Shasta Regional Transportation Agency

2015 Regional Transportation Plan for Shasta County

Final

Program Environmental Impact Report

SCH# 2014022018

June 2015

Environmental Scientists Planners Engineers

FINAL
PROGRAM ENVIRONMENTAL IMPACT REPORT

2015 REGIONAL TRANSPORTATION PLAN FOR SHASTA COUNTY

Prepared by:

Shasta Regional Transportation Agency
1255 East Street, Suite 202
Redding, CA 96001
Contact: Jennifer Pollom
(530) 262-6195

Prepared with the assistance of:

Rincon Consultants, Inc.
2220 J Street, Suite 7
Sacramento, CA 95816

June 2015

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“The preparation of the Regional Transportation Plan was financed in part through grants from the United States Department of Transportation (U.S. DOT). The views and opinions of the agency expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation. The agencies represented in this document assume no liability for its contents or use thereof.”

FINAL

SHASTA REGIONAL TRANSPORTATION AGENCY (SRTA) 2015 RTP PROGRAM EIR

Table of Contents

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1.0 INTRODUCTION

This document, together with the 2015 Regional Transportation Plan (RTP) for Shasta County Draft Program Environmental Impact Report (Draft Program EIR) which is incorporated by reference, constitutes the Shasta Regional Transportation Agency's (SRTA) 2015 RTP for Shasta County Final Program Environmental Impact Report (Final Program EIR).

A Draft Program EIR for this project was circulated in March 2015 (SCH #2014022018). The Final Program EIR is an informational document prepared by SRTA that must be considered by decision makers before approving or denying the 2015 RTP (the "proposed project"). Pursuant to Section 15132 of the California Environmental Quality Act (CEQA) Guidelines, this Final Program EIR consists of (a) revisions to the Draft Program EIR, (b) a list of persons and organizations that commented on the Draft Program EIR, (c) comments received on the Draft Program EIR, (d) SRTA's responses to significant environmental points raised in the review and consultation process, (e) any other information added by SRTA, and (f) the mitigation monitoring and reporting program (MMRP). The Final Program EIR will be used for review and consideration for certification by the SRTA Board of Directors.

This introduction section describes the organization of this document, a summary of the Program EIR certification and project approval procedure, a summary of public involvement, and an overview of the response to comment process.

The Final Program EIR may be obtained and all documents referenced in the Final Program EIR may be reviewed at SRTA's office located at: 1255 East Street, Suite 202, Redding, CA 96001. In addition, the Final Program EIR, Draft Program EIR, and Final Draft RTP are available online at http://www.srta.ca.gov/.

1.1 ORGANIZATION OF THIS FINAL PROGRAM EIR

This document is organized into four sections. Following this introduction (Section 1.0), Section 2.0, *Response to Comments / Revisions to the Draft Program EIR*, presents minor changes to the Final Program EIR since the publication of the Draft Program EIR and revisions that have been made to the Draft Program EIR as a result of comments on the document received from organizations and individuals. Section 2.0, also contains a list of persons and organizations that submitted written comments on the Draft Program EIR, the comments letters, and responses to those comments. Section 3.0, *References and Report Preparers*, lists the references used in the EIR and the persons involved in the preparation of this Final Program EIR. Finally, Section 4.0, *Mitigation Monitoring and Reporting Program (MMRP)*, presents in a tabular format the mitigation measures, and the responsibility, timing, and verification of monitoring of mitigation measures which are necessary to reduce any environmental impacts identified in the EIR.

1.2 EIR CERTIFICATION - PROJECT APPROVAL PROCESS

The proposed 2015 RTP requires the discretionary approval of the SRTA Board of Directors. SRTA is the lead agency for the proposed project as it holds principal responsibility for approving the 2015 RTP. Prior to approving the 2015 RTP, the SRTA Board of Directors must

certify that (1) the Final Program EIR has been completed in compliance with CEQA; (2) SRTA has reviewed and considered the information in the Final Program EIR; and (3) the Final Program EIR reflects SRTA's independent judgment and analysis (State CEQA Guidelines, Section 15090).

Once the Final Program EIR is certified, the SRTA Board of Directors can approve the 2015 RTP as proposed, approve one of the alternatives evaluated in the Program EIR, or choose to take no action on the project. As part of the approval of either the project or an alternative, SRTA must make written findings for each significant effect identified in the Program EIR.

Following certification of the Final Program EIR by SRTA, those lead agencies implementing subsequent transportation projects would undertake future environmental review for projects identified in the proposed 2015 RTP. Implementing agencies include the cities within Shasta County (Anderson, Redding, and Shasta Lake) as well as Shasta County, Caltrans, and public transit agencies. These lead agencies would be able to prepare subsequent environmental documents that incorporate by reference the appropriate information from this Program EIR regarding secondary effects, cumulative impacts, broad alternatives, and other relevant factors. If the lead agency finds that implementation of a later activity would have no new effects and that no new mitigation measures would be required, that activity would require no additional CEQA review. Where subsequent environmental review is required, such review would focus on project-specific significant effects specific to that project, or its site, that have not been considered in this Program EIR.

1.3 PUBLIC INVOLVEMENT

SRTA published a public Notice of Availability (NOA) for the Draft Program EIR on March 16, 2015, inviting comments from the general public, agencies, organizations, and other interested parties. The NOA was filed with the State Clearinghouse (SCH # 2014022018) and the County Clerk, and was published in the Redding Record Searchlight pursuant to the public noticing requirements of CEQA. SRTA released the Draft Program EIR for public review and comment on March 16, 2015, for a 60-day public review period. The Notice of Completion and NOA for the Draft Program EIR identified the 60-day public review period to end on May 16, 2015. Copies of the Draft Program EIR were distributed to the State Clearinghouse, state agencies, local governments, and interested parties. Hard copies of the Draft Program EIR and appendices were available to the public at SRTA's office and at local public libraries in Shasta County. The Draft Program EIR was also available online at: http://www.srta.ca.gov/. In addition, a public hearing was conducted during the 60-day public review period presenting the Draft RTP and the Draft Program EIR at the SRTA Board of Directors meeting on April 28, 2015 at 3:00 p.m., at the Shasta County Board of Supervisors Chambers, 1450 Court Street, Suite 263, Redding, California.

1.4 RESPONSE TO COMMENTS

Pursuant to CEQA, the lead agency must respond to all substantive environmental issues raised in comments on the Draft Program EIR. Responses to all written and verbal comments received within the comment period are contained in this Final Program EIR (see Section 2.0). Responses in this Final Program EIR include factual corrections and explanation of the Draft Program EIR

analyses. SRTA received three (3) comment letters regarding the Draft Program EIR, all from public agencies. No additional oral or written comments were received. In accordance with CEQA Guidelines Section 15088, this Final Program EIR responds to the written comments received (see Section 2.0). Any changes to the text of the Draft Program EIR that resulted from the comments are also presented in Section 2.0 of this Final Program EIR. This document and the Draft Program EIR, as amended herein, constitute the Final Program EIR.

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2.0 COMMENTS and RESPONSES / REVISIONS to the DRAFT PROGRAM EIR

The Draft Program EIR and this Comments and Responses / Revisions to the Draft Program EIR document collectively comprise the Final Program EIR for the 2015 Regional Transportation Plan for Shasta County (RTP). Any changes made to the text of the Draft Program EIR correcting information, data or intent, other than minor typographical corrections or minor working changes, are noted in the Final Program EIR as changes from the Draft Program EIR. Corrections or additional text discussed below are also shown in ~~strikethrough~~ (for deleted text) and <u>underline</u> (for added text) format.

2.1 SUMMARY OF REVISIONS TO THE DRAFT PROGRAM EIR

The changes incorporated into this Final Program EIR correct minor errors or clarify information. These edits, in addition to other minor or technical edits found in the text of the Final Program EIR (including in the Appendices), do not result in presentation of new substantial adverse environmental effects and do not affect the conclusions of the EIR. Deletions in the Final Program EIR are indicated by strikethrough text, and insertions are indicated by underlined text. The page numbers of the changes to the Draft Program EIR are listed in Section 2.2 Comments and Responses following the response to a comment that suggests or warrants a change/edit to the Draft Program EIR. The Final Program EIR (including the Appendices) reflect the final, corrected EIR text.

2.2 COMMENTS AND RESPONSES

In accordance with Section 15088 of the CEQA Guidelines, SRTA, as the lead agency, has reviewed the comments received on the Draft Program EIR for the 2015 RTP and has prepared written responses to the written and verbal comments received. The Draft Program EIR was circulated for a 60-day public review period that began March 17, 2015 and concluded on May 16, 2015. The comment letters included herein were submitted by public agencies.

Each comment that SRTA received is included in this section. Responses to these comments have been prepared to address the environmental concerns raised by the commenters and to indicate where and how the Final Program EIR addresses pertinent environmental issues.

The comment letters have been numbered, and each issue within a comment letter, if more than one, has a number assigned to it (for example, letter 1, comment 2 is referenced as 1.2). Each comment letter is reproduced in its entirety with the issues of concern numbered in the right margin. The commenters are listed in Table 2-1.

The focus of the responses to comment is the disposition of environmental issues that are raised in the comments, as specified by Section 15088 (b) of the CEQA Guidelines. Detailed responses are not provided to comments on the merits of the proposed project.

Table 2-1
Commenters on the Draft Program EIR

Letter No.	Commenter	Agency/Organization	Date Received	Page Number
1	Richard W. Simon	Shasta County Department of Resource Management	April 8, 2015	2-3
2	Len Marino	California Natural Resources Agency Central Valley Flood Protection Board	April 13, 2015	2-6
3	Curt Babcock	California Natural Resources Agency Department of Fish and Wildlife	May 12, 2015	2-11

Letter 1

Shasta County

DEPARTMENT OF RESOURCE MANAGEMENT
1855 Placer Street, Redding, CA 96001

Richard W. Simon, AICP
Director

RECEIVED
APR 08 2015
SHASTA REGIONAL
TRANSPORTATION AGENCY

April 2, 2015

Daniel S. Little, Executive Director
Shasta Regional Transportation Agency
1255 East Street, Suite 202
Redding, CA 96001

Dear Mr. Little:

Thank you for the opportunity to comment on the Draft 2015 Regional Transportation Plan Environmental Impact Report. The Regional Transportation Plan is very comprehensive and the associated Draft Environmental Impact Report captures impacts of road construction in a very thorough way. The only area of environmental impact to air quality that is not adequately discussed is the use of rubberized asphalt.

Odors generated from the manufacture, transportation and placement of rubberized asphalt are significant. Melting rubber at the manufacturing plant and the high mix temperature required with its formulation lead to much higher odors. Additionally, the manufacture of this material often occurs at night when dispersing winds are at their lowest velocity.

The best method for mitigation of these odors is to not use rubberized asphalt in these construction activities. If rubberized asphalt has to be used, then it should be manufactured and placed during the day light hours when some dispersing winds are likely.

If you have any questions regarding the use of rubberized asphalt, please contact Ross Bell at the Shasta County Air Quality Management District office at 530-225-5674.

Sincerely,

Richard W. Simon
Air Pollution Control Officer

☒ *Suite 101*
AIR QUALITY MANAGEMENT DISTRICT
530 225-5674
Fax 530 225-5237

☐ *Suite 102*
BUILDING DIVISION
530 225-5761
Fax 530 245-6468

☐ *Suite 103*
PLANNING DIVISION
530 225-5532
Fax 530 245-6468

☐ *Suite 201*
ENVIRONMENTAL HEALTH DIVISION
530 225-5787
Fax 530 225-5413

☐ *Suite 200*
ADMINISTRATION & COMMUNITY EDUCATION
530 225-5789
Fax 530 225-5807

Toll Free Access Within Shasta County 1 800 528-2850

Letter 1

COMMENTER: Richard W. Simon, Air Pollution Control Officer, Shasta County Department of Resource Management

DATE: April 8, 2015

RESPONSE:

Response 1.1

The commenter states that the Draft Program EIR does not adequately discuss the impact to air quality from the use of rubberized asphalt. The commenter states that the manufacture, transportation, and placement of rubberized asphalt generates substantial odors. The commenter suggests mitigating odors from rubberized asphalt by requiring that rubberized asphalt not be used in construction activities, and if infeasible, requiring that its manufacture and use takes place during the day to take advantage of dispersing winds.

The proposed 2015 RTP does not include any projects that involve a rubberized asphalt manufacturer nor would the 2015 RTP place a rubberized asphalt manufacturer near sensitive receptors. Requirements for where the manufacturing of rubberized asphalt occurs are outside the jurisdiction of SRTA and beyond the scope of the EIR. However, the placement of rubberized asphalt during the construction of a transportation project included in the proposed 2015 RTP may expose sensitive receptors to substantial odors. This impact would be temporary as it would only occur during construction activity, and thus would not result in a significant odor impact. Further, individual specific environmental analysis of each transportation project will be undertaken as necessary by the appropriate implementing lead agency prior to each project being considered for approval. These agencies include the cities within Shasta County (Anderson, Redding, and Shasta Lake) as well as Shasta County, Caltrans, and public transit agencies. Where subsequent environmental review is required, such review would focus on project-specific significant effects, or its site, that have not been considered in this Final Program EIR, such as the project's use of rubberized asphalt in close proximity to any sensitive receptors and the associated impact related to odors from such use during construction. Nevertheless, page 4.2-16 of the Draft Program EIR has been revised in the Final Program EIR to include the following additional text related to rubberized asphalt:

> In addition, diesel exhaust has a distinct odor, which is primarily a result of hydrocarbons and aldehydes contained in diesel fuel. In addition to the health risks associated with diesel exhaust, the odors associated with diesel exhaust could be a nuisance to nearby receptors.
>
> In addition to odors associated with diesel exhaust, odors associated with rubberized asphalt which may be utilized by transportation projects could be a nuisance to nearby receptors. Rubberized asphalt is almost exclusively used for street and highway overlay projects (Mendocino County Grand Jury, April 2012). There are a number of benefits of rubberized asphalt over conventional asphalt, including reducing the number of scrap tires that are sent to landfills, reducing roadway noise, providing better skid resistance, and reducing maintenance costs.

Rubberized asphalt is manufactured by blending 15% to 20% ground scrap tires to asphalt. The placement of rubberized asphalt can produce odors when the asphalt is over-heated especially during night time when winds are minimal. The odors associated with the placement of rubberized asphalt could be a nuisance to nearby receptors if placed during the night, however, odor impacts would be temporary in nature and therefore not significant.

Letter 2

STATE OF CALIFORNIA – CALIFORNIA NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., GOVERNOR

CENTRAL VALLEY FLOOD PROTECTION BOARD
3310 El Camino Ave., Rm. 151
SACRAMENTO, CA 95821
(916) 574-0609 FAX: (916) 574-0682
PERMITS: (916) 574-2380 FAX: (916) 574-0682

April 10, 2015

Ms. Jennifer Pollom
Shasta Regional Transportation Agency
1255 East Street, Suite 202
Redding, California 96001

Subject: 2015 Regional Transportation Plan (RTP), Draft EIR, SCH No. 2014022018

Location: Shasta County

Dear Ms. Pollom:

Central Valley Flood Protection Board (Board) staff has reviewed the subject document and provides the following comments:

The proposed transportation plan may result in projects located adjacent to or within the following regulated streams under Board jurisdiction pursuant to Title 23, California Code of Regulations (23 CCR), Section 112:

Stream	County - Limits
Bear Creek	Shasta County - within the designated floodway of the Sacramento River
Churn Creek	Shasta County- within the Sacramento River Floodway
Clear Creek	Shasta County- Sacramento River to Whiskeytown Dam
Clover Creek	Shasta County - to 1.1 miles upstream from Millville Plains Road
Cottonwood Creek	Shasta County
Cow Creek	Shasta County - to 0.6 miles upstream of Millville Plains Road
Dry Creek	Shasta County
Little Cow Creek	Shasta County
Oak Run Creek	Shasta County- to 0.6 miles upstream of Millville Plains Road
Sacramento River	Shasta County- Keswick Dam to the west end of Sherman Island
Salt Creek	Shasta County

2.1

The Board enforces its regulations for the construction, maintenance, and protection of adopted plans of flood control that protect public lands from floods. Adopted plans of flood control include federal-State facilities of the State Plan of Flood Control, regulated streams, and designated floodways. The geographic extent of Board jurisdiction includes the Central Valley, and all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and the Tulare and Buena Vista basins (23 CCR, Section 2).

A Board permit is required prior to working in the Board's jurisdiction for the following:

- Placement, construction, reconstruction, removal, or abandonment of any landscaping, culvert, bridge, conduit, fence, projection, fill, embankment, building, structure, obstruction, encroachment, excavation, the planting, or removal of vegetation, and any repair or maintenance that involves cutting into the levee (23 CCR Section 6);

- Existing structures that predate permitting, or where it is necessary to establish the conditions normally imposed by permitting. The circumstances include those where responsibility for the encroachment has not been clearly established or ownership and use have been revised (23 CCR Section 6);

- Vegetation plantings require submission of detailed design drawings; identification of vegetation type; plant and tree names (both common and scientific); quantities of each type of plant and tree; spacing and irrigation method; a vegetative management plan for maintenance to prevent the interference with flood control operations, levee maintenance, inspection, and flood fight procedures (23 CCR Section 131).

2.1 cont'd

Other local, federal and State agency permits may be required and are the responsibility of the applicant to obtain.

Board permit application forms and our complete 23 CCR regulations can be found on our website at http://www.cvfpb.ca.gov/. Maps of the Board's jurisdiction including all tributaries and distributaries of the Sacramento and San Joaquin Rivers, and Board designated floodways are also available on a Department of Water Resources website at http://gis.bam.water.ca.gov/bam/.

Additional Considerations Related to Potential Impacts of Vegetation and Hydraulics

Accumulation and establishment of woody vegetation that is not managed may have negative impacts on channel capacity and may increase the potential for levee over-topping or other failure. When vegetation develops and becomes habitat for wildlife, maintenance to initial baseline conditions typically becomes more difficult as the removal of vegetative growth may be subject to federal and State resource agency requirements for on-site mitigation. The proposed project should include mitigation measures to avoid decreasing floodway channel capacity.

2.2

Adverse hydraulic impacts of proposed encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The proposed project should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. If possible off-site mitigation outside of the Board's jurisdiction should be used when mitigating for vegetation removed at the project location.

2.3

If you have any questions please contact James Herota at (916) 574-0651, or via email at james.herota@water.ca.gov.

Sincerely,

Len Marino, P.E.
Chief Engineer

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, California 95814

Letter 2

COMMENTER: Len Marino, P.E., Chief Engineer, California Natural Resource Agency Central Valley Flood Protection Board

DATE: April 13, 2015

RESPONSE:

Response 2.1

The commenter states that the 2015 RTP may result in projects located adjacent to or within regulated streams under the jurisdiction of the Central Valley Flood Protection Board and that projects within its jurisdiction may require a permit from the Board.

As a programmatic document, the Draft Program EIR presents a region-wide assessment of the impacts of the proposed 2015 RTP and does not analyze the site-specific impacts and permit requirements of individual projects. Precise project designs and locations are not known at this time. Specific environmental analysis of each individual transportation project will be undertaken and permit requirements will be identified as necessary by the appropriate implementing agency prior to each project being considered for approval.

Response 2.2

The commenter states that the Draft Program EIR should include mitigation measures to avoid decreasing floodway channel capacity due to the accumulation and establishment of woody vegetation.

As described by the commenter and as discussed in Section 4.3, *Biological Resources*, transportation projects in accordance with the 2015 RTP would be required to comply with state and federal permitting requirements for vegetation removal within jurisdictional waterways. Individual projects would be required by lead agencies to provide sufficient drainage capacity. As discussed in Section 4.13, *Less than Significant Environmental Factors*, the 2015 RTP would not change the drainage pattern of an area or result in flooding due to the alteration of a stream or river, as the 2015 RTP does not propose such actions. The majority of projects would occur within existing rights-of-way and would not adversely affect floodway channel capacity.

Furthermore, as discussed in Response 2.1 above and Section 1.0, *Introduction*, the Draft Program EIR presents a region-wide assessment of the impacts of the proposed 2015 RTP. Analysis of site-specific impacts of individual projects is not the intended use of a Program EIR. Many specific projects are not currently defined to the level that would allow for such an analysis. Individual specific environmental analysis of each project will be undertaken as necessary by the appropriate implementing lead agency prior to each project being considered for approval. Lead agencies implementing subsequent projects would undertake future environmental review for projects in the 2015 RTP. These agencies include the cities within Shasta County (Anderson, Redding, and Shasta Lake) as well as Shasta County, Caltrans, and public transit agencies. Where subsequent environmental review is required, such review would focus on significant effects specific to the project, or its site, that have not been

considered in this Program EIR, such as the project's impact to accumulation and establishment of woody vegetation in floodway channels.

Response 2.3

The commenter states that proposed encroachments could impede flood flows, reroute flood flows, and/or increase sediment accumulation. The commenter states that the Draft Program EIR should include mitigation measures for channel and levee improvements and maintenance to prevent and/or reduce hydraulic impacts. The commenter recommends that mitigation for vegetation removal should occur off-site, at locations outside of the Board's jurisdiction.

During project design and development review, individual transportation projects would be required by lead agencies to avoid encroachment into the floodway or provide necessary drainage improvements. As described in Section 4.13, *Less than Significant Environmental Factors,* the 2015 RTP would not change the drainage pattern of an area or result in flooding due to the alteration or encroachment into a stream or river, as the 2015 RTP does not propose such actions. The majority of projects would occur within existing rights-of-way and would not generate significant new surface water runoff that could exceed the capacity of stormwater infrastructure, impact drainage conditions, or impede flood flows. Hydraulic impacts of the 2015 RTP would be less than significant. Thus, while the amount of impervious surface would increase, adjacent stormwater infrastructure would be designed to collect, convey and treat runoff. Impacts would be less than significant.

As discussed in Response 2.2 above, if subsequent projects under the proposed 2015 RTP would impede flood flows, reroute flood flows, and/or increase sediment accumulation, subsequent environmental review by the lead agency would be required and mitigation measures for channel and levee improvements and maintenance to reduce project-specific hydraulic impacts may be required.

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Region 1 – Northern
601 Locust Street
Redding, CA 96001
www.wildlife.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

May 12, 2015

Ms. Jennifer Pollom
Shasta Regional Transportation Agency
1255 East Street, Suite 202
Redding, CA 96001

Subject: Review of the Draft Programmatic Environmental Impact Report for the 2015 Regional Transportation Plan, State Clearinghouse Number (SCH) 2014022018, Shasta County

Dear Ms. Pollom:

The California Department of Fish and Wildlife (Department) has reviewed the Draft Programmatic Environmental Impact Report (DEIR) for the above-referenced project SCH 2014022018 (Project). The Project includes the area within the limits of Shasta County including the incorporated cities of Anderson, Redding, and Shasta Lake and all unincorporated areas under the jurisdiction of the County of Shasta. The Department offers the following comments and recommendations on the Project in our role as the State's trustee for fish and wildlife resources, and as a responsible agency under the California Environmental Quality Act (CEQA), California Public Resources Codes section 21000 et seq.

Project Description

> *"The Shasta Regional Transportation Agency (SRTA) has developed a 2015 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) to guide future transportation projects and to facilitate a land use scenario for the region that is consistent with the requirements of Senate Bill 375 (SB 375)."*

3.1

Project Comments and Recommendations

The Department would first like to acknowledge the exceptional job the SRTA and their consultant did on this DEIR. The Department appreciates that many of our Notice of Preparation comments were addressed in the DEIR.

The Department recognizes that the 2015 RTP and EIR are programmatic, and that the mitigation measures are not specific to specific projects. With that in mind, the Department has the following comments on the mitigation measures

related to biological resources. The mitigation measures presented in the DEIR are well thought out and the Department appreciates the attention to detail provided in each measure. A few of the mitigation measures use vague phrases and/or words such as *"if feasible," "where feasible"* or *"where economically feasible."* It is the Department's experience that such language is confusing for the project applicant/Lead Agency in its application for future projects and can lead to situations where it is determined never feasible. It is in the best interest of the project applicant/Lead Agency to have the mitigation measure state exactly what they should do. If it is truly infeasible then the mitigation measure should state something to the effect that they will consult with the appropriate agency on what mitigation is appropriate for that specific species. 3.1 cont'd

The following mitigation measures should be rewritten to properly address protections of fish and wildlife resources:

1. Mitigation Measure B-1(a):

    a. This mitigation measure should also incorporate the following: *"...but not limited to special status species, nesting birds, wildlife movement* ***corridors, potential for installation or retrofitting of existing structures for wildlife movement corridors, evaluation of culverts or other watercourse structures to remove barriers to fish passage,*** *sensitive plant communities/critical habitat...."* 3.2

2. Mitigation Measure B-1(f):

    a. Overall this is a well written measure, however, it should state that projects with the potential to affect endangered or threatened state and federal species may require take authorization from both agencies. The Department recommends this be included in the mitigation measure to ensure early coordination and minimize time delays. 3.3
    b. If instream work is proposed in a stream known to support anadromous fish, the Department and the National Marine Fisheries Service shall be consulted to determine the best work window for species potentially affected. Depending on where the project is located, and the timing of that project, many more species could be potentially affected including, but not limited to, willow flycatcher (*Empidonax traillii)*, foothill yellow-legged frog (*Rana boylii*), and western pond turtle (*Emys marmorata*). Therefore, the work window of April 1 through October 31 may need to be changed depending on when and where the work will occur. 3.4

c. The sixth bullet point states that the silt fencing shall be inspected weekly. The Department recommends the fencing be checked daily. 3.5

d. The last bullet point states that if there are impacts to federal and state threatened or endangered species habitat, the lead agency will explore species-appropriate mitigation banks for mitigation credits. The Department recommends stating what the contingency plan is if no bank exists or no mitigation credits are present. Mitigation options may include, but are not limited to, onsite or offsite habitat creation and restoration, land acquisitions and conservation easements. 3.6

3. Mitigation Measure B-1(g):

a. The first bullet point states that coverboard surveys will be completed within three months of the start of construction. The Department is concerned this is the only type of survey method to be used for reptiles and amphibians. In order to detect a number of different species, multiple methods may have to be employed. Also, the time of year when the coverboards are placed will affect detection success. For instance, it is highly unlikely that you will get reptiles underneath a coverboard in the summer in Redding. The Department recommends that the mitigation measure include other types of survey methodologies. In addition, the Department should be consulted on the potential relocation sites if immediately adjacent habitat is unavailable. 3.7

b. The fourth bullet point states that a Final Compliance report will be submitted within 30 days of completion but does not specify who is to receive the report. The Department would like the results of all preconstruction surveys. The results can be sent to California Department of Fish and Wildlife, Attn: CEQA, 601 Locust Street, Redding, CA 96001. 3.8

c. The fifth bullet point states that a qualified biologist will conduct surveys for bat species 30 days prior to the start of construction. This should read, "a qualified **bat** biologist shall conduct presence/absence surveys..." It should also be noted that if a maternity roost is found, depending upon the species, the project may need to be redesigned so as not to impact that roost. The decision on whether or not a maternity roost is taken should be discussed in consultation with the Department. 3.9

4. Mitigation Measure B-1(h):

    a. The Department recommends that preconstruction surveys for nesting birds be conducted no more than seven days prior to vegetation removal. 3.10
    b. The sentence regarding buffers should read, "The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 150 feet for raptor species **or determined in consultation with CDFW and/or USFWS.**" 3.11
    c. The report for preconstruction nesting bird surveys should also be sent to the California Department of Fish and Wildlife, Attn: CEQA, 601 Locust Street, Redding, CA 96001. 3.12

5. Mitigation Measure B-2(b):

    a. The last sentence of this measure should be revised to reflect that if there needs to be mitigation included in a Lake of Streambed Alteration Agreement, the mitigation bank would also need to have been approved by the Department. Depending upon what types of credits are needed, the Department may not allow for purchase of credits in an in-lieu fee program. 3.13

6. Mitigation Measure B-2(c):

    a. The landscaping plan should specify that locally collected seeds and plants shall be used. 3.14

7. Mitigation Measure B-3(a):

    a. Lighting for trails and bridges that are near rivers and/or streams that are known to support anadromous fish should be approved by the Department. Lighting that may shine into creeks and streams, from roads, bridges or pedestrian trails shall also be designed to be non-disruptive to fish, amphibians, aquatic reptiles, and other aquatic life. This is particularly true with anadromous fish where excess light has been found to disrupt egg development and fry emergence and also found to disrupt migratory patterns and timing by young fish, which increases the frequency of predation. 3.15
    b. The paragraph discussing fencing should also include that the Department should be consulted during the design phase for fencing or wildlife crossing structures. 3.16

8. Mitigation Measure W-1(b):

    a. This measure states that, *"When feasible, native plant species shall be used."* The Department recommends taking out vague phrases such as "when feasible" and instead proposing an additional measure in the event native species are not available. 3.17

If you should have any questions or concerns, please contact Amy Henderson, Environmental Scientist, at (530) 225-2779 or by email at Amy.Henderson@wildlife.ca.gov.

Sincerely,

Curt Babcock
Habitat Conservation Program Manager

ec: Mss. Amy Henderson, Kristin Hubbard, and Rachelle Pike
Mr. Michael R. Harris
California Department of Fish and Wildlife
Amy.Henderson@wildlife.ca.gov, Kristin.Hubbard@wildlife.ca.gov, Rachelle.Pike@wildlife.ca.gov, and Michael.R.Harris@wildlife.ca.gov

Shasta Regional Transportation Agency
srta@srta.ca.gov

CHRON

Letter 3

COMMENTER: Curt Babcock, Habitat Conservation Program Manager, California Natural Resource Agency Department of Fish and Wildlife

DATE: May 12, 2015

RESPONSE:

Response 3.1

The commenter states that the mitigation measures presented in the DEIR are well thought out and appreciates the attention to detail provided in each measure. However, the commenter suggests removing the use of vague phrases and/or words such as "if feasible," "where feasible" or "where economically feasible."

Use of the terms "if feasible," "where feasible" or "where economically feasible" are utilized in some mitigation measures and are necessary as the RTP EIR is programmatic in nature and mitigation measures used in the EIR are not to be universally applied to all transportation projects, or by all project lead agencies, considered in the RTP. Rather, the intent of the suggested mitigation measures is to provide options and methods for individual project lead agencies to reduce environmental impacts if a specific transportation project would result in a significant impact. Subsequent environmental review by the project lead agency would be required for each transportation project and specific project mitigation measures may be required. The project lead agency can utilize the suggested mitigation measures provided in the Draft Program EIR to develop site and project specific mitigation measures.

Response 3.2

The commenter suggests additional language for Mitigation Measure B-1(a) in Section 4.3, *Biological Resources*, to properly address protections of fish and wildlife resources. Therefore, Mitigation Measure B-1(a) on Page 4.3-49 of the EIR has been revised to include the following additional text:

B-1(a) **Biological Resources Screening and Assessment.** Because of the programmatic nature of the 2015 RTP and specific impacts for a given project are unknown at this time, on a project-by-project basis upon completion of final design, a preliminary biological resource screening shall be performed as part of the environmental review process 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 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 a buffer and to determine the potential impacts to those resources. The BRA shall evaluate the

potential for impacts to all biological resources including, but not limited to special status species, nesting birds, wildlife movement corridors, potential for installation or retrofitting of existing structures for wildlife movement corridors, evaluation of culverts or other watercourse structures to remove barriers to fish passage, 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 [B-1(b) through B-1(k)] shall be incorporated, only as applicable, into the BRA for projects where specific resources are present or may be present and 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.

Response 3.3

The commenter requests that Mitigation Measure B-1(f) state that projects with the potential to affect endangered or threatened state and federal species may require take authorization from the Department of Fish and Wildlife (CDFW) and the United States Fish and Wildlife Service (USFWS). Mitigation Measure B-1(f) on 4.3-51 has been revised to include the following additional text:

B-1(f) **Endangered/Threatened Species Avoidance and Minimization.** The habitat requirements of endangered and threatened species throughout Shasta County are highly variable. The potential impacts from any given project implemented under the 2015 RTP are likewise highly variable. However, there are several avoidance and minimization measures that can be applied for a variety of species to reduce the potential for impact, with the final goal of no net loss of the species. The following measures may be applied to aquatic and/or terrestrial species. Project lead agencies shall select from these measures as appropriate. Additionally, projects with the potential to affect endangered or threatened state and federal species may require take authorization from CDFW and/or USFWS.

Response 3.4

The commenter states that the Department of Fish and Wildlife (CDFW) and the National Marine Fisheries Service should be consulted to determine the appropriate work window, if instream work is proposed in a stream known to support anadromous fish. Mitigation Measure B-1(f) on 4.3-51 has been revised to include the following additional text:

- All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed during the typical low flow period or when water is unlikely to be present (generally between April 1 and October 31), if feasible, to avoid impacts to sensitive aquatic species. Additional timing restrictions shall be incorporated into the project schedule on a species by species basis in coordination with the resource agencies (e.g. National Marine Fisheries Service, CDFW, USFWS).

Response 3.5

The commenter states that Mitigation Measure B-1(f) should require silt fencing to be checked daily, rather than weekly. Therefore, Mitigation Measure B-1(f) on Page 4.3-52 of the EIR has been revised to include the following additional text:

- For all projects occurring in areas where endangered/ threatened species may be present and are at risk of entering the project site during construction, exclusion fencing shall be placed along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of 3 feet above grade and 2 feet below grade and shall be attached to wooden stakes placed at intervals of not more than 5 feet. The fence shall be inspected ~~weekly~~daily and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete.

Response 3.6

The commenter states that the last bullet of Mitigation Measure B-1(f) should include reference to mitigation options, if mitigation banks and credits are not available. Therefore, Mitigation Measure B-1(f) on Page 4.3-53 of the EIR has been revised to include the following additional text:

- Considering the potential for projects to impact federal and state listed species and their habitat, SRTA and lead agencies shall contact the CDFW and USFWS to identify mitigation banks within Shasta County during development of the RTP. Upon implementation of projects included in the RTP, but on a project-by-project basis, if the results of the BRA determines that impacts to federal and state threatened or endangered species habitat are expected, lead agencies shall explore species-appropriate mitigation bank(s) servicing the county for purchase of mitigation credits. If mitigation banks or

credits are not available, mitigation options may include, but are not limited to, onsite or offsite habitat creation and restoration, land acquisitions, and conservation easements.

Response 3.7

The commenter recommends that Mitigation Measure B-1(g) include other types of survey methodologies and states that the Department of Fish and Wildlife should be consulted on potential relocation sites, if immediately adjacent habitat is unavailable. In addition to the coverboard surveys required by Mitigation Measure B-1(g), pre-construction clearance surveys to capture and relocate non-listed special status species are also required; this represents a second visual-based method in addition to coverboard surveys. Mitigation Measure B-1(g) on Page 4.3-54 of the EIR has been revised to include the following additional text:

- For non-listed special-status terrestrial amphibians and reptiles, coverboard surveys shall be completed within three months of the start of construction. The coverboards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The coverboards shall be checked by a qualified biologist once per week for each week after placement up until the start of vegetation removal. All non-listed special status and common animals found under the coverboards shall be captured and placed in five-gallon buckets for transportation to relocation sites. All relocation sites shall be reviewed by the project lead agency and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is not harmed by construction of the project. Relocation shall occur on the same day as capture. If a relocation site immediately adjacent to the project site is unavailable, the CDFW shall be consulted to determine an appropriate relocation site. CNDDB Field Survey Forms shall be submitted to the CFDW for all special-status animal species observed.

Response 3.8

The commenter requests to receive the results of all preconstruction surveys. Therefore, Mitigation Measure B-1(g) on Page 4.3-54 of the EIR has been revised to include the following additional text:

- Upon completion of the project, a qualified biologist shall prepare a Final Compliance report documenting all compliance activities implemented for the project, including the pre-construction survey results. The report shall be submitted within 30 days of completion of the project to the project lead agency and CDFW.

Response 3.9

The commenter states that a qualified "bat" biologist should conduct surveys as specified in the fifth bullet of Mitigation Measure B-1(g). The following edits have been made to Mitigation Measure B-1(g):

- If special-status bat species may be present and impacted by the project, a qualified bat biologist shall conduct within 30 days of the start of construction presence/absence surveys for special-status bats in consultation with the CDFW where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas where bats may roost. If active roosts are located, exclusion devices such as netting shall be installed to discourage bats from occupying the site. If a roost is determined by a qualified bat biologist to be used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified bat biologist that the young have dispersed. If it is determined that a maternity colony would be removed, it would be done only if the ~~Once it has been determined that the~~ roost is clear of bats~~, the roost shall be removed immediately~~. The decision on whether or not the maternity roost would be removed shall be made in consultation with CDFW.

Response 3.10

The commenter recommends that preconstruction surveys for nesting birds be conducted no more than seven days prior to vegetation removal. Therefore, Mitigation Measure B-1(h) on Page 4.3-55 of the EIR has been revised to include the following change:

B-1(h) **Preconstruction Surveys for Nesting Birds for Construction Occurring within Nesting Season.** For projects that may result in tree felling or removal of trees or vegetation that may contain a nesting bird, if feasible, construction activities should occur generally between September 16 to January 31 (thus outside of the nesting season). However, if construction activities must during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the California Fish and Game Code and the Migratory Bird Treaty Act shall be conducted by a

qualified biologist no more than 7~~14~~ days prior to vegetation removal.

Response 3.11

The commenter requests that additional language be included in Mitigation Measure B-1(h). Mitigation Measure B-1(h) on Page 4.3-55 of the EIR has been revised to include the following additional text:

> The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 150 feet for raptor species or as determined in consultation with CDFW and/or USFWS.

Response 3.12

The commenter requests that the report for preconstruction nesting bird surveys should also be sent to the Department of Fish and Wildlife. Therefore, Mitigation Measure B-1(h) on Page 4.3-55 of the EIR has been revised to include the following additional text:

> A report of these preconstruction nesting bird surveys shall be submitted to the lead agency to document compliance and to the CDFW.

Response 3.13

The commenter states that Mitigation Measure B-2(b) should be revised to reflect the Department's role. The mitigation measure has been revised as follows:

B-2(b) **Wetland and Riparian Habitat Restored.** Impacts to jurisdictional wetland and riparian habitat shall be mitigated at a minimum ratio of 2:1 (acres of habitat restored to acres impacted), and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan shall be developed by a qualified biologist in accordance with mitigation measure B-1(d) above and shall be implemented for no less than five years after construction of the segment, or until the lead agency and/or the permitting authority (e.g., CDFW or USACE) has determined that restoration has been successful. Alternately, mitigation may occur through the purchase of credits at a USACE approved mitigation bank or contribution to the USACE in-lieu fee program within the USACE Sacramento District. If mitigation is required through a Lake or Streambed Alteration Agreement, the mitigation bank or purchase of credits in an in-lieu fee program shall be approved by CDFW.

Response 3.14

The commenter states that Mitigation Measure B-2(c) should require that the landscaping plan specify that locally collected seeds and plants shall be used.
The intent of the Mitigation Measure B-2(c) is to prevent invasive plant species from being included in general landscaping. Mitigation Measure B-2(d) requires hydroseeding with a mix of locally native species upon completion of work in areas that are disturbed by a project. Mitigation Measure B-2(c) has been revised as follows:

B-2(c) **Landscaping Plan.** If landscaping is proposed for projects occurring within or adjacent to sensitive habitats, a qualified biologist/landscape architect shall prepare a landscape plan for that project. This plan shall indicate the locations and species of plants to be installed. Drought tolerant, locally native plant species shall be used. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or California Invasive Plant Council Lists 1, 2, and 4 shall not be permitted. Species selected for planting shall be similar to those species found in adjacent native habitats and if feasible, locally collected seeds and plants shall be used.

Response 3.15
The commenter states that lighting for trails and bridges that are near rivers and/or streams that are known to support anadromous fish should be approved by the Department of Fish and Wildlife. Mitigation Measure B-3(a) on Page 4.3-60 of the EIR has been revised to include the following additional text:

Similarly, lighting installed as part of any project shall be designed to be minimally disruptive to wildlife. This may be accomplished through the use of hoods to direct light away from natural habitat, using low intensity lighting, and using as few lights as necessary to achieve the goals of the project. Lighting for trails and bridges that would overspill onto rivers and/or streams that are known to support anadromous fish shall be approved by CDFW.

Response 3.16

The commenter states that Mitigation Measure B-3(a) should require that fencing should be designed in consultation with the Department of Fish and Wildlife. Mitigation Measure B-3(a) on Page 4.3-59 of the EIR has been revised to include the following additional text:

B-3(a) **Fence and Lighting Design.** All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing shall not block wildlife movement through

riparian or other natural habitat. Where fencing is required for public safety concerns, the fence shall be designed in consultation with CDFW and to permit wildlife movement by incorporating design features such as:

- A minimum 16 inches between the ground and the bottom of the fence to provide clearance for small animals;
- A minimum 12 inches between the top two wires, or top the fence with a wooden rail, mesh, or chain link instead of wire to prevent animals from becoming entangled; and
- If privacy fencing is required near open space areas, openings at the bottom of the fence measure at least 16 inches in diameter shall be installed at reasonable intervals to allow wildlife movement.

If fencing must be designed in such a manner that wildlife passage would not be permitted, wildlife crossing structures shall be incorporated into the project design as appropriate and in consultation with CDFW.

Response 3.17

The commenter recommends that "when feasible" be removed from Mitigation Measure W-1(b) and that additional measures should be included in the event that native species are not available.

See Response 3.1.

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3.0 REFERENCES AND PREPARERS

3.1 REFERENCES

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3.2 LIST OF PREPARERS

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4.0 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. The mitigation monitoring and reporting program is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Environmental Impact Report, specifications are made herein that identify the action required and the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in the Mitigation Monitoring and Reporting Program (MMRP).

Agencies considering approval of future projects under the 2015 RTP would utilize the EIR as a basis in determining potential mitigation measures for subsequent activities. The agencies responsible for implementing the mitigation measures, described as "the individual project lead agency"in the EIR, will be the lead agency for the individual future projects under the 2015 RTP. The project lead agency for individual projects will involve one or more of the following agencies: the city of Anderson, Redding, or Shasta Lake, Shasta County, Caltrans, or a public transit agency. The individual project lead agency, which will be the lead agency for individual future projects under the 2015 RTP, will be responsible to monitor the mitigation measures that are required to be implemented for the project.

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
AESTHETICS							
AES-1(a) Where a particular 2015 RTP transportation improvement project affects adjacent landforms, the project sponsor shall ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade.	Place conditions of approval on the project to ensure that recontouring provides a smooth and gradual transition between modified landforms and existing grade.	During individual environmental review	Once	The individual project lead agency			
AES-1(b) The project sponsor shall ensure that landscaping is installed to restore natural features along corridors after widening, interchange modifications, realignment, or construction of ancillary facilities. Associated landscape materials and design shall enhance landform variation, provide erosion control, and blend with the natural setting. To ensure compliance with approved landscape plans, the implementing agency shall provide a performance security equal to the value of the landscaping/irrigation installation.	Place conditions of approval on the project to ensure that associated landscape materials enhance landform variation, provide erosion control and blend with the natural setting; provide a performance security equal to the value of the landscaping/ irrigation installation.	During individual environmental review	Once	The individual project lead agency			
AES-1(c) The project sponsor shall ensure that a project in a scenic view corridor will have the minimum possible impact upon foliage, existing landscape architecture and natural scenic views, consistent with project goals.	Place conditions of approval on the project to ensure that minimizes impact upon foliage, existing landscape architecture and natural scenic views, consistent with project goals.	During individual environmental review	Once	The individual project lead agency			
AES-1(d) Potential noise impacts arising from increased traffic volumes associated with adjacent land development shall be preferentially mitigated through the use of setbacks and the acoustical design of adjacent proposed structures. The use of sound walls, or any other architectural features that could block views from the scenic highways or other view corridors, shall	Place conditions of approval on the project to ensure that the use of setbacks and the acoustical design of adjacent proposed structures are included in project design. In addition, ensure	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
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 should be complementary in color and texture to surrounding natural features.	through conditions of approval that sound walls incorporate offsets, accents, and landscaping to prevent monotony and complement the color and texture of surrounding natural features.						
AES-2(a) Roadway extensions and widenings shall avoid the removal of existing mature trees to the extent possible. The loss of trees that are protected by local agencies shall be replaced at a minimum 2:1 basis and incorporated into the landscaping design for the roadway. The project sponsor of a particular 2015 RTP project shall ensure the continued vitality of replaced trees through periodic maintenance (see Mitigation Measure B-1(j)).	Development plans shall avoid the removal of existing mature trees to the extent possible; replace lost trees at a minimum 2:1 ratio; periodic maintenance shall occur to ensure vitality of replaced trees.	During individual environmental review for roadway extensions and widening	Once during plan review; periodically during construction	The individual project lead agency			
AES-2(b) Roadway lighting shall be minimized to the extent possible, 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 hoods, low intensity lighting, and using as few lights as necessary to achieve the goals of the project.	Development plans shall minimize lighting and not exceed local minimum height requirements.	During individual design review	Once	The individual project lead agency			
AES-2(c) Bus shelters and other ancillary facilities constructed as part of roadway improvements under the 2015 RTP shall be designed in accordance with the architectural review requirements of the local jurisdiction in which the project is proposed.	Develop plans for bus shelters and other ancillary facilities shall be consistent with architectural review requirements of the local jurisdiction.	During plan check	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
AIR QUALITY							
AQ-1 The individual project lead agency shall ensure that all feasible and appropriate SCAQMD Standard Mitigation Measures (SMMS) and Best Available Mitigation Measures (BAMMs) are implemented. The measures shall be noted on all construction plans and the lead agency shall perform periodic site inspections. SCAQMD SMMs and BAMMs include, but are not limited to, the following: Fugitive dust emissions: • Implement all adequate dust control measures in a timely and effective manner during all phases of project development and construction; • Water all excavated, stockpiled, or graded material to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering shall occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day; • During initial grading, earth moving, or site preparation, construct a paved (or dust palliative treated) apron, at least 100 feet in length, onto the project site from the adjacent paved road(s); • Sweep adjacent paved streets (recommend water sweeper with reclaimed water) at the end of each day if substantial volumes	Construction plans shall show SCAQMD SMMS and BAMMS; The individual project lead agency shall ensure implementation.	Prior to issuance of grading permits; periodically during construction	Once during plan review; periodically during construction	The individual project lead agency and on-site construction manager			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
of soil materials have been carried onto adjacent public paved roads from the project site; • Install sandbags or other erosion control measures to prevent silt runoff to roadways; • Apply Department of Public Works approved non-toxic soil stabilizers (according to manufacturer's specifications) to all inactive construction areas (previously graded areas which remain inactive for 96 hours); • Replant vegetation in disturbed areas as quickly as possible; • Cover all trucks hauling soil, sand, and other loose materials, or require all trucks to maintain at least two feet of freeboard; • Use wheel washers or wash off tires of all trucks exiting the construction site; and • Mitigate fugitive dust emissions from wind erosion of areas disturbed from construction activities (including storage piles) by application of either water or chemical dust suppressant. Exhaust emissions from diesel heavy equipment: • Shut down equipment when not in use to limit engine idling time. Idling time shall be limited to no more than 3 minutes. This idling limit does not apply to circumstances as stated in the California Environmental Protection Agency Air							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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Resources Board Advisory Number 377 (2008); • Provide regular preventive equipment maintenance to prevent emission increases due to engine problems; • Use low sulfur and low aromatic fuels meeting California standards for motor vehicle diesel fuel; and • Use low-emitting gas and diesel engines meeting state and federal emissions standards (Tier I, II, III) for construction equipment. Other emissions: • Use low VOC coatings for the architectural coating phase of construction. All coatings must meet the VOC limits per SCAQMD Rule 3-31; • Use asphalt mixtures appropriate for the time of year of application, while maintaining compliance with the lead agency's road design and construction standards; • Use alternatives to open burning of vegetative material on the project site, unless otherwise deemed infeasible by the SCAQMD. Among suitable alternatives are chipping, mulching, or conversion to biomass fuel; • Provide for temporary traffic control as appropriate during all phases of construction to improve traffic flow as deemed appropriate by the Department							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
of Public Works and/or Caltrans; and • Schedule construction activities that direct traffic flow to off-peak hours as much as practicable.							
AQ-3 The lead agency shall retain a qualified air quality consultant to prepare a health risk assessment in accordance with CARB and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to stationary air quality polluters prior to issuance of a demolition, grading, or building permit. The health risk assessment shall be submitted to the Lead Agency for review and approval. The lead agency shall implement any approved health risk assessment recommendations to a level which would not result in exposure of sensitive receptors to substantial pollutant concentrations. Such measures may include: • Do not locate sensitive receptors in the same building as a perchloroethylene dry cleaning facility. • Maintain a 50 foot buffer from a typical gas dispensing facility (under 3.6 million gallons of gas per year). • Install, operate and maintain in good working order a central heating and ventilation system or other air take system in the building, or in each individual residential unit, that meets the efficiency standard of the minimum efficiency reporting value 13. The heating and ventilation system should include the following features: Installation of a high efficiency filter and/or carbon filter-to-filter particulates and other chemical matter from entering the building. Either high efficiency	The individual project lead agency shall incorporate measures based on analysis of individual sites and project circumstances.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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particulate absorption filters or American Society of Heating, Refrigeration, and Air-Conditioning Engineers 85% supply filters should be used. • Retain a qualified heating and ventilation consultant or high efficiency particulate absorption rate during the design phase of the project to locate the heating and ventilation system based on exposure modeling from the mobile and/or stationary pollutant sources. • Maintain positive pressure within the building. • Achieve a performance standard of at least one air exchange per hour of fresh outside filtered air. • Achieve a performance standard of at least 4 air exchanges per hour of recirculation. • Achieve a performance standard of 0.25 air exchanges per hour of in unfiltered infiltration if the building is not positively pressurized.							
BIOLOGICAL RESOURCES							
B-1(a) Biological Resources Screening and Ass impact biological resources. If it is determined that the project has no potential to impact biological resources, no further 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 a buffer and to determine the potential impacts to those resources. The BRA shall evaluate the potential for impacts to all biological resources including, but not limited to special status species, nesting birds, wildlife	Projects shall conduct a preliminary biological resource screening; if determined the project has potential to impact biological resources, a biological resources assessment or similar shall be conducted.	Prior to construction	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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movement corridors, potential for installation or retrofitting of existing structures for wildlife movement corridors, evaluation of culverts or other watercourse structures to remove barriers to fish passage, 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 [B-1(b) through B-1(k)] shall be incorporated, only as applicable, into the BRA for projects where specific resources are present or may be present and 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.							
B-1(b) Special Status Plant Species Surveys. If completion of the project-specific BRA determines that special status plant species may occur on-site, surveys for special status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity of each segment (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. All plant surveys shall be conducted by a qualified biologist approved by the implementing agency no more than two years before initial ground disturbance. All special status plant species identified on-site shall be mapped onto a site-specific aerial photograph and topographic map. Surveys shall be conducted in accordance with the most current protocols established by the	If applicable, surveys for special status plants shall be completed.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
CDFW, USFWS, and the local jurisdictions if said protocols exist. A report of the survey results shall be submitted to the implementing agency, and the CDFW and/or USFWS, as appropriate, for review and approval.							
B-1(c) Special Status Plant Species Avoidance, Minimization, and Mitigation. If state listed or California Rare Plant List 1B species are found during special status plant surveys [pursuant to mitigation measure B-1(b)], then the project shall be re-designed to avoid impacting these plant species, if feasible. Rare plant occurrences that are not within the immediate disturbance footprint, but are located within 50 feet of disturbance limits shall have bright orange protective fencing installed at least 30 feet beyond their extent, or other distance as approved by a qualified biologist, to protect them from harm.	If applicable, project shall be redesigned to avoid impacting rare plant species.	During individual environmental review	Once	The individual project lead agency			
B-1(d) Restoration and Monitoring. If special status plants species cannot be avoided and will be impacted by a project implemented under the 2015 RTP, all impacts shall be mitigated at a minimum ratio of 2:1 (number of acres/individuals restored to number of acres/individuals impacted) for each species as a component of habitat restoration. A restoration plan shall be prepared and submitted to the jurisdiction overseeing the project for approval. (Note: if a state listed plant species will be impacted, the restoration plan shall be submitted to the CDFW for approval). The restoration plan shall include, at a minimum, the following components: • Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type).	If applicable, project plans shall include project-specific mitigation measures to mitigate impacts at a minimum ratio of 2:1 and a restoration plan shall be prepared meeting all requirements.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
• Goal(s) of the compensatory mitigation project [type(s) and area(s) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved]. • Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values). • Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan). • Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule). • Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports). • Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type. • An adaptive management program and remedial measures to address any shortcomings in meeting							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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success criteria. • Notification of completion of compensatory mitigation and agency confirmation. • Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).							
B-1(e) Endangered/Threatened Species Habitat Assessment and Protocol Surveys. Specific habitat assessment and survey protocol surveys are established for several federally and state endangered or threatened species. If the results of the BRA determine that suitable habitat may be present any such species, protocol habitat assessments/surveys shall be completed in accordance with CDFW and/or USFWS protocols prior to issuance of any construction permits. If through consultation with the CDFW and/or USFWS it is determined that protocol habitat assessments/surveys are not required, said consultation shall be documented prior to issuance of any construction permits. Each protocol has different survey and timing requirements. The applicants for each project shall be responsible for ensuring they understand the protocol requirements.	If applicable, protocol habitat assessments/ surveys shall be completed in accordance with protocols.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
B-1(f) Endangered/Threatened Species Avoidance and Minimization. The habitat requirements of endangered and threatened species throughout Shasta County are highly variable. The potential impacts from any given project implemented under the 2015 RTP are likewise highly variable. However, there are several avoidance and minimization measures that can be applied for a variety of species to reduce the potential for impact, with the final goal of no net loss of the species. The following measures may be applied to aquatic and/or terrestrial species. Project lead agencies shall select from these measures as appropriate. Additionally, projects with the potential to affect endangered or threatened state and federal species may require take authorization from CDFW and/or USFWS. • 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 within or adjacent to the limits of disturbance shall have highly visible orange construction fencing installed between said area and the limits of disturbance. • All projects occurring within/adjacent to aquatic habitats (including riparian habitats and wetlands) shall be completed during the typical low flow period or when water is unlikely to be present (generally between April 1 and October 31), if feasible, to avoid impacts to sensitive aquatic species. Additional timing restrictions shall be incorporated into the project schedule on a species by	If applicable, project plans shall include project-specific mitigation measures to avoid and minimize impacts to endangered or threatened species.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
species basis in coordination with the resource agencies (e.g. National Marine Fisheries Service, CDFW, USFWS). • All projects occurring within or adjacent to sensitive habitats that may support federally and/or state endangered/threatened species shall have a CDFW and/or USFWS-approved 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, 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 expressed permission from the CDFW and/or USFWS. • 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. A CDFW/USFWS-approved biologist shall document the occurrence and consult with the CDFW and/or USFWS as appropriate.							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
• For all projects occurring in areas where endangered/ threatened species may be present and are at risk of entering the project site during construction, exclusion fencing shall be placed along the project boundaries prior to start of construction (including staging and mobilization). The placement of the fence shall be at the discretion of the CDFW/USFWS-approved biologist. This fence shall consist of solid silt fencing placed at a minimum of 3 feet above grade and 2 feet below grade and shall be attached to wooden stakes placed at intervals of not more than 5 feet. The fence shall be inspected daily and following rain events and high wind events and shall be maintained in good working condition until all construction activities are complete. • 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. A minimum of one spill kit shall be available at each work location near riparian habitat or water bodies. • No equipment shall be permitted to enter wetted portions of any affected drainage channel. • All equipment operating within streams 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							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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and clean up materials shall be located in close proximity for easy access. • If project activities could degrade water quality, water quality sampling shall be implemented to identify the pre-project baseline, and to monitor during construction for comparison to the baseline. • If water is to be diverted around work sites, a diversion plan shall be submitted (depending upon the species that may be present) to the CDFW, RWQCB, USFWS, and/or NMFS for their review and approval prior to the start of any construction activities (including staging and mobilization). If pumps are used, all intakes shall be completely screened with wire mesh not larger than five millimeters to prevent animals from entering the pump system. • At the end of each workday, excavations shall be secured with cover or a ramp provided to prevent wildlife entrapment. • All trenches, pipes, culverts or similar structures shall be inspected for animals prior to burying, capping, moving, or filling. • The CDFW/USFWS-approved biologist shall remove invasive aquatic species such as bullfrogs and crayfish from suitable aquatic habitat whenever observed and shall dispatch them in a humane manner and dispose of properly. • If any federally and/or state protected species are harmed, the CDFW/USFWS-approved biologist							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
shall document the circumstances that led to harm and shall determine if project activities should cease or be altered in an effort to avoid additional harm to these species. Dead or injured special status species shall be disposed of at the discretion of the CDFW and USFWS. All incidences of harm shall be reported to the CDFW and USFWS within 48 hours. • Considering the potential for projects to impact federal and state listed species and their habitat, SRTA and lead agencies shall contact the CDFW and USFWS to identify mitigation banks within Shasta County during development of the RTP. Upon implementation of projects included in the RTP, but on a project-by-project basis, if the results of the BRA determines that impacts to federal and state threatened or endangered species habitat are expected, lead agencies shall explore species-appropriate mitigation bank(s) servicing the county for purchase of mitigation credits. If mitigation banks or credits are not available, mitigation options may include, but are not limited to, onsite or offsite habitat creation and restoration, land acquisitions, and conservation easements.							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
B-1(g) Non-Listed Special Status Animal Species Avoidance and Minimization. Several State Species of Special Concern may be impacted by projects implemented under the 2015 RTP. The ecological requirements and potential for impacts is highly variable among these species. Depending on the species identified in the BRA, several of the measures identified under B-1(f) shall be applicable to the project. In addition, measures shall be selected from among the following to reduce the potential for impacts to non-listed special status animal species: • For non-listed special-status terrestrial amphibians and reptiles, coverboard surveys shall be completed within three months of the start of construction. The coverboards shall be at least four feet by four feet and constructed of untreated plywood placed flat on the ground. The coverboards shall be checked by a qualified biologist once per week for each week after placement up until the start of vegetation removal. All non-listed special status and common animals found under the coverboards shall be captured and placed in five-gallon buckets for transportation to relocation sites. All relocation sites shall be reviewed by the project lead agency and shall consist of suitable habitat. Relocation sites shall be as close to the capture site as possible but far enough away to ensure the animal(s) is not harmed by construction of the project. Relocation shall occur on the same day as capture. If a relocation site immediately adjacent to the project	If applicable, project plans shall include project-specific mitigation measures to reduce impacts to non-listed special status species.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
site is unavailable, the CDFW shall be consulted to determine an appropriate relocation site. CNDDB Field Survey Forms shall be submitted to the CFDW for all special-status animal species observed. • Pre-construction clearance surveys shall be conducted within 14 days of the start of construction (including staging and mobilization). The surveys shall cover the entire disturbance footprint plus a minimum 200-foot buffer, if feasible, 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 (e.g., American badger). A report of the pre-construction survey shall be submitted to the lead 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 pre-construction survey results. The report shall be submitted within 30 days of completion of the project to the project lead agency and CDFW.							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
• If special-status bat species may be present and impacted by the project, a qualified bat biologist shall conduct within 30 days of the start of construction presence/absence surveys for special-status bats in consultation with the CDFW where suitable roosting habitat is present. Surveys shall be conducted using acoustic detectors and by searching tree cavities, crevices, and other areas where bats may roost. If active roosts are located, exclusion devices such as netting shall be installed to discourage bats from occupying the site. If a roost is determined by a qualified bat biologist to be used by a large number of bats (large hibernaculum), bat boxes shall be installed near the project site. The number of bat boxes installed will depend on the size of the hibernaculum and shall be determined through consultations with the CDFW. If a maternity colony has become established, all construction activities shall be postponed within a 500-foot buffer around the maternity colony until it is determined by a qualified bat biologist that the young have dispersed. If it is determined that a maternity colony would be removed, it would be done only if the roost is clear of bats. The decision on whether or not the maternity roost would be removed shall be made in consultation with CDFW.							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
B-1(h) Preconstruction Surveys for Nesting Birds for Construction Occurring within Nesting Season. For projects that may result in tree felling or removal of trees or vegetation that may contain a nesting bird, if feasible, construction activities should occur generally between September 16 to January 31 (thus outside of the nesting season). However, if construction activities must during the nesting season (generally February 1 to September 15), surveys for nesting birds covered by the California Fish and Game Code and the Migratory Bird Treaty Act shall be conducted by a qualified biologist no more than 7 days prior to vegetation removal. The surveys shall include the entire segment disturbance area plus a 200-foot buffer around the site. If active nests are located, all construction work shall be conducted outside a buffer zone from the nest to be determined by the qualified biologist. The buffer shall be a minimum of 50 feet for non-raptor bird species and at least 150 feet for raptor species or as determined in consultation with CDFW and/or USFWS. Larger buffers may be required depending upon the status of the nest and the construction activities occurring in the vicinity of the nest. The buffer area(s) shall be closed to all construction personnel and equipment until the adults and young are no longer reliant on the nest site. A qualified biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer. A report of these preconstruction nesting bird surveys shall be submitted to the lead agency to document compliance and to the CDFW.	If applicable, a survey for nesting birds shall be completed; if necessary, a buffer shall be created.	Prior to construction activities; during construction activities if required.	Once prior to construction; as needed during construction activities.	The individual project lead agency			

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B-1(i) Worker Environmental Awareness Program (WEAP). Prior to initiation of construction activities for applicable projects (including staging and mobilization), all personnel associated with project construction shall attend WEAP training, conducted by a qualified biologist, to aid workers in recognizing special status resources that may occur in the project area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. 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 provided by the trainer indicating they have attended the WEAP and understand the information presented to them. The form shall be submitted to the lead agency to document compliance.	If applicable, construction personnel shall attend WEAP training.	Prior to construction activities.	Once	The individual project lead agency			
B-1(j) Tree Protection. If it is determined that construction may impact trees protected by local agencies, the project lead agency shall procure all necessary tree removal permits. A certified arborist shall develop a tree protection and replacement plan as appropriate. The plan shall include, but would not be limited to, an inventory of trees to within the construction site, setbacks from trees and protective fencing, restrictions regarding grading and paving near trees, direction regarding pruning and digging within root zone of trees, and requirements for	If applicable, tree removal permits shall be acquired and a tree protection and replacement plan shall be developed with requirements. Replacement planting/restoration shall be monitored until stasis is achieved.	Review plan prior to construction activities. Review restoration annually for minimum of seven years or until stasis is achieved.	Once prior to construction; annually after restoration until stasis is achieved.	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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replacement and maintenance of trees. If protected trees will be removed, replacement tree plantings of like species in accordance with local agency standards, but at a minimum ratio of 2:1 (trees planted to trees impacted), shall be installed on-site or at an approved off-site location and a restoration and monitoring program shall be developed in accordance with B-1(d) and shall be implemented for a minimum of seven years or until stasis has been determined by certified arborist. If a protected tree shall be encroached upon but not removed, a certified arborist shall be present to oversee all trimming of roots and branches.							
B-2(a) Jurisdictional Delineation. If projects implemented under the 2015 RTP 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 a jurisdictional delineation. The jurisdictional delineation shall determine the extent of the jurisdiction for each of these agencies and shall be conducted in accordance with the requirement set forth by each agency. The result shall be a preliminary jurisdictional delineation report that shall be submitted to the implementing agency, USACE, RWQCB, and CDFW, as appropriate, for review and approval. If jurisdictional areas are expected to be impacted, then the RWQCB would require a Waste Discharge Requirements (WDR) permit and/or Section 401 Water Quality Certification (depending upon whether or not the feature falls under federal jurisdiction). If CDFW asserts its jurisdictional authority, then a Streambed Alteration Agreement pursuant to Section 1600 *et seq.* of the California Fish and Game Code would also be required prior	If applicable, a jurisdictional delineation shall be completed. Receipt of regulatory agency permits, if necessary, shall be verified.	During individual environmental review; verify permit acquisition prior to issuance of grading permits	Once during environmental review; once prior to issuance of grading permits; as needed, during and following construction.	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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to construction within the areas of CDFW jurisdiction. If the USACE asserts its authority, then a permit pursuant to Section 404 of the Clean Water Act would likely be required.							
B-2(b) Wetland and Riparian Habitat Restored. Impacts to jurisdictional wetland and riparian habitat shall be mitigated at a minimum ratio of 2:1 (acres of habitat restored to acres impacted), and shall occur on-site or as close to the impacted habitat as possible. A mitigation and monitoring plan shall be developed by a qualified biologist in accordance with mitigation measure B-1(d) above and shall be implemented for no less than five years after construction of the segment, or until the lead agency and/or the permitting authority (e.g., CDFW or USACE) has determined that restoration has been successful. Alternately, mitigation may occur through the purchase of credits at a USACE approved mitigation bank or contribution to the USACE in-lieu fee program within the USACE Sacramento District. If mitigation is required through a Lake or Streambed Alteration Agreement, the mitigation bank or purchase of credits in an in-lieu fee program shall be approved by CDFW.	If applicable, project plans shall mitigate impacts to jurisdictional wetlands and riparian habitats at a ratio of 2:1 and a MMRP shall be developed. Compliance with permit conditions shall be verified.	During environmental review. Verify compliance with permit conditions as necessary during following construction.	Once during environmental review; as needed, during and following construction.	The individual project lead agency			
B-2(c) Landscaping Plan. If landscaping is proposed for projects occurring within or adjacent to sensitive habitats, a qualified biologist/landscape architect shall prepare a landscape plan for that project. This plan shall indicate the locations and species of plants to be installed. Drought tolerant, locally native plant species shall be used. Noxious, invasive, and/or non-native plant species that are recognized on the Federal Noxious Weed List, California Noxious Weeds List, and/or	If applicable, a landscaping plan shall be prepared and include all requirements; species shall be similar to those in adjacent native habitats.	During environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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California Invasive Plant Council Lists 1, 2, and 4 shall not be permitted. Species selected for planting shall be similar to those species found in adjacent native habitats and if feasible, locally collected seeds and plants shall be used.							
B-2(d) Invasive Weed Prevention and Management Program. Prior to start of construction for projects occurring within or adjacent to sensitive habitats, an Invasive Weed Prevention and Management Program shall be developed by a qualified biologist to prevent invasion of native habitat by non-native plant species. A list of target species shall be included, along with measures for early detection and eradication. All disturbed areas shall be hydroseeded with a mix of locally native species upon completion of work in those areas. In areas where construction is ongoing, hydroseeding shall occur where no construction activities have occurred within six (6) weeks since ground disturbing activities ceased. If exotic species invade these areas prior to hydroseeding, weed removal shall occur in consultation with a qualified biologist and in accordance with the restoration plan.	An Invasive Weed Prevention and Management Program shall be developed; disturbed areas shall be hydroseeded.	Prior to construction activities; during construction activities	Once; ongoing during construction	The individual project lead agency			
B-3(a) Fence and Lighting Design. All projects including long segments of fencing and lighting shall be designed to minimize impacts to wildlife. Fencing shall not block wildlife movement through riparian or other natural habitat. Where fencing is required for public safety concerns, the fence shall be designed in consultation with CDFW and to permit wildlife movement by incorporating design features such as: • A minimum 16 inches between the ground and the bottom of the fence to provide clearance for small	Project plans for projects with fencing and lighting shall be designed to minimize impacts to wildlife.	During environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
animals; • A minimum 12 inches between the top two wires, or top the fence with a wooden rail, mesh, or chain link instead of wire to prevent animals from becoming entangled; and • If privacy fencing is required near open space areas, openings at the bottom of the fence measure at least 16 inches in diameter shall be installed at reasonable intervals to allow wildlife movement. If fencing must be designed in such a manner that wildlife passage would not be permitted, wildlife crossing structures shall be incorporated into the project design as appropriate and in consultation with CDFW. Similarly, lighting installed as part of any project shall be designed to be minimally disruptive to wildlife. This may be accomplished through the use of hoods to direct light away from natural habitat, using low intensity lighting, and using a as few lights as necessary to achieve the goals of the project. Lighting for trails and bridges that would overspill onto rivers and/or streams that are known to support anadromous fish shall be approved by CDFW.							
B-3 (b) Construction Best Management Practices. The following construction Best Management Practices (BMPs) shall be incorporated into all grading and construction plans: • Designation of a 20-mile-per-hour speed limit in all construction areas. • All vehicles and equipment shall be parked on pavement, existing roads, and	Construction plans shall incorporate best management practices to minimize impacts to biological resources.	Prior to issuance of grading permits	Once during plan review	The individual project lead agency and on-site construction manager			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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previously disturbed areas, and clearing of vegetation for vehicle access shall be avoided to the greatest extent feasible. • The number of access routes, number and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the goal of the project. • Designation of equipment washout and fueling areas to be located within the limits of grading at a minimum of 100 feet from waters, wetlands, or other sensitive resources as identified by a qualified biologist. Washout areas shall be designed to fully contain polluted water and materials for subsequent removal from the site. • Daily construction work schedules should be limited to daylight hours only, to the extent feasible. • Mufflers shall be used on all construction equipment and vehicles shall be in good operating condition. • Drip pans shall be placed under all stationary vehicles and mechanical equipment. • All trash shall be placed in sealed containers and shall be removed from the project site a minimum of once per week. • No pets are permitted on project site during construction.							

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
CULTURAL RESOURCES							
CR-1(a) The individual project lead agency of a 2015 RTP project involving earth disturbance, the installation of pole signage or lighting, or construction of permanent above ground structures or roadways shall ensure that the following elements are included in the project's individual environmental review: 1. Prior to construction, a map defining the Area of Potential Effects (APE) shall be prepared on a project by project basis for 2015 RTP improvements which involve earth disturbance, the installation of pole signage or lighting, or construction of permanent above ground structures. This map will indicate the areas of primary and secondary disturbance associated with construction and operation of the facility and will help in determining whether known archaeological, paleontological or historical resources are located within the impact zone. 2. A preliminary study of each project area, as defined in the APE, shall be completed to determine whether or not the project area has been studied under an earlier investigation, and to determine the impacts of the previous project. 3. If the results of the preliminary studies indicate additional studies are necessary; development of field studies and/or other documentary research shall be developed and completed (Phase I studies). Negative results would result in no additional studies for the project area.	Project plans shall include required components to limit impacts to cultural resources.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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4. Based on positive results of the Phase I studies, an evaluation of identified resources shall be completed to determine the potential eligibility/ significance of the resources (Phase II studies). 5. Based on the evaluations of the Phase II studies, if necessary Phase III mitigation studies shall be coordinated with the Office of Historic Preservation, as the research design will require review and approval from the OHP. In the case of prehistoric or Native American related resources, the Native American Heritage Commission and/or local representatives of the Native American population shall be contacted and permitted to respond to the testing/mitigation programs.							
CR-1(b) If development of the proposed improvement requires the presence of an archaeological, Native American, or paleontological monitor, the individual project lead agency shall ensure that a Native American monitor, certified archaeologist, and/or certified paleontologist, as applicable, monitors the grading and/or other initial ground altering activities. The schedule and extent of the monitoring will depend on the grading schedule and/or extent of the ground alterations. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual environmental review.	Place conditions of approval on the project to ensure that a Native American monitor or certified archaeologist/ paleontologist monitors the grading and/or other ground altering activities if required.	Apply conditions during individual project permitting; monitoring will depend on the schedule and extent of the monitoring will depend on the grading schedule and/or extent of the ground alterations.	Once during individual environmental review; monitor as needed during construction	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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CR-1(c) The individual project lead agency shall ensure that materials recovered over the course of any given improvement are adequately cleaned, labeled, and curated at a recognized repository. This requirement can be accomplished through placement of conditions on the project by the local jurisdiction during individual environmental review.	Place conditions of approval on project to ensure that materials recovered are adequately cleaned, labeled, and curated at a recognized repository.	During individual project permitting	Once	The individual project lead agency			
CR-1(d) The individual project lead agency shall ensure that mitigation for potential impacts to significant cultural resources includes one or more of the following: • Realign the project right-of-way (avoidance; the most preferable method). • Cap the site and leave it undisturbed. • Address structural remains with respect to NRHP guidelines (Phase III studies). • Relocate structures per NRHP guidelines. • Create interpretative facilities at the site. • Develop measures to prevent vandalism. These measures can be accomplished through placement of conditions on the project by the local jurisdiction during individual environmental review.	Place applicable conditions of approval on project to ensure mitigation for potential impacts includes requirements.	During individual project permitting	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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ENERGY							
E-1(a) New facilities should be designed with energy-efficient equipment and passive solar design (e.g., orientation of building to maximize natural heating and cooling, solar water heating, use of daylighting, and placement of trees to aid passive cooling, protection from prevailing winds, and maximum year-round solar access), provided that additional capital costs are offset by estimated energy savings during the first 5 years of operation. Additional improvements with longer payback periods, such as photovoltaic solar electric systems, should be considered where applicable.	Development plans shall be designed with energy-efficient equipment provided that additional capital costs are offset by estimated energy savings during the first 5 years of operation.	Prior to issuance of a grading permit	Once	The individual project lead agency			
E-1(b) All lighting should be energy efficient and designed to use the least amount of energy to serve the purpose of the lighting. Lighting should utilize solar energy wherever feasible.	Development plans shall be designed with energy-efficient lighting equipment and should utilitize solar energy wherever feasible.	Prior to issuance of a grading permit	Once	The individual project lead agency			
E-1(c) New landscaping design and irrigation systems should be water efficient. To the extent possible, reclaimed water should be used for roadside landscape irrigation.	Development plans shall be designed with water efficienty irrigation systems.	Prior to issuance of a grading permit	Once	The individual project lead agency			
GEOLOGY AND SOILS							
G-1 The lead agency in which a particular 2015 RTP bridge project is located shall ensure that the structure is designed and constructed to the latest geotechnical standards. In most cases, this will necessitate site-specific geologic and soils engineering investigations to exceed the code for high groundshaking zones. This can be accomplished through the placement of conditions on the project by the lead agency during individual environmental review.	Place conditions of approval on projects to ensure the structure is designed and constructed to the latest geotechnical standard.	During individual environmental review	Once	The individual project lead agency			

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G-2 If an RTP project involves cut slopes over 15 feet in height, the lead agency in which the project is located shall ensure that specific slope stabilization studies are conducted. Possible stabilization methods include buttresses, retaining walls and soldier piles.	Place conditions of approval on the project, when applicable, to ensure that a site-specific geotechnical investigation is conducted.	During individual environmental review	Once	The individual project lead agency			
GREENHOUSE GAS EMISSIONS							
GHG-1 The individual project lead agency shall ensure that applicable GHG-reducing diesel particulate and NO_X emissions measures for off-road construction vehicles are implemented during construction. The measures shall be noted on all construction plans and the lead agency shall perform periodic site inspections. Applicable GHG-reducing measures include the following. • Use of diesel construction equipment meeting ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation; • Use of on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation; • All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit; • Use of electric equipment in place of diesel-powered equipment, where feasible; • Substitute gasoline-powered in place of diesel-powered equipment,	Construction plans shall incorporate standard GHG control measures; The individual project lead agency shall ensure implementation.	Prior to issuance of grading permits; periodically during construction	Once during plan review; periodically during construction	The individual project lead agency and on-site construction manager			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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where feasible; • Use of alternatively fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel, in place of diesel powered equipment for 15 percent of the fleet; • Use of materials sources from local suppliers; • Recycling of at least 50 percent of construction waste materials.							
HYDROLOGY AND WATER RESOURCES							
W-1(a) The individual lead agency of a 2015 RTP project shall ensure that, where economically feasible, reclaimed water is used for dust suppression during construction activities. This measure shall be noted on construction plans and shall be spot checked by the lead agency.	Where economically feasible, reclaimed shall be used for dust suppression during construction activities.	Prior to issuance of grading permit	Once	The individual project lead agency			
W-1(b) The individual lead agency of a 2015 RTP project shall ensure that low water use landscaping (i.e., drought tolerant plants and drip irrigation) is installed. When feasible, native plant species shall be used.	Low water use landscaping (i.e., drought tolerant plants and drip irrigation) shall be installed.	During individual environmental review	Once	The individual project lead agency			
W-1(c) The individual lead agency of a 2015 RTP project shall ensure that, if feasible, landscaping associated with proposed improvements is maintained using reclaimed water.	If feasible, landscaping associated with proposed improvements is maintained using reclaimed water.	During individual environmental review	Once	The individual project lead agency			
W-1(d) The individual lead agency of a 2015 RTP project shall ensure that porous pavement materials are utilized, where feasible, to allow for groundwater percolation.	Use porous pavement materials where feasible.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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W-1(e) The individual lead agency of a 2015 RTP project that requires potable water service should coordinate with water supply system operators to ensure that the existing water supply systems have the capacity to handle the increase. If the current infrastructure servicing the project site is found to be inadequate, infrastructure improvements for the appropriate public service or utility should be provided by the The individual project lead agency. In addition, wherever feasible, reclaimed water should be used for landscaping purposes instead of potable water.	Provide infrastructure improvements for the appropriate public service or utility as needed.	During individual environmental review	Once	The individual project lead agency			
W-2(a) The individual lead agency of a 2015 RTP project shall ensure that fertilizer/pesticide application plans for any new right-of-way landscaping are prepared to minimize deep percolation of contaminants. The plans shall specify the use of products that are safe for use in and around aquatic environments.	Fertilizer/pesticide application plans for any new right-of-way landscaping shall be prepared to minimize deep percolation of contaminants.	During individual environmental review	Once	The individual project lead agency			
W-2(b) The individual lead agency of a 2015 RTP widening or roadway extension project shall ensure that the improvement directs runoff into subsurface percolation basins and traps which would allow for the removal of urban pollutants, fertilizers, pesticides, and other chemicals.	Improvements shall direct runoff into subsurface percolation basins and traps.	During individual environmental review	Once	The individual project lead agency			
W-2(c) For a 2015 RTP project that would disturb at least one acre, a SWPPP shall be developed prior to the initiation of grading and implemented for all construction activity on the project site. The SWPPP shall include specific BMPs to control the discharge of material from the site and into the creeks and local storm drains. BMP methods may include, but would not be limited to, the use of temporary retention basins, straw bales, sand bagging, mulching, erosion control blankets and soil stabilizers.	Construction plans shall include a Storm Water Pollution Prevention Plan (SWPPP) for roadway projects that would disturb at least one acre and shall implement it for all construction activity on the project site; SWPPP shall include	Prior to issuance of grading permit	Once	The individual project lead agency			

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	specific BMPs to control the discharge of material from the site and into the creeks and local storm drains.						
W-3(a) If a 2015 RTP project is located in an area with high flooding potential due a storm event or dam inundation, the individual project lead agency shall ensure that the structure is elevated at least one foot above the 100-year flood zone elevation and that bank stabilization and erosion control measures are implemented along creek crossings.	Project design shall ensure that all structures are located at least one foot above the 100-year floodzone elevation and that bank stabilization and erosion control measures are implemented.	During individual environmental review	Once	The individual project lead agency			
W-3(b) For 2015 RTP projects within a dam failure inundation hazard zone, the project's lead agency shall ensure that a comprehensive flood risk communication strategy is developed, which would include an evacuation plan and/or an Emergency Action Plan and promote dam failure risk awareness and safety.	Project design shall ensure that a flood risk communication strategy is developed including an evacuation plan and/or an Emergency Action Plan and promote dam failure risk awareness and safety prior to construction and during operation of the project.	During individual environmental review Periodically once the project is fully operational	Once prior to project construction and periodically once operational.	The individual project lead agency			
LAND USE							
LU-2(a) The individual project lead agency of RTP projects with the potential to displace residences or businesses should assure that project-specific environmental reviews consider alternative alignments and developments that avoid or minimize impacts to nearby residences and businesses.	Assure that project-specific environmental reviews consider alternative alignments that avoid or minimize impacts to nearby residences and businesses.	During individual environmental review	Once	The individual project lead agency			

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LU-2(b) Where project-specific reviews identify displacement or relocation impacts that are unavoidable, the individual project lead agency should ensure that all applicable local, state, and federal relocation programs are used to assist eligible persons to relocate. In addition, the lead agency shall review the proposed construction schedules to ensure that adequate time is provided to allow affected businesses to find and relocate to other sites.	Ensure that all applicable local, state, and federal relocation programs are used to assist eligible persons to relocate; review the proposed construction schedules to ensure that adequate relocation time is provided.	Prior to issuance of grading permits	Once	The individual project lead agency			
LU-2(c) For all RTP projects that could result in temporary lane closures or access blockage during construction, a temporary access plan should be implemented by the lead agency to ensure continued access to affected cyclists, businesses, and homes. Appropriate signs and safe access shall be guaranteed during project construction to ensure that businesses remain open.	Construction plans for projects that could result in temporary lane closures or access blockage during construction shall contain a temporary access plan that shall be implemented to ensure continued access to affected cyclists, businesses, and homes; construction plans shall guarantee appropriate signs and safe access during project construction.	Prior to issuance of grading permits; during construction	Once prior to issuance of grading permits; as needed during construction	The individual project lead agency			
LU-5(a) When new roadway extensions or widenings are planned, the individual project lead agency should assure that project-specific environmental reviews consider alternative alignments that reduce or avoid impacts to Prime Farmlands.	Ensure that environmental reviews consider alterantive alignments that reduce or avoid impacts to Prime Farmlands.	During individual environmental review	Once	The individual project lead agency			

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LU-5(b) Rural roadway alignments shall follow property lines to the extent feasible, to minimize impacts to the agricultural production value of any specific property. Farmers should be compensated for the loss of agricultural production at the margins of lost property, based on the amount of land deeded as road right-of-way, as a function of the total amount of production on the property.	Ensure that rural roadway alignments follow property lines. Compensate farmers for the loss of agricultural production at the margin of lost property.	Prior to issuance of grading permits	Once	The individual project lead agency			
LU-5(c) Individual project lead agencies should consider corridor realignment, buffer zones, setbacks, and fencing to reduce conflict between agricultural lands and neighboring uses.	Ensure that project-specific environmental reviews consider the use of agricultural conservation easements.	During individual environmental review	Once	The individual project lead agency			
LU-5(d) Quantify potential for direct conversion of Important Farmland using the Land Evaluation and Site Assessment (LESA) model or a similar quantitative tool.	Ensure that the LESA model or a similar quantitative tool is run if conversion of Important Farmland would occur.	During individual environmental review	Once	The individual project lead agency			
LU-5(e) Compensate for conversion impacts to Prime Farmland by purchasing agricultural conservation easements (ACE) or funding the acquisition of agricultural mitigation lands through an appropriate land trust.	Ensure that compensation (through purchase of agricultural easements or funding through a land trust) is administered if conversion of Prime Farmland would occur as a result of the project.	During individual environmental review	Once	The individual project lead agency			
LU-5(f) Individual project lead agencies should conduct an analysis of potential conflicts with Williamson Act contracts at the project level, consistent with the State CEQA Guidelines. If the impacts of the proposed roadway projects on Williamson Act contract lands are determined to be significant,	Ensure review of conflcts of the project with Williamson Act contracts is administered and if necessary project design shall avoid or	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
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implement the following measures to reduce the impacts to a less-than-significant level: a. Design the proposed roadway projects to avoid or minimize the displacement of current and reasonably foreseeable agricultural operations from affected Williamson Act contract lands. b. Where it has been determined that cancellation of a Williamson Act contract for a parcel, or a portion of a parcel, may result in impacts to Prime or Important Farmland, Mitigation Measure LU-5(a) shall be implemented.	minimize displacement of agricultural operations.						
NOISE							
N-1(a) Individual project lead agencies of 2015 RTP projects shall ensure that, where residences or other noise sensitive uses are located within 800 feet of construction sites, 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.	Prior to issuance of grading permits	Once	The individual project lead agency			
N-1(b) If a particular project within 800 feet of sensitive receptors requires pile driving, the individual project lead agency in which this project is located shall require the use of pile drilling techniques instead, where feasible. This shall be accomplished through the placement of conditions on the project during its individual environmental review.	Place mitigation measures or conditions of approval on project to require the use of pile drilling techniques when applicable and feasible.	During individual environmental review	Once	The individual project lead agency			

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N-1 (c) Individual project lead 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).	Ensure that equipment and trucks use best available noise control techniques.	During individual environmental review	Once	The individual project lead agency			
N-1(d) Individual project lead agencies shall ensure that impact equipment (e.g., jack hammers, pavement breakers, and rock drills) used for project construction be hydraulically or electrical 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 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.	Ensure that equipment is hydraulically or electrically powered; that an exhaust muffler is used; that external jackets on impact equipment is used; or quitter procedures are used, when feasible and applicable.	During individual environmental review	Once	The individual project lead agency			
N-1(e) Locate stationary noise sources as far from sensitive receptors as possible. Stationary noise sources that must be located near existing receptors will be adequately muffled.	Ensure that stationary noise sources are located away from sensitive receptors or muffled.	During individual environmental review	Once	The individual project lead agency			
N-2(a) Individual project lead agencies of 2015 RTP projects that would result in noise exceeding normally acceptable levels shall complete detailed noise assessments using applicable guidelines (e.g., Federal Transit Administration Transit Noise and Vibration Impact Assessment for rail and bus projects and the California Department of Transportation Traffic Noise Analysis Protocol for roadway projects). The lead	A noise survey shall be conducted to determine alternate alignments which allow greater distance from, or greater buffering of, noise-sensitive areas; noise survey shall be sufficient to indicate existing and projected	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
agency shall ensure that a noise survey is conducted to determine potential alternate alignments which allow greater distance from, or greater buffering of, noise-sensitive areas. The noise survey shall be sufficient to indicate existing and projected noise levels, to determine the amount of attenuation needed to reduce potential noise impacts to applicable state and local standards. This shall be accomplished during the project's individual environmental review as necessary.	noise levels, to determine the amount of attenuation needed to reduce potential noise impacts to applicable State and local standards.						
N-2(b) Where new or expanded roadways or transit are found to expose receptors to noise exceeding normally acceptable levels, the individual project lead agency shall consider various sound attenuation techniques. The preferred methods for mitigating noise impacts will be 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) will be considered. Long expanses of walls or fences should be interrupted with offsets and provided with accents to prevent monotony. Landscape pockets and pedestrian access through walls should be provided. Whenever possible, a combination of elements should be used, including open grade paving, solid fences, walls, and, landscaped berms. Determination of appropriate noise attenuation measures will be assessed on a case-by-case basis during a project's individual environmental review pursuant to the regulations of the applicable lead agency.	Development plans shall consider various sound attenuation techniques where new or expanded roadways are found to expose receptors to noise exceeding normally acceptable levels; applicable agency shall assess and determine appropriate noise attenuation barriers on a case-by-case basis.	During individual environmental review	Once	The individual project lead agency			

Mitigation Measure	Action Required	When Monitoring to Occur	Monitoring Frequency	Responsible Agency or Party	Compliance Verification		
					Initial	Date	Comments
N-3 If a 2015 RTP project is located in an area with exterior ambient noise levels above local noise standards or in an area with potential cumulative noise levels above local noise standards (based on traffic volumes from regionally adopted travel demand model), the individual project lead agency shall ensure that a noise study is conducted to determine existing and projected noise levels and feasible attenuation measures needed to reduce potential noise impacts to such uses to an exterior and interior noise level below local standards. Such measures may include, but are not limited to: dual-paned windows, solid core exterior doors with perimeter weather stripping, air condition system so that windows and doors may remain closed, and situating exterior doors away from roads. This shall be accomplished during the project's individual environmental review.	A noise study shall be conducted to determine existing and projected noise levels and feasible attenuation measures needed to reduce potential noise impacts to such uses to an exterior and interior noise level below local standards.	During individual environmental review	Once	The individual project lead agency			

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