occur shall be conducted where suitable habitat is present by a qualified biologist not more than 48 hours prior to the start of construction activities. The survey area shall include the proposed disturbance area and all proposed ingress/egress routes, plus a 100-foot buffer. If any life stage of federal and/or state listed species is found within the survey area, the qualified biologist shall recommend an	If applicable, project plans shall include project-specific mitigation measures to avoid and minimize impacts to endangered or threatened species.  Implement the plans preconstruction and during construction of the project, and post construction monitoring as required.	During project permitting and environmental review; prior to and ongoing throughout project construction.	Periodically through construction.	Implementing agencies/ project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

appropriate course of action, which may include consultation with USFWS, NMFS and/or CDFW. The results of the preconstruction surveys shall be submitted to the implementing agency for review and approval prior to start of construction.

- Ground disturbance shall be limited to the minimum necessary to complete the project. The project limits of disturbance shall be flagged. Areas of special biological concern shall have highly visible orange construction fencing.
- All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed between April 1 and October 31, to avoid impacts to sensitive aquatic species.
- All projects occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a qualified biologist present during all initial ground disturbing/vegetation clearing activities. Once initial ground disturbing/vegetation clearing activities have been completed, said biologist shall conduct daily pre-activity clearance surveys for endangered/threatened species. Alternatively, and upon approval of the CDFW and/or USFWS/NMFS or as

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

outlined in project permits, said biologist may conduct site inspections at a minimum of once per week to ensure all prescribed avoidance and minimization measures are begin fully implemented.

- No endangered/threatened species shall be captured and relocated without authorization from the CDFW and/or USFWS.
- If pumps are used for dewatering activities, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system.
- If at any time during construction of the project an endangered/threatened species enters the construction site or otherwise may be impacted by the project, all project activities shall cease. At that point, a qualified biologist shall recommend an appropriate course of action, which may include consultation with USFWS, NMFS and/or CDFW.
- All vehicle maintenance/fueling/staging shall occur not less than 100 feet from any riparian habitat or water body. Suitable containment procedures shall be implemented to prevent spills.

<ul> <li>Mitigation Measure</li> <li>No equipment shall be permitted to enter wetted portions of any affected drainage channel.</li> <li>All equipment operating within streambeds (restricted to conditions in which water is not present) shall be in good conditions and free of leaks. Spill containment shall be installed under all equipment staged within stream areas and extra spill containment and clean up materials shall be located in close proximity for easy access.</li> <li>At the end of each workday, excavations shall be secured with a cover, or a ramp shall be provided to prevent wildlife entrapment.</li> <li>All trenches, pipes, culverts, or similar</li> </ul>	Action Required	Timing	Monitoring Requirements	Responsible Agency
structures shall be inspected for animals prior to burying, capping, moving, or filling.				
BIO-1(g) Non-Listed Special-status Animal Spec	cies Avoidance and Minimization			
Depending on the species identified in the biological resources screening assessment (measure BIO-1[a]), measures shall be selected from among the following to reduce the potential for impacts to non-listed special-status animal species:  Preconstruction clearance surveys shall be conducted within 14 days prior to the start of construction (including staging and mobilization). The surveys shall cover the	If applicable, project plans shall include project-specific mitigation measures to reduce impacts to nonlisted special status species.	During project permitting and environmental review; prior to, during and after project construction.	During all initial ground disturbance, as applicable.	Implementing agencies/ project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

entire disturbance footprint plus a minimum 100-foot buffer and shall identify all special-status animal species that may occur on-site. All non-listed special-status species shall be relocated from the site either through direct capture or through passive exclusion. A report of the preconstruction survey shall be submitted to the implementing agency for their review and approval prior to the start of construction.

- A qualified biologist shall be present during all initial ground disturbing activities, including vegetation removal, to recover special-status animal species unearthed by construction activities.
- Upon completion of the project, a qualified biologist shall prepare a final compliance report documenting all compliance activities implemented for the project, including the preconstruction survey results.
- If special-status bat species may be present and impacted by the project, within 30 days of the start of construction a qualified biologist shall conduct presence/absence surveys for special-status bats, in consultation with the CDFW, where suitable roosting habitat is present. Surveys shall be conducted using acoustic

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
detectors and by searching tree cavities,				
crevices, and other areas where bats may roost. If active bat roosts or colonies are				
present, the biologist shall evaluate the				
type of roost to determine the next step.				
☐ If a maternity colony is present, all				
construction activities shall be				
postponed within a 250-foot buffer				
around the maternity colony until it is				
determined by a qualified biologist that				
the young have dispersed or as recommended by CDFW through				
consultation. Once it has been				
determined that the roost is clear of				
bats, the roost shall be removed				
immediately.				
<ul> <li>If a roost is determined by a qualified</li> </ul>				
biologist to be used by a large number				
of bats (large hibernaculum), alternative				
roosts, such as bat boxes if appropriate				
for the species, shall be designed and installed near the project site. The				
number and size of alternative roosts				
installed will depend on the size of the				
hibernaculum and shall be determined				
through consultations with the CDFW.				
<ul> <li>If other active roosts are located,</li> </ul>				
exclusion devices such as valves,				
sheeting or flap-style one-way devices				
that allow bats to exit but not re-enter				

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
roosts discourage bats from occupying the site.				
BIO-1(h) Preconstruction Surveys for Nesting B	irds			
The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. For construction activities occurring during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the CFGC, the MBTA, and Bald and Golden Eagle Protection Act shall be conducted by a qualified biologist no more than 10 days prior to vegetation removal activities.  A qualified biologist shall conduct preconstruction surveys for raptors. The survey for the presence of bald and golden eagles shall cover all areas within of the disturbance footprint plus a one-mile buffer where access can be secured. The survey area for all other nesting bird and raptor species shall include the disturbance footprint plus a 300-foot and 500-foot buffer, respectively. If active nests (nests with eggs or chicks) are located, the qualified biologist shall establish an appropriate avoidance buffer based on the species biology and the current and anticipated disturbance levels occurring in vicinity of the nest. All buffers shall be marked using high visibility flagging or fencing, and,	If applicable, a survey for nesting birds shall be completed; if necessary, a buffer shall be created.	During project permitting and environmental review; prior to construction activities; during construction activities if required. ornithologist determines a given nest has failed.	Once prior to construction; as needed during construction activities.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
unless approved by the qualified biologist, no construction activities shall be allowed within the buffers until the qualified biologist has verified that young have fledged from the nest, or the nest fails.  For bald or golden eagle nests identified during the preconstruction surveys, an avoidance buffer of up to one mile shall be established on a case-by-case basis in consultation with the USFWS and CDFW. The size of the buffer may be influenced by the existing conditions and disturbance regime, relevant landscape characteristics, and the nature, timing, and duration of the expected disturbance. The buffer shall be established between February 1 and September 15; however, buffers may be relaxed earlier than September 15 if a qualified ornithologist determines that a given nest has failed or that all surviving chicks have fledged, and the nest is no longer in use.  A report of these preconstruction nesting bird surveys and nest monitoring (if applicable) shall be submitted to the implementing agency for review and approval prior to the	Action Required	Timing	Requirements	Agency
start of construction.				
BIO-1 (i) Fence and Signpost Restriction		5	•	
Any fencing posts or signs installed temporarily or permanently throughout the course of the project shall have the top three	Appropriate fencing posts and signage shall be utilized.	Prior to start of construction and as new construction	Once prior to construction.	Implementing agencies/

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
post holes covered or filled with screws or bolts to prevent the entrapment of wildlife, specifically the talons of birds of prey. Also, fencing shall incorporate wildlife friendly design elements, such as smooth wires and having a 6-inch or greater gap above grade. Fencing shall also be designed to be wildlife friendly (e.g., smooth top wire, smooth bottom wire at 6 inches above grade, etc.).		staff start working on project.		project sponsor.
BIO-1 (j) Worker Environmental Awareness Pro	gram (WEAP)			
The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend WEAP training, conducted by a qualified biologist retained by the implementing agency, to aid workers in recognizing special-status resources and review of the limits of construction and mitigation measures required. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction of the project. All employees shall sign a form documenting that they have attended the WEAP and understand the information presented to them.	Construction personnel shall attend WEAP training prior to working on the project and receive a fact sheet. Fact sheet to be made available at the project site.	Prior to start of construction and as new construction staff start working on project.	Once prior to construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
BIO-2(a) Aquatic Resources Jurisdictional Delin	eation and Impact Avoidance			
The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. If the results of measure BIO-1(a) indicates projects implemented under the proposed 2022 RTP/SCS occur within or adjacent to wetland, drainages, riparian habitats, or other areas that may fall under the jurisdiction of the CDFW, USACE, and/or RWQCB, a qualified biologist shall complete an aquatic resources delineation in accordance with the requirement set forth by each agency. The result shall be submitted to the implementing agency, USACE, RWQCB, and/or CDFW, as appropriate, for review and approval, and the project shall be designed to avoid and minimize impacts to jurisdictional areas to the extent feasible. The delineation shall serve as the basis to identify potentially jurisdictional areas to be protected during construction, through implementation of the avoidance and minimization identified in measure BIO-2(f).	If applicable, a jurisdictional delineation shall be completed and submitted to the applicable agencies listed in this mitigation measure.	During project permitting and environmental review.	Once.	Implementing agencies/project sponsor.
BIO-2(b) Wetland, Drainages, and Riparian Hab	pitat Restoration			
The implementing agencies shall, or can and should, implement the following measures during CEQA review of projects implementing the proposed 2022 RTP/SCS. Unavoidable impacts to jurisdictional wetlands, drainages,	Ensure, if applicable, project plans mitigate impacts to jurisdictional wetlands and riparian habitats at a ratio to fully offset project impacts, as determined by a qualified biologist.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
and riparian habitat shall be mitigated at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist retained by the implementing agency and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan consistent with regulatory agency requirements shall be developed by a qualified biologist and submittal to the regulatory agency overseeing the project for approval. Alternatively, mitigation shall be accomplished through purchase of credits from an approved wetlands mitigation bank.	Ensure a mitigation and monitoring plan is developed be developed by a qualified biologist.			
BIO-2(c) Landscaping Plan				
If landscaping is proposed for a specific project, a qualified biologist/landscape architect retained by the implementing agency shall prepare a landscape plan. Drought tolerant, locally native plant species shall be used. Noxious, invasive and/or nonnative plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List and/or California Invasive Plant Council Inventory shall not be permitted. Species selected for planting shall be regionally appropriate native species that are known to occur in the adjacent native habitat types.	Retain a qualified biologist/landscape architect, if applicable, to prepare a landscaping plan that includes all requirements in this mitigation measure; species shall be regionally appropriate native species found in adjacent native habitats.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
If the results of measure BIO-1(a) indicates projects implemented under the proposed 2022 RTP/SCS would impact sensitive natural communities, the implementing agency shall avoid impacts to sensitive natural communities through final project design modifications if feasible.  If the implementing agency determines that sensitive natural communities cannot be avoided, impacts shall be mitigated on-site or offsite at an appropriate ratio to fully offset project impacts, as determined by a qualified biologist based on any applicable resource agency guidelines. Temporarily impacted areas shall be restored to pre-project conditions. A Restoration Plan shall be developed by a qualified biologist and submitted to the implementing agency.	If applicable, project plans shall include final project design modifications shall be developed to avoid impacts to sensitive vegetation communities. If avoidance is not possible, impacts shall be mitigated at a ratio to fully offset project impacts, as determined by a qualified biologist. Ensure temporarily impacted areas are restored to pre-project conditions. Ensure a qualified biologist develops a Restoration Plan.	During project permitting and environmental review.	Once following construction and then, when applicable, in accordance with the Restoration Plan.	Implementing agencies/project sponsor.
BIO-2(e) Invasive Weed Prevention and Manag	gement Program			
Prior to start of construction for each project that occurs within or adjacent to native habitats, an Invasive Weed Prevention and Management Program shall be developed by a qualified biologist retained by the implementing agency to prevent invasion of native habitat by non-native plant species. The plan shall be submitted to the implementing agency for review and approval. A list of target species shall be	Retain a qualified biologist to develop an Invasive Weed Prevention and Management Program if project is in or next to native habitats.	During project permitting and environmental review; prior to construction activities; during construction activities.	Once prior to construction; ongoing during construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
included, along with measures for early				
detection and eradication.				
The plan, which shall be implemented by the				
implementing agency, shall also include, but not be limited to, the following measures to				
prevent the introduction of invasive weed				
species:				
<ul> <li>During construction, limit the use of</li> </ul>				
imported soils for fill. If the use of				
imported fill material is necessary, the				
imported material must be obtained from				
a source that is known to be free of				
<ul><li>invasive plant species.</li><li>To minimize colonization of disturbed</li></ul>				
areas and the spread of invasive species,				
the contractor shall stockpile topsoil and				
redeposit the stockpiled soil after				
construction or transport the topsoil to a				
permitted landfill for disposal.				
<ul> <li>All erosion control materials, including</li> </ul>				
straw bales, straw wattles, or mulch used				
on-site must be free of invasive species seed.				
<ul> <li>Exotic and invasive plant species shall be</li> </ul>				
excluded from any erosion control seed				
mixes and/or landscaping plant palettes				
associated with the proposed project.				
<ul> <li>All disturbed areas shall be hydroseeded with a mix of locally native species upon</li> </ul>				
completion of work in those areas.				
22				

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
BIO-2(f) Wetlands, Drainages, and Riparian Ha	bitat Best Management Practices Duri	ng Construction		
The following best management practices shall be required by the implementing agency for development within or adjacent to wetlands, drainages, or riparian habitat:  Access routes, staging and construction areas shall be limited to the minimum area necessary to achieve the project goal and minimize impacts to other waters including locating access routes and ancillary construction areas outside of jurisdictional areas.	If applicable, ensure project plans incorporate the best management practices listed in this mitigation measure.	During project permitting and environmental review; prior to construction activities; during construction activities.	Once prior to construction; ongoing during construction.	Implementing agencies/ project sponsor.
<ul> <li>To control sedimentation during and after project implementation, appropriate erosion control materials shall be deployed to minimize adverse effects on jurisdictional areas in the vicinity of the project.</li> </ul>				
<ul> <li>Project activities within the jurisdictional areas should occur during the dry season (typically between June 1 and November 1) in any given year, or as otherwise directed by the regulatory agencies.</li> </ul>				
<ul> <li>During construction, no litter or construction debris shall be placed within jurisdictional areas. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site.</li> <li>Raw cement, concrete, or washings</li> </ul>				
thereof, asphalt, paint or other coating				

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
material, oil or other petroleum products, or any other substances which could be hazardous to aquatic species resulting from project related activities, shall be prevented from contaminating the soil and/or entering wetlands, drainages, or riparian habitat.  All refueling, maintenance and staging of equipment and vehicles shall occur at least 100 feet from bodies of water and in a location where a potential spill would not drain directly toward aquatic habitat (e.g., on a slope that drains away from the water source). Prior to the onset of work activities, a plan must be in place for prompt and effective response to any accidental spills.				
BIO-3(a) Project Design for Wildlife Connectivity	ty			
The implementing agency shall implement the following measures. All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife.  Where fencing or other project components is required for public safety concerns, these project components shall be designed to permit wildlife movement by incorporating design features such as:  A minimum 16 inches between the ground	Project plans for projects with fencing and lighting shall be designed to minimize impacts to wildlife.  Project plans shall incorporate wildlife crossing structures when a crossing is applicable.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.
and the bottom of the fence to provide clearance for small animals;				

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Action Required	Timing	Requirements	Agency
	Action Required	Action Required Timing	

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
BIO-3 (b) Maintain Connectivity in Drainages				
The implementing agency shall implement the following measures. Permanent structures shall be avoided to the extent feasible within any drainage or river that serves as a wildlife migration corridor that would impede wildlife movement.  In addition, upon completion of construction within any drainage, areas of stream channel and banks that are temporarily impacted shall be returned to pre-construction contours and in a condition that allows for unimpeded passage through the area once the work has been complete.  If water is to be diverted around work sites, a diversion plan shall be submitted to the implementing agency for review and approval prior to issuance of project construction permits/approvals. The diversion shall be designed in a way as to not impede movement while the diversion is in place.	Ensure construction plans and building plans avoid placement of permanent structures in drainages or rivers such that wildlife movement would be impeded. Ensure temporary impacts to stream channels are restored. If applicable, ensure a diversion plan is provided for the project.	During project permitting and environmental review. Ensure temporary impacts to stream channels are restored after construction is completed.	Once.	Implementing agencies/ project sponsor.
BIO-3 (c) Construction Best Management Pract	ices to Minimize Disruption to Wildlife			
The following construction best management practices shall be incorporated by the implementing agency into all grading and construction plans to minimize temporary disruption of wildlife, which could hinder wildlife movement:	Ensure construction plans incorporate best management practices to minimize disruption to wildlife.	During project permitting and environmental review; prior to issuance of grading and construction permits.	Periodically during construction	Implementing agencies/ project sponsor.

<ul> <li>Mitigation Measure</li> <li>Designation of a 20 mile per hour speed limit in all construction areas.</li> <li>Daily construction work schedules shall be limited to daylight hours only.</li> <li>Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition.</li> <li>All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week.</li> <li>No pets are permitted on project site during construction.</li> </ul>	Action Required	Timing	Monitoring Requirements	Responsible Agency
Cultural Resources				
CR-1 Built Environment Historical Resources				
Prior to the issuance of an individual project permit, the implementing agency of a 2022 RTP/SCS project involving a building or structure over 45 years of age shall prepare a map defining the project area. This map shall indicate the areas of disturbance associated with construction and operation of the facility and will help in determining whether known and potential historical resources are located within the project area. If a building or structure greater than 45 years in age is within the identified impact zone, a survey and evaluation of the building(s) and/or structure(s) to determine their eligibility for recognition under State, federal, or local historic resource designation criteria shall be	Prepare a map defining the Area of Potential Effects.  Retain an architectural historian, or historical architect, to determine eligibility of structure for recognition under state, federal, or local historic preservation criteria, if applicable.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

conducted. 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 (PQS) as defined in 36 CFR Part 61. All buildings and structures 45 years of age or older within the project area shall be evaluated in their historic context and documented in a report meeting the State Office of Historic Preservation guidelines. All evaluated properties shall be documented on Department of Parks and Recreation Series 523 Forms. The report shall be submitted to the implementing agency for review and concurrence.

If historical resources are identified within the project area of a proposed development, efforts shall be made to the extent feasible to ensure that impacts are mitigated.

Application of mitigation shall generally be overseen by a qualified architectural historian or historic architect meeting the PQS, unless unnecessary in the circumstances (e.g., preservation in place). In conjunction with any development application that may affect the historical resource, a report identifying and specifying the treatment of character-defining features and construction activities shall be

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
provided to the implementing agency for				_
review.				
To the greatest extent possible to ensure that				
the relocation, rehabilitation, or alteration of				
the resource is consistent with the Secretary				
of the Interior's Standards for the Treatments				
of Historic Properties (Standards). In				
accordance with CEQA, a project that has				
been determined to conform with the				
Standards generally would not cause a				
significant adverse direct or indirect impact to				
historical resources (14 CCR § 15126.4(b)(1)).				
Application of the Standards shall be overseen				
by a qualified architectural historian or				
historic architect meeting the PQS. In				
conjunction with any development				
application that may affect the historical				
resource, a report identifying and specifying				
the treatment of character-defining features				
and construction activities shall be provided				
to the implementing agency for review and concurrence.				
If significant historical resources are identified				
on a development site and compliance with				
the Standards and/or avoidance is not				
possible, appropriate site-specific mitigation measures shall be established and				
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undertaken. Mitigation measures may include documentation of the historical resource in the form of a Historic American Building Survey-Like report. The report shall comply

Mitigation Measure with the Secretary of the Interior's Standards for Architectural and Engineering Documentation and shall generally follow the HABS Level III requirements, including digital photographic recordation, detailed historic narrative report, and compilation of historic research. The documentation shall be completed by a qualified architectural historian or historian who meets the PQS and submitted to the implementing agency prior to issuance of any permits for demolition or alteration of the historical resource. Copies of the report shall be provided to a local library and/or other appropriate repositories.	Action Required	Timing	Monitoring Requirements	Responsible Agency
CR-2(a) Archaeological Resources Impact Minis	mization			
Before construction activities, implementing agencies shall, or can and should, retain a	Retain a qualified archaeologist to conduct a record search to determine	During project permitting and	Ongoing throughout	Implementing agencies/

qualified archaeologist to conduct a record search at the Northwest Information Center to determine whether the project area has been previously surveyed and whether resources were identified. When recommended by the Information Center, implementing agencies shall, or can and should, retain a qualified archaeologist to conduct archaeological surveys before construction activities. Implementing agencies shall, or can and should, follow recommendations identified in the survey, which may include, but would not be limited

whether the project area has been previously surveyed and whether resources were identified. Implement recommendations identified in the survey. Project construction plans shall include required components to stop work if archaeological resources are uncovered.

environmental review; prior to construction activities; during construction activities.

construction. project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
to subsurface testing, designing, and implementing a Worker Environmental Awareness Program (WEAP), construction monitoring by a qualified archaeologist, avoidance of sites and preservation in place, and/or data recovery if avoidance is not feasible. Recommended mitigation measures shall be consistent with <i>State CEQA Guidelines</i> Section 15126.4(b)(3) recommendations and may include but not be limited to preservation in place and/or data recovery. All cultural resources work shall follow accepted professional standards in recording any find including submittal of standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area.				
CR-2(b) Unanticipated Discoveries During Cons	truction			
During construction activities, implementing agencies shall, or can and should, implement the following measures. If evidence of any prehistoric or historic-era subsurface archaeological features, deposits or tribal cultural resources are discovered during construction-related earthmoving activities (e.g., ceramic shard, trash scatters, lithic scatters), all ground-disturbing activity proximate to the discovery shall be halted until a qualified archaeologist (36 CFR Section	Place conditions of approval on project to ensure that if archaeological resources are uncovered work is halted until the procedures described in this mitigation measure have been completed.	During project permitting and environmental review; prior to construction activities; during construction activities.	Ongoing throughout construction.	Implementing agencies/ project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

61) can assess the significance of the find. If the find is a prehistoric archaeological site, the appropriate Native American group shall be notified. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed. If the archaeologist determines that further information is needed to evaluate significance, a testing plan shall be prepared and implemented. If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource or a unique archaeological resource), the archaeologist shall work with the implementing agency to avoid disturbance to the resources, and if complete avoidance is not feasible in light of project design, economics, logistics and other factors, shall recommend additional measures such as the preparation and implementation of a data recovery plan. All cultural resources work shall follow accepted professional standards in recording any find including submittal of standard DPR Primary Record forms (Form DPR 523) and location information to the appropriate California Historical Resources Information System office for the project area. If the find is a prehistoric archaeological site, the culturally affiliated California Native

Mitigation Measure  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 in other parts of the project area that are distant enough from the find not to impact it, as determined by the qualified archaeologist.  Environmental Justice	Action Required	Timing	Monitoring Requirements	Responsible Agency
EJ-1				
No mitigation measures are feasible. Impacts would remain significant and unavoidable.	No mitigation measures.	During project permitting and environmental review; prior to construction activities; during construction activities.	Ongoing throughout construction.	Implementing agencies/ project sponsor.
Geology and Soils				
<b>GEO -5 Paleontological Resources Mitigation a</b>	nd Monitoring Program			
The implementing agency of a proposed 2022 RTP/SCS project involving ground disturbing activities (including grading, trenching, foundation work and other excavations) shall, or can and should, retain a qualified paleontologist, defined as a paleontologist who meets the Society of Vertebrate Paleontology (SVP) standards for Qualified Professional Paleontologist (SVP 2010), to	Retain a qualified paleontologist to conduct a PRA.  Place conditions of approval on project to ensure procedures described in this mitigation measure are completed before and throughout construction, if the project area is underlying high	During project permitting and environmental review; prior to construction activities; during construction activities.	Ongoing throughout construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
conduct a Paleontological Resources	sensitivity or unique geologic			
Assessment (PRA). The PRA shall determine	features.			
the age and paleontological sensitivity of geologic formations underlying the proposed				
disturbance area, consistent with SVP				
Standard Procedures for the Assessment and				
Mitigation of Adverse Impacts to				
Paleontological Resources (SVP 2010)				
guidelines for categorizing paleontological				
sensitivity of geologic units within a project				
area. If underlying formations are found to				
have a high potential (sensitivity) for				
paleontological resources and/or could be				
considered a unique geologic feature, the				
following measures shall apply:				
<ul> <li>Avoidance. Avoid routes and project</li> </ul>				
designs that would permanently alter				
unique paleontological and unique				
geological features. If avoidance practices				
cannot be implemented, the following				
measures shall apply.				
<ul> <li>Retention of a Qualified Paleontologist. A</li> </ul>				
Qualified Paleontologist shall be retained				
to create a Paleontological Resources				
Monitoring and Mitigation Program				
(PRMMP) to direct all mitigation measures				
related to paleontological resources. The				
Qualified Paleontologist shall meet the				
qualifications for a Qualified Professional Paleontologist, which is defined by the SVP				
as an individual, preferably with an M.S. or				
as an maividual, preferably with all ivi.s. of				

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

Ph.D. in paleontology or geology, who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least two years (SVP 2010).

- Paleontological Worker Environmental Awareness Program (WEAP). Prior to the start of ground disturbance activity, construction personnel shall be informed on the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff.
- Paleontological Monitoring.

Paleontological monitoring shall be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources and meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor. The duration and timing of the monitoring will be determined by the Qualified Paleontologist based on the observation of the geologic setting from initial ground disturbance. If the Qualified Paleontologist determines that full-time monitoring is no longer warranted, based on the specific geologic conditions once

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

the full depth of excavations has been reached, they may recommend that monitoring be reduced to periodic spotchecking or ceased entirely. Monitoring shall be reinstated if any new ground disturbances are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time. In the event of a fossil discovery by the paleontological monitor or construction personnel, all work in the immediate vicinity of the find shall cease. A Qualified Paleontologist shall evaluate the find before restarting construction activity in the area. If it is determined that the fossil(s) is (are) scientifically significant, the Qualified Paleontologist shall complete the following measures to mitigate impacts to significant fossil resources:

□ Fossil Salvage. If significant fossils are discovered, the implementing agency shall be notified immediately, and the qualified paleontologist (or paleontological monitor) shall recover them. Typically, fossils can be safely salvaged quickly by a single paleontologist and not disrupt construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

longer salvage periods. In this case, the paleontologist shall have the authority to temporarily direct, divert or halt construction activity to ensure that the fossil(s) can be removed in a safe and timely manner.

- □ Preparation and Curation of Recovered Fossils. Once salvaged, fossils shall be identified to the lowest possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection, such as the Natural History Museum of Los Angeles County, along with all pertinent field notes, photos, data, and maps.
- Final Paleontological Resources Mitigation and Monitoring Report. Upon completion of ground disturbing activity (and curation of fossils, if necessary) the Qualified Paleontologist shall prepare a final mitigation and monitoring report outlining the results of the PRMMP. The report shall include discussion of the location, duration and methods of the monitoring, stratigraphic sections, any recovered fossils, and the scientific significance of those fossils, and where fossils were curated. The report shall be submitted to the implementing agency. If the monitoring efforts recovered fossils, then a

Mitigation Measure  copy of the report shall also be submitted to the designated museum repository, such as the Natural History Museum of Los Angeles County	Action Required	Timing	Monitoring Requirements	Responsible Agency
Greenhouse Gas Emissions and Climate Change GHG –1 Construction GHG Reduction Measures				
The project sponsor shall incorporate the most recent GHG emission reduction measures for off-road construction vehicles during construction. The measures shall be noted on all construction plans, and the implementing agency shall perform periodic site inspections. Current GHG-reducing measures include the following:  Use of diesel construction equipment meeting CARB's Tier 4 certified engines wherever feasible for off-road heavy-duty diesel engines and comply with the State Off-Road Regulation. Where the use of Tier 4 engines is not feasible, Tier 3 certified engines shall be used; where the use of Tier 3 engines are not feasible, Tier 2 certified engines shall be used;  Use of on-road heavy-duty trucks that meet CARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;  Minimizing idling time (e.g., five-minute maximum). Signs shall be posted in the	Ensure construction plans specify construction equipment is subject to the CARB Regulation for In-use Offroad Diesel Vehicles and, if feasible, construction equipment meets Tier 4 standards; or at least Tier 2 standards; and perform periodic site inspections.  Ensure periodic site inspections are conducted.	During project permitting and environmental review	Once during project plan review; periodically during construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
designated queuing areas and or job sites to remind drivers and operators of the five-minute idling limit;  Use of electric-powered equipment in place of diesel-powered equipment when feasible;  Use of alternatively fueled or catalyst-equipped diesel construction equipment when feasible, to the extent electric powered equipment is not feasible;  Substitute gasoline-powered in place of diesel-powered equipment, when neither electric-powered equipment or alternatively fueled or catalyst-equipped diesel equipment is feasible; and  Project proponents shall incentivize that construction workers carpool, and/or use electric vehicles to commute to and from the project site.				
GHG-2 Land Use Project Energy Consumption at For land use projects under their jurisdiction, cities and the County can and should implement measures to reduce energy consumption, water use, solid waste generation, and VMT, all of which contribute to GHG emissions. Project-specific environmental documents may adjust these mitigation measures as necessary to respond to site-specific conditions. These measures include, but are not limited to:	Use project-level analysis of energy consumption, solid waste generation, and water use and incorporate mitigation measures as needed to specifications described in measure. Place conditions of approval on the project requiring energy- and watersaving measures.	During project permitting and environmental review.	Once during project-level environmental review and discretionary approval decisions for land use projects.	Implementing agencies/ project sponsor.

Mitigation Measure  Require new residential and commercial	Action Required	Timing	Monitoring Requirements Once prior to	Responsible Agency
construction to install solar energy systems or be solar-ready			issuance of an occupancy	
<ul> <li>Require new residential and commercial development to install low flow water fixtures</li> </ul>			permit.	
<ul> <li>Require new residential and commercial development to install water-efficient drought-tolerant landscaping, including the use of compost and mulch</li> </ul>				
<ul> <li>Require new development to exceed the applicable Title 24 energy-efficiency requirements</li> </ul>				
<ul> <li>Require new development to be fully electric</li> </ul>				
<ul> <li>Require new residential and commercial development to offer information on recycling, composting, and disposal of household hazardous waste and e-waste</li> </ul>				
<ul> <li>Require new development to implement circulation design elements in parking lots for no-residential uses to reduce vehicle queuing and improve the pedestrian environment</li> </ul>				
GHG-4 Transportation-Related GHG Reduction	Measures			
The implementing agency shall incorporate the most recent GHG emission reduction measures and/or technologies for reducing VMT and associated transportation related	Place conditions of approval on the requirement of implementation of GHG and/or VMT reduction measures described in this mitigation.	During project permitting and environmental review.	Once during project-level environmental review and discretionary	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
GHG emissions. Current GHG-reducing			approval	
measures include the following:			decisions for	
<ul> <li>Installation of electric vehicle charging</li> </ul>			land use	
stations beyond those required by State and local codes			projects	
<ul> <li>Utilization of electric vehicles and/or</li> </ul>				
alternatively fueled vehicles in company				
fleet				
<ul> <li>Provision of dedicated parking for carpools,</li> </ul>				
vanpool, and clean air vehicles				
<ul> <li>Provision of vanpool and/or shuttle service</li> </ul>				
for employees				
<ul> <li>Implementation of reduced parking</li> </ul>				
minimum requirements				
<ul> <li>Implementation of maximum parking limits</li> </ul>				
<ul> <li>Provision of bicycle parking facilities</li> </ul>				
beyond those required by State and local codes				
<ul><li>Provision of a bicycle-share program</li></ul>				
<ul> <li>Expansion of bicycle routes/lanes along the</li> </ul>				
project site frontage				
<ul><li>Provision of new or improved transit</li></ul>				
amenities (e.g., covered turnouts, bicycle				
racks, covered benches, signage, lighting) if				
project site is located along an existing				
transit route				
<ul> <li>Expansion of existing transit routes</li> </ul>				
<ul><li>Provision of transit subsidies</li></ul>				

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>Expansion of sidewalk infrastructure along the project site frontage</li> <li>Provision of safe, pedestrian-friendly, and interconnected sidewalks and streetscapes</li> <li>Provision of employee lockers and showers</li> <li>Provision of on-site services that reduce the need for off-site travel (e.g., childcare facilities, automatic teller machines, postal machines, food services)</li> <li>Provision of alternative work schedule options, such as telework or reduced schedule (e.g., 9/80 or 10/40 schedules), for employees</li> <li>Implementation of transportation demand management programs to educate and incentivize residents and/or employees to use transit, smart commute, and alternative transportation options</li> </ul>				
Hazards and Hazardous Materials				
HAZ-3 Site Remediation				
If an individual project included in the proposed 2022 RTP/SCS is located on or near a hazardous materials and/or waste site compiled by Government Code Section 65962.5, the implementing agency shall prepare a Phase I ESA in accordance with the American Society for Testing and Materials' E-1527-05 standard. For work requiring any demolition or renovation, the Phase I ESA shall make recommendations for any	Where applicable, prepare a Phase I ESA meeting the specifications of this mitigation measure. Place conditions of approval on project requiring incorporation of recommendations of the Phase I ESA, and if applicable, Phase II ESA.	During project permitting and environmental review.	Once prior to issuing grading or demolitions permits; periodically during construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
hazardous building materials survey work that shall be done. All recommendations included				
in a Phase I ESA prepared for a site shall be				
implemented. If a Phase I ESA indicates the				
presence or likely presence of contamination,				
the implementing agency shall require a				
Phase II ESA, and recommendations of the				
Phase II ESA shall be fully implemented.				
Examples of typical recommendations				
provided in Phase I/II ESAs include removal of				
contaminated soil in accordance with a soil				
management plan approved by the local environmental health department; covering				
stockpiles of contaminated soil to prevent				
fugitive dust emissions; capturing				
groundwater encountered during				
construction in a holding tank for additional				
testing and characterization and disposal				
based on its characterization; and				
development of a health and safety plan for				
construction workers.				
Hydrology and Water Quality				
HYD -2(a) Construction Dust Suppression Wate	r Supply			
For all proposed 2022 RTP/SCS projects, where feasible, reclaimed and/or recycled water shall be used for dust suppression during construction activities. This includes use of such reclaimed water in water trucks utilized for project construction occurring outside developed areas and away from	Place conditions of approval of individual projects on the implementation of mitigation detailed in this measure.	During project permitting and environmental review; during construction.	Ongoing throughout construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
water infrastructure which would otherwise provide such reclaimed water. This measure shall be noted on construction plans and shall be spot checked by the local jurisdiction.				
HYD -2(b) Landscape Watering				
In jurisdictions that do not already have an appropriate local regulatory program related to landscape watering, proposed 2022 RTP/SCS projects that include landscaping shall be designed with drought tolerant plants and drip irrigation. When feasible, native plant species shall be used. In addition, landscaping associated with proposed improvements shall be maintained using reclaimed water when feasible. If reclaimed water could feasibly be utilized for project landscape watering due to proximity of reclaimed water sources but is unavailable due to lack of connecting infrastructure, local agencies or transportation sponsors shall conduct an analysis of the upgrades needed to provide such infrastructure, which will include the potential for new connections to existing reclaimed water systems to provide reclaimed water to other nearby sources besides the proposed project in the analysis, and shall perform such steps as necessary to utilize available reclaimed water if feasible.	If applicable, place conditions of approval on the inclusion of landscaping features described in this mitigation.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
Noise				
N -1 Construction Noise Reduction				
To reduce construction noise levels to achieve applicable standards, implementing agencies for transportation and land use projects shall implement the measures identified below where feasible and necessary.  a. Compliance with local Construction Noise Regulations. Implementing agencies shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites without pile driving, appropriate measures shall be implemented to ensure consistency with local noise ordinance requirements relating to construction. Specific techniques may include, but are not limited to, restrictions on construction timing, use of sound blankets on construction equipment, and the use of temporary walls and noise barriers to block and deflect noise.	Ensure consistency with local noise ordinance requirements relating to construction for sensitive uses.  Place conditions of approval on project to require construction noise reduction measures detailed in this mitigation.	During project permitting and environmental review; prior to construction; during construction activities.	Ongoing throughout construction.	Implementing agencies/ project sponsor.
b. Noise Complaint and Enforcement Manager. Designate an on-site construction complaint and enforcement manager for projects within 800 feet of sensitive receivers. Implementing agencies shall post phone numbers for the on-site enforcement manager at construction sites				

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

- along with complaint procedures and who to notify in the event of a problem.
- c. **Pile Driving.** For any project within 3,200 feet of sensitive receptors that requires pilings, the implementing agency shall require caisson drilling or sonic pile driving as opposed to pile driving, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.
- d. Construction Equipment Noise Control.
  Implementing agencies shall ensure that
  equipment and trucks used for project
  construction utilize the best available noise
  control techniques (including mufflers, use
  of intake silencers, ducts, engine
  enclosures, and acoustically attenuating
  shields or shrouds).
- e. Impact Equipment Noise Control.

  Implementing agencies shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction be hydraulically or electrically powered wherever feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatically powered tools is unavoidable, use of an exhaust muffler on the compressed air exhaust can lower noise levels from the

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
exhaust by up to about 10 dBA. When feasible, external jackets on the impact equipment can achieve a reduction of 5 dBA. Whenever feasible, use quieter procedures, such as drilling rather than impact equipment operation.  f. Construction Activity Timing Restrictions. The following timing restrictions shall apply to proposed 2022 RTP/SCS activates creating noise levels at or above 65 dBA at a nearby dwelling unit, except where timing restrictions are already established in local codes or policies. Construction activities shall be limited to:  Monday through Friday: 7 a.m. to 6 p.m.  Saturday: 9 a.m. to 5 p.m.  Placement of Stationary Noise Sources. Locate stationary noise sources as far from noise-sensitive receptors as possible. Stationary noise sources that must be located near existing receptors will be equipped with the best available mufflers				
N -2 Noise Assessment and Control for Mobile	and Point Source Reduction			
Implementing agencies for 2022 RTP/SCS projects shall complete detailed noise assessments using applicable guidelines (e.g., Caltrans Traffic Noise Analysis Protocol) for roadway projects that may impact noise sensitive receptors. The implementing agency	Prior to issuance of grading or building permits, ensure noise assessments have been completed. Place conditions of approval to require implementation of recommendations in project-specific noise assessments.	During project permitting and environmental review.	Once	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
shall ensure that a noise survey is conducted		-		
that, at minimum:				
<ul><li>Determines existing and projected noise levels</li></ul>				
<ul> <li>Determines the amount of attenuation needed to reduce potential noise impacts to applicable State and local standards</li> </ul>				
<ul> <li>Identifies potential alternate alignments</li> </ul>				
that allow greater distance from, or				
greater buffering of, noise-sensitive areas				
<ul><li>If warranted, recommends methods for</li></ul>				

- Appropriate setbacks
- Sound attenuating building design, including retrofit of existing structures with sound attenuating building materials

mitigating noise impacts, including:

- Use of sound barriers (earthen berms, sound walls, or some combination of the two)
- Locate transit-related passenger stations, central maintenance facilities, decentralized maintenance facilities, and electric substations away from sensitive receptors to the maximum extent feasible.

Where new or expanded roadway projects are found to expose receptors to noise exceeding normally acceptable levels, the individual project lead agency shall implement techniques as recommended in the project-specific noise assessments. The

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
preferred methods for mitigating noise impacts shall include the use of appropriate setbacks and sound attenuating building design, including retrofit of existing structures with sound attenuating building materials where feasible. In instances where use of these techniques is not feasible, the use of sound barriers (earthen berms, sound walls, or some combination of the two) shall be considered. Whenever possible, a combination of elements shall be used, including open grade paving, solid fences, walls, and landscaped berms. Other techniques such as rubberized asphalt or "quiet pavement" shall be used where feasible to reduce road noise for new roadway segments or modifications requiring repaving. The effectiveness of noise reduction measures shall be monitored by taking noise measurements and installing adaptive mitigation measures to achieve applicable standards.				
N-3 (a) Vibration Mitigation for Construction of	f Transportation Projects			
Where local vibration and groundborne noise standards do not apply, implementing agencies of proposed 2022 RTP/SCS projects utilizing heavy construction equipment shall estimate vibration levels generated by construction activities and use the Caltrans vibration damage potential threshold criteria	If applicable, place conditions of approval on project to require construction noise reduction measures detailed in this mitigation.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
to screen for and screen out projects as to their potential to damage buildings on site or near a project.				
If construction equipment would generate vibration levels exceeding acceptable levels as established by Caltrans, implementing agencies of the proposed 2022 RTP/SCS shall, or can and should, complete the following				
<ul> <li>Prior to construction, survey the project site for vulnerable buildings, and complete geotechnical testing (preconstruction assessment of the existing subsurface conditions and structural integrity), for any</li> </ul>				
older or historic buildings within 50 feet of pile driving. The testing shall be completed by a qualified geotechnical engineer and qualified historic preservation professional and/or structural engineer.				
<ul> <li>Prepare and submit a report to the lead agency that contains the results of the geological testing. If recommended by the preconstruction report implementing</li> </ul>				
agencies shall require ground vibration monitoring of nearby historic structures. Methods and technologies shall be based on the specific conditions at the				
construction site. The preconstruction assessment shall include a monitoring program to detect ground settlement or				

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency
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, historic structure.				
<ul> <li>To minimize disturbance withing 550 feet</li> </ul>				
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 duration of pile				
driving), where feasible, in consideration of				
geotechnical and structural requirements				
and conditions as defined as part of the				
geotechnical testing if testing was feasible.				
<ul> <li>Use cushion blocks to dampen noise from</li> </ul>				
pile driving.				
<ul> <li>Phase operations of construction</li> </ul>				
equipment to avoid simultaneous vibration				
• •				

sources

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
N-3(b) Vibration Mitigation for Operation of To	ransportation Projects			
Where local vibration and groundborne noise standards do not apply, implementing agencies of proposed 2022 RTP/SCS projects shall comply with all applicable local vibration and groundborne noise standards, or in the absence of such local standards, comply with guidance provided by the FTA in Transit Noise and Vibration Impact Assessment (FTA 2018) to assess impacts to buildings and sensitive receptors and reduce vibration and groundborne noise. FTA recommended thresholds shall be used except in areas where local standards for groundborne noise and vibration have been established.  Methods that can be implemented to reduce vibration and groundborne noise impacts include, but are not limited to:  Bus and Truck Traffic  Constructing of noise barriers  Use noise reducing tires and wheel construction on bus wheels  Use vehicle skirts (i.e., a partial enclosure around each wheel with absorptive treatment) on freight vehicle wheels	Prior to issuance of grading or building permits, ensure noise assessments have been completed. Place conditions of approval to require implementation of recommendations in project-specific noise assessments.	During project permitting and environmental review	Once.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
N-4 Noise Mitigation for Land Uses	·		•	-
If a land use project is located in an area with exterior ambient noise levels above local noise standards, the implementing agency shall ensure that a noise study is conducted to determine the existing exterior noise levels in the vicinity of the project. If the project would be impacted by ambient noise levels, feasible attenuation measures shall be used to reduce operational noise to meet acceptable standards. In addition, noise insulation techniques shall be utilized to reduce indoor noise levels to thresholds set in applicable State and/or local standards. Such measures may include but are not limited to dual-paned windows, solid core exterior doors with perimeter weather stripping, air conditioning system so that windows and doors may remain closed, and situating exterior doors away from roads. The noise study and determination of appropriate mitigation measures shall be completed during the project's individual environmental review.	Comply with all applicable local and/or FTA vibration and groundborne noise standards.	During project permitting and environmental review.	Open during project operation.	Implementing agencies/ project sponsor.
N-5 Noise Mitigation Near Airports				
Implementing 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, or within two miles of a private use airport, shall require a site-specific noise	If applicable, require a site-specific noise compatibility study. Place conditions of approval on adherence to recommendations to site design and building construction, as recommended in the study.	During project permitting and environmental review.	Once	Implementing agencies/ project sponsor.

Responsible

Monitoring

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
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. Such measures may include but are not limited to dual-paned windows, solid core exterior doors with perimeter weather stripping, air conditioning system so that windows and doors may remain closed, and situating exterior doors away from roads, such as dual paned windows. The noise study and determination of appropriate mitigation measures shall be completed during the project's individual environmental review.				
Transportation				
T -2(a) Regional VMT Reduction Programs				
Implementing agencies shall require implementation of VMT reduction strategies through TDM programs, impact fee programs, mitigation banks or exchange programs, inlieu fee programs, and other land use project conditions that reduce VMT. Programs shall be designed to reduce VMT from existing land uses, where feasible, and from new	Require the inclusion VMT reduction strategies included in this mitigation measure at a program and project-level.	During project permitting and environmental review.	Once.	Implementing agencies/ project sponsor.

discretionary residential or employment land use projects. The design of programs and project specific mitigation shall focus on VMT reduction strategies that increase travel choices and improve the comfort and

Mikigation Magazza	Action Dominad	Timing	Monitoring	Responsible
Mitigation Measure convenience of sharing rides in private	Action Required	Timing	Requirements	Agency
vehicles, using public transit, biking, or				
walking. Modifications may include but are				
not limited to:				
<ul><li>Provide car-sharing, vanpool, bike sharing,</li></ul>				
and ride-sharing programs				
<ul> <li>Implement or provide access to commute</li> </ul>				
reduction programs				
<ul> <li>Provide a bus rapid transit system</li> </ul>				
<ul> <li>Improve pedestrian or bicycle networks, or</li> </ul>				
transit service				
<ul><li>Provide transit passes</li></ul>				
<ul> <li>Encourage telecommute programs</li> </ul>				
Incorporate affordable housing into the				
project				
<ul><li>Increase density</li></ul>				
<ul> <li>Increase mixed uses within the project</li> </ul>				
area				
<ul> <li>Incorporate improved pedestrian</li> </ul>				
connections within the				
project/neighborhood				
<ul> <li>Incentivize development in low VMT communities</li> </ul>				
<ul> <li>Incentivize housing near commercial and offices</li> </ul>				
<ul> <li>Increase access to goods and services, such</li> </ul>				
as groceries, schools, and daycare				
<ul> <li>Incorporate neighborhood electric vehicle</li> </ul>				
network				

<ul> <li>Mitigation Measure</li> <li>Orient the project toward transit, bicycle, and pedestrian facilities</li> <li>Provide traffic calming</li> <li>Provide bicycle parking</li> <li>Limit parking</li> <li>Separate out parking costs</li> <li>Provide parking cash-out programs</li> <li>T-2(b) Project Level VMT Analysis and Reduction</li> </ul>	Action Required	Timing	Monitoring Requirements	Responsible Agency
Transportation project sponsor agencies shall evaluate transportation projects that involve increasing roadway capacity for their potential to increase VMT. Where project-level increases are found to be potentially significant, implementing agencies shall, or can and should, identify and implement measures that reduce VMT. Examples of measures that can reduce the VMT associated with increases in roadway capacity include tolling new lanes to encourage carpools and fund transit improvements; converting existing general-purpose lanes to high occupancy vehicle lanes; VMT banks; and implementing or funding offsite travel demand management.  Implementing agencies shall evaluate VMT as part of project specific CEQA review and discretionary approval decisions for land use projects. Where project level significant impacts are identified, implementing agencies shall identify and implement measures that	Evaluate the potential for projects to increase VMT. Where project-level significant impacts are identified, develop, and implement mitigation measures to reduce VMT.	During project permitting and environmental review	Once	Implementing agencies/ project sponsor.

Mitigation Measure reduce VMT. Examples of measures that reduce VMT include infill development, mixed use, and transit-oriented development, TDM strategies, complete streets, reduced parking requirements, and providing alternative transportation facilities, such as bike lanes and transit stops Tribal Cultural Resources	Action Required	Timing	Monitoring Requirements	Responsible Agency
TRC-1 Tribal Cultural Resources Impact Minimi	zation			
Transportation project sponsor agencies shall comply with AB 52, which may require formal tribal consultation. If the implementing agency determines that a project may cause a substantial adverse change to a tribal cultural resource, they shall implement mitigation measures identified in the consultation process required under PRC Section 21080.3.2, or shall implement the following measures where feasible to avoid or minimize the project-specific significant adverse impacts:  Avoidance and preservation of the resources in place, including, but not limited to: designing and building the project 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.	Ensure compliance with AB 52; and when applicable, implement measures identified in this mitigation measure.	During project permitting and environmental review. Additional measures listed should be implemented prior to and during construction.	Ongoing throughout project construction.	Implementing agencies/ project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values, and meaning of the resource, including, but not limited to, the following:         <ul> <li>Protecting the cultural character and integrity of the resource</li> <li>Protecting the traditional use of the resource</li> </ul> </li> <li>Protecting the confidentiality of the resource</li> </ul>				
<ul> <li>Establishment of permanent conservation easements or other culturally appropriate property management criteria for the purposes of preserving or utilizing the resources or places.</li> <li>Native American monitoring by the appropriate tribe during soil disturbance for all projects in areas identified as sensitive for potential tribal cultural resources and/or in the vicinity (within 100 feet) of known tribal cultural resources.</li> </ul>				
Wildfire				
WF-1 (a) Wildfire Risk Reduction				
If an individual transportation or land use project included in proposed 2022 RTP/SCS is located within or less than two miles from an SRA or very high fire hazard severity zones, the implementing agency shall require	If a project is within two miles of an SRA or VHFHSZ, implement mitigation described in this measure, such as maintaining and enforcing defensible space.	During project permitting and environmental review	Once.	Implementing agencies/ project sponsor.

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

appropriate mitigation to reduce the risk. Examples of mitigation to reduce risk of loss, injury or death from wildlife include, but are not limited to:

- Require the use of fire-resistant vegetation native to Stanislaus County and/or the local microclimate of the project site and discourage the use of fire-prone species especially nonnative, invasive species.
- Enforce defensible space regulations to keep overgrown and unmanaged vegetation, accumulations of trash and other flammable material away from structures.
- Provide public education about wildfire risk, fire prevention measures, and safety procedures and practices to allow for safe evacuation and/or options to shelter-inplace.
- Require adherence to the local hazard mitigation plan, as well as the local general plan policies and programs aimed at reducing the risk of wildfires through land use compatibility, training, sustainable development, brush management, public outreach, and service standards for fire departments.
- Ensure sufficient emergency water supply.
- Encourage the use of fire-resistant vegetation native to Stanislaus County

			Monitoring	Responsible
Mitigation Measure	Action Required	Timing	Requirements	Agency

and/or the local microclimate of the project site and discourage the use of fire-prone species especially non-native, invasive species.

- Require a fire safety plan be submitted to and approved by the local fire protection agency. The fire safety plan shall include all of the fire safety features incorporated into the project and the schedule for implementation of the features. The local fire protection agency may require changes to the plan or may reject the plan if it does not adequately address fire hazards associated with the project as a whole or the individual phase of the project.
- Prohibit certain project construction activities with potential to ignite wildfires during red-flag warnings issued by the National Weather Service for the project site location. Example activities that should be prohibited during red-flag warnings include welding and grinding outside of enclosed buildings.
- Require fire extinguishers to be onsite during construction of projects. Fire extinguishers shall be maintained to function according to manufacturer specifications. Construction personnel shall receive training on the proper methods of using a fire extinguisher.

Mitigation Measure  ■ Smoking and open fires shall be prohibited at individual transportation or land use projects sites included in proposed 2022 RTP/SCS during construction and operations. A copy of the notification to all contractors regarding prohibiting smoking and burning shall be provided to the County.	Action Required	Timing	Monitoring Requirements	Responsible Agency
<ul> <li>WF -1 (b) Fire Protection Plan</li> <li>Implementing agencies for individual transportation or land use projects included in proposed 2022 RTP/SCS located within or less than two miles from an SRA or very high fire hazard severity zone shall prepare a Fire Protection Plan that meets TCFD requirements. The plan shall contain (but not be limited to) the following provisions:         <ul> <li>All construction equipment shall be equipped with appropriate spark arrestors and carry fire extinguishers.</li> <li>A fire watch with appropriate firefighting equipment shall be available at the Project site at all times when welding activities are taking place. Welding shall not occur when sustained winds exceed that set forth by the TCFD unless a TCFD-approved windshield is on site.</li> <li>A vegetation management plan shall be prepared to address vegetation clearance around all WTGs and a regularly scheduled</li> </ul> </li> </ul>	If a project is within two miles of an SRA or VHFHSZ, implement mitigation described in this measure, such as operational fire water tanks.	During project permitting and environmental review.	Once.	Implementing agencies/project sponsor.

Mitigation Measure	Action Required	Timing	Monitoring Requirements	Responsible Agency
brush clearance of vegetation on and				
adjacent to all access roads, power lines, and other facilities.				
<ul> <li>Operational fire water tanks shall be</li> </ul>				
installed prior to construction.				
<ul> <li>Provisions for fire/emergency services</li> </ul>				
access if roadway blockage occurs due to large loads during construction and				
operation				
<ul> <li>Cleared, maintained parking areas shall be</li> </ul>				
designated; no parking shall be allowed in				
non-designated areas.				
<ul> <li>The need for and/or use of dedicated repeaters for emergency services.</li> </ul>				
<ul> <li>Appropriate Hot Work permits (such as</li> </ul>				
cutting and welding permits) shall be				
obtained from the jurisdictional fire				
<ul><li>agency.</li><li>Individual transportation or land use</li></ul>				
projects included in proposed 2022				
RTP/SCS shall participate in the Red Flag				
Warning program with local fire agencies				
and the National Weather Service. The Applicant shall stop work during Red Flag				
conditions to reduce the risk of wildlife				
ignition.				
<ul> <li>Compliance with California PRC sections</li> </ul>				
4291, 4442, and 4443.				

