Butte – 32 Chico Rehabilitation Project

Butte County, California 03-BUT-32-5.0/10.2 EA: 03-4H760/0319000046

Initial Study with Proposed Negative Declaration



Prepared by the State of California, Department of Transportation



October 2021



General Information About This Document

What's in this document:

The California Department of Transportation (Caltrans) has prepared this Initial Study (IS) with proposed Negative Declaration (ND), which examines the potential environmental impacts of the alternatives being considered for the proposed project located in Butte County on State Route 32 in Chico, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). The document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization and/or mitigation measures.

What you should do:

- Please read the document.
- Additional copies of the document are available for review at the 703 B Street Marysville, CA 95901. Copies are also available at the Butte County Library, Chico Branch, 1108 Sherman Ave, Chico CA 95926.
- The document can be viewed digitally via Caltrans weblink: https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs
- We'd like to hear what you think. If you have any comments about the proposed project, please attend the meeting on Tuesday November 9, 2021, 4:30 pm to 6:00 pm Valley Contractors Exchange 951 E. 8th Street at Alder Street, Chico (Parking Lot) and/or send comments via U.S. postal mail to: California Department of Transportation Environmental Management, M-3 Branch

Attn: Butte 32 Chico Rehab

703 B Street, Marysville, CA, 95901

- Submit comments via email to: <u>But-32.Chico.Rehab.Project@dot.ca.gov</u>
- Be sure to submit comments by the deadline: November 18, 2021

What happens next:

After comments are received from the public and reviewing agencies, Caltrans, may: (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is appropriated, Caltrans could complete the design and construct all or part of the project.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Deanna Shoopman, 703 B Street, Marysville, CA 95901, 530-632-0080, or use the California Relay Service TTY number, 1 (800) 735-2929.



[SCH Number] 03-BUT-32-5.0/10.2 03-4H760-0319000046

Maintain and provide a serviceable facility for the traveling public, enhance safety features and expand multi-modal opportunities on State Route 32 in the City of Chico from post miles 5.0 and 10.2.

INITIAL STUDY

With Proposed NEGATIVE DECLARATION

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA Department of Transportation

Mike Bartlett

Mike Bartlett Environmental Office Chief North Region Environmental Management- District 3 California Department of Transportation CEQA Lead Agency

10/12/2021

Date of Approval



PROPOSED Negative Declaration

Pursuant to: Division 13, Public Resources Code

State Clearinghouse Number:

District-County-Route-Post Mile: 03-BUT-32-5.0 to 10.2

EA/Project Identification: 03-4H760 and 0319000046

Project Description:

The California Department of Transportation (Caltrans) proposes to improve State Route 32 in the City of Chico in Butte County, between post miles 5.0 and 10.2. This project proposes to replace pavement, add new striping and retroreflective pavement markers, enhance bike lanes on segments of 8th and 9th Streets along the roadway, rehabilitate the drainage system currently in poor condition, improve shoulders, add Americans with Disability Act (ADA) improvements, repair and replace existing failed sidewalks, and install new intersection lighting and traffic signals at 8th/Flume and 9th/Flume Streets.

Determination:

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt a ND for this project. This does not mean that Caltrans' decision on the project is final. The ND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and, pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The project would have *No Effect* with regard to biological resources, energy, hydrology and water quality, land use, mineral resources, population and housing, and recreation.

In addition, the proposed project would have *Less than Significant Impacts* with regard to air quality, aesthetics, agriculture, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, public services, transportation, utilities and service systems, tribal cultural resources, and wildfire.

Mike Bartlett	10/12/2021
Mike Bartlett, Environmental Office Chief	Date
North Region Environmental Management –District 3	
California Department of Transportation	



Table of Contents

PROPOSED I	Negative Declaration	i
	ents	
List of Figures	and Tables	iv
List of Abbrev	iated Terms	V
Chapter 1	Proposed Project	1
_	luction	
1.2 Projec	ct Alternatives	3
1.3 Perm	its and Approvals Needed	3
1.4 Stand	lard Measure and Best Management Practices Included	3
	ssion of the NEPA Categorical Exclusion	
Chapter 2	CEQA Evaluation	9
Project Impa	act Analysis Under CEQA	
2.1.1	Aesthetics	
2.1.2	Agriculture and Forest Resources	
2.1.3	Air Quality	
2.1.4	Biological Resources	
2.1.5	Cultural Resources	
2.1.6	Energy	
2.1.7 2.1.8	Geology and SoilsGreenhouse Gas Emissions	
2.1.0 2.1.9	Hazards and Hazardous Materials	
2.1.10	Hydrology and Water Quality	
2.1.10	Land Use and Planning	
2.1.12	Mineral Resources	
2.1.13	Noise	
2.1.14	Population and Housing	
2.1.15	Public Services	
2.1.16	Recreation	68
2.1.17	Transportation	70
2.1.18	Tribal Cultural Resources	
2.1.19	Utilities and Service Systems	
2.1.20	Wildfire	
2.1.21	Mandatory Findings of Significance	
Chapter 3	Agency and Public Coordination	80
Chapter 4	List of Preparers	82
Chapter 5	Distribution List	83
Chapter 6	References	85
Appendix A	Project Layouts	87
Appendix B		
	Title VI Policy Statement	

List of Figures and Tables

Figure 1.	Project Vicinity Map	1
Figure 2	Biological Communities with Planning	24
Figure 3.	U.S. 2016 GHG Gas Emissions	35
Figure 4.	California 2017 Greenhouse Gas Emissions	36
Figure 5.	Change in California GDP, Population, and GHG Emissions	36
Figure 6.	California Climate Strategy	41
Figure 7.	FEMA Flood Zone Map	47
Figure 8.	City of Chico - Fire Hazard Severity Zones	77
Table 1.	Sensitive Receptors Located Within 150 meters	20
Table 2.	Agency Coordination and Professional Contacts	81

List of Abbreviated Terms

Abbreviation	Description
АВ	Assembly Bill
ARB	Air Resources Board
BMPs	Best Management Practices
BSA	Biological Study Area
CAFE	Corporate Average Fuel Economy
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CGP	Construction General Permit
CH ₄	methane
CO ₂	carbon dioxide
СТР	California Transportation Plan
CWA	Clean Water Act
Department	Caltrans
DI	drainage inlet
DOT	Department of Transportation

Abbreviation	Description
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA(s)	Environmentally Sensitive Area(s)
ESHA	Environmentally Sensitive Habitat Area
ESL	Environmental Study Limits
FED	Final Environmental Document
FHWA	Federal Highway Administration
GHG	greenhouse gas
IS	Initial Study
MLD	Most Likely Descendent
MMTC02e	million metric tons of carbon dioxide equivalent
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
N ₂ O	nitrous oxide
NAHC	Native American Heritage Commission
NCSC	Natural Communities of Special Concern
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service

Abbreviation	Description
NPDES	National Pollutant Discharge Elimination System
O ₃	ozone
Pb	lead
PDT	Project Development Team
PM(s)	post mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
PRC	Public Resources Code
RMS	root mean square
RSP	Rock Slope Protection
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
S	State: ranking for Natural Communities of Special Concern
SB	Senate Bill
scs	Sustainable Communities Strategy
SF ₆	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SHS	State Highway System
SLR	Sea Level Rise
SNC	Sensitive Natural Community
SR	State Route
SWMP	Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan

Abbreviation	Description
SWRCB	State Water Resources Control Board
TMP	Transportation Management Plan
U.S. or US	United States
USDOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGCRP	U.S. Global Change Research Program
VIA	Visual Impact Assessment
VMT	Vehicle Miles Traveled
WDRs	Waste Discharge Requirements
WQAR	Water Quality Assessment Report



Chapter 1 Proposed Project

1.1 Introduction

Project Description

The California Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA).

The proposed project is located on State Route (SR) 32 in Butte County, between post miles 5.0 and 10.2 (Figure 1.1 Project Vicinity Map). The total length of the project is approximately 5.2 miles long. The project proposes to replace pavement, add new striping and retroreflective pavement markers, enhance bike lanes on segments of 8th and 9th Streets along the roadway, rehabilitate the drainage system currently in poor condition, improve shoulders, add Americans with Disability Act (ADA) improvements, repair and replace existing failed sidewalks, and install new intersection lighting and traffic signals at W Lindo Ave and Nord Ave (SR 32) and 8th/Flume and 9th/Flume Streets.

Background

SR 32 is located in the City of Chico where the route functions as a state highway. The project area is between Muir Ave and SR 99 junction. SR 32 conveys interregional travel east—west. It starts from Interstate 5 in Orland, across the Sacramento Valley and Chico, through Sierra Nevada mountain, and it ends at SR 36 and SR 89 in eastern Tehama County. SR 32 then adjoins I-5 and SR 99. SR 32 is a key interregional route that serves both local and regional traffic. The route serves as a major connector for automobile and truck traffic; it is a crucial route for transportation of goods and services. SR 32 is a connector between Glenn, Butte, and Tehama Counties and surrounding cities.

The existing facility in the project area is a two-lane conventional highway from post miles 5.0 to 8.37; four-lane conventional highway from post miles 8.37 to 8.87; and two-lane couplet from post mile 8.87 to 10.2. The proposed project limits encompass both rural areas as well as the city limits of Chico. Outside the city limits, the roadway configuration is one lane in each direction with a two-way left-turn lane. Near city limits, the configuration changes to two lanes for eastbound and westbound directions. SR 32 is named Nord Ave from post mile 5 to 8.3, Walnut Street from post mile 8.3 to 8.8, and W 8th Street for westbound and W 9th Street for eastbound to post mile 10.2.

Purpose

The purpose of the project is to maintain the SR 32 corridor to provide safe and serviceable facilities for the traveling public by improving traffic operations and motorist ride quality; replacing or rehabilitating existing drainage system; expanding multimodal use for public and complying with American with Disabilities Act (ADA) accessibility requirements.

Need

The existing pavement needs to be rehabilitated as it is exhibiting signs of major distress (82% of lane mile in fair conditions, and 7% of lane miles in poor condition). This work is warranted to preserve the ride quality, function, and safety of the SR 32 corridor.

The existing drainage facilities identified as either fair or poor condition during Caltrans culvert assessments need to be rehabilitated or replaced. This work is warranted to preserve drainage function, stability of existing roadway sections, and safety of the SR 32 corridor.

Existing curb ramps which are not compliant with the American with Disabilities Act (ADA) policies need to be reconstructed, and curb ramps missing from locations requiring these facilities need to be constructed. This work is warranted to provide safe and accessible facilities along the SR 32 corridor to the traveling public.

The intersection of SR 32 (Nord Ave) and W. Lindo Ave needs improved intersection control given traffic volumes observed during a 2016 traffic operations study. This work is warranted to provide safe and improved operation of the SR 32 corridor to the traveling public.

The intersection of SR 32 (Walnut St) and 8th Street needs improved intersection control given traffic volumes observed during a 2019 traffic operations study. The intersection of SR 32 and 9th Street needs improved intersection control given its proximity to SR 32 and 8th Street. This work is warranted to provide safe and improved operation of the SR 32 corridor to the traveling public.

The SR-32 (8th Street) and Flume Street intersection, and the SR 32 (9th Street) and Flume Street intersection need improved Highway Safety Lighting. This work is warranted to provide greater safety to the traveling public.

The existing multimodal facilities need to be improved or enhanced to provide greater continuity of pedestrian facilities, greater comfort and safety for bicycle users, and transit facilities in-line with Caltrans guidance.

1.2 Project Alternatives

Alternative 1: CAPM with Expanded Electrical and Hydraulic Scope

This alternative would maintain the facility in a safe and serviceable condition for the traveling public by rehabilitating or replacing pavement in less than good condition, rehabilitating or replacing poor condition drainage systems; upgrading existing roadway lighting, adding or replacing traffic signals and upgrading signal timing; upgrading non-standard ADA features as needed; repair or extend existing sidewalk; improve bicycle facilities, and installing fiber optics for traffic operation capability improvement.

The final configuration of Alternative 1 would generally match the existing corridor with improvement being the addition of signalized intersections at SR 32 (Nord Ave) and W Lindo Ave, SR 32 (Walnut St) and 8th St, and SR 32 (Walnut St) and 9th St.

The proposed scope of work for alternative 1 includes:

Rehabilitating or replacing pavement in less than good condition:

- Re-surfacing pavement for areas with regulatory speeds 45 MPH or greater:
 - Cold Plane Existing Roadway (0.30' below finished grade)
 - Pave 0.15' HMA-A
 - o Pave 0.15' RHMA-G
 - Pave 0.10' RHMA-O
- Re-surfacing pavement for areas with regulatory speeds less than 45 MPH:
 - o Cold Plane Existing Roadway (0.30' below finished grade)
 - Pave 0.15' HMA-A
 - Pave 0.15' RHMA-G
- Reconstructing Pavement for areas with poor pavement conditions and failing structural sections or subgrade:
 - o 0.10' RHMA-O
 - 0.20' RHMA-G
 - o 0.45' HMA-A
 - o 1.20' Class II AB
- Addressing corridor deficiencies related to shoulder backing and roadway taper edge where appropriate.

Repairing or Extending Sidewalk; or Upgrading Non-Standard ADA features:

- Upgrading or installing ADA ramps at 61 locations (approx. 2850 LF)
- Upgrading or installing bus stops facilities at four (4) locations (approx. 70 LF)
- Replacing or repairing existing sidewalks or driveways (approx. 2400 LF)
- Extending existing flatwork with new sidewalk and driveways (approx. 5000 LF)

Rehabilitating, replace and install drainage systems:

- Rehabilitating culverts with cured-in-place-pipe (CIPP) liners
 - 23 systems in poor condition (approx. 1400 LF)
 - 52 systems in fair condition (approx. 3611 LF)
- Maintaining drainage systems at locations with replaced sidewalks or ramps
- Installing drainage systems at locations where existing curb gutter and sidewalk are extending
- Upgrade existing drainage inlets and grates to current standards (105 locations)
- Installing new drainage systems at the SR 32/SR 99 interchange

Improving bicycle facilities:

- Coloring and delineate Class II bicycle facilities with contrast paving, pavement marking and wide delineations or buffers (PM 6.2 to 8.3)
- Delineating bike boxes to improve bicycle safety at signalized intersections
- Installing bike loop detection at signalized intersections

Installing or upgrading electrical facilities:

- Installing new traffic signal and controller cabinets at three (3) intersections
 - SR 32 (Nord Ave) and W Lindo Ave.
 - SR 32 (Walnut St) and SR WB (8th St)
 - SR 32 (Walnut St) and SR EB (9th St)
- Replacing traffic signal at twelve (12) intersections
 - SR 32 (Nord Ave) and W East Ave
 - SR 32 (Nord Ave) and W 8th Ave
 - SR 32 (Walnut St) and W 2nd St
 - SR 32 (Walnut St) and W 3rd St
 - SR 32 (Walnut St) and W 5th St
 - o SR 32 WB (8th St) and Broadway St
 - o SR 32 EB (9th St) and Broadway St
 - SR 32 WB (8th St) and Main St
 - o SR 32 WB (8th St) and Pine St
 - o SR 32 EB (9th St) and Pine St
 - SR 32 WB (8th St) and Cypress St
 - SR 32 EB (9th St) and Cypress St
- Installing new intersection lighting at two (2) intersections
 - o SR 32 WB (8th St) and Flume St
 - o SR 32 EB (9th St) and Flume St
- Replacing intersection lighting at seven (7) intersections
 - SR 32 (Nord Ave) and Stewart Ave
 - o SR 32 (Walnut St) and W 1st St
 - o SR 32 EB (9th St) and Broadway St

- o SR 32 WB (8th St) and Pine St
- o SR 32 EB (9th St) and Pine St
- o SR 32 WB (8th St) and Cypress St
- o SR 32 EB (9th St) and Cypress St
- Upgrading controller cabinets at five (5) intersections
 - SR 32 (Nord Ave) and W East Ave
 - SR 32 (Nord Ave) and W 8th Ave
 - Timber Apartment Pedestrian Crosswalk
 - o SR 32 (Walnut St) and W 3rd St
 - o SR 32 EB (9th St) and Salem St
- Installing pedestrian crossing signal and controller cabinet at SR 32 (Nord Ave) and Stewart Ave
- Upgrading UPRR Signal and crossing arms at two (2) at-grade crossings
 - At-grade crossing on SR 32 EB (9th St)
 - At-grade crossing on SR 32 WB (8th St)
- Installing Fiber optic cables for project length (5.2 miles)

Other proposed work:

- Trimming or removing tree which existing within clear recovery zone
- Installing signs as needed
- Maintaining traffic during construction
- Complying with regulatory requirements
- Addressing conflicts with existing utilities

Utility owner involvement:

The following utility facilities existing within the project corridor and will either require relocation or protection in place:

- Electrical: Pacific Gas and Electric (PG&E)
- Water: California Water Service (CalWater)
- · Sewer: City of Chico
- Storm Drain: City of Chico
- Fiber Optic: Sprint, PG&E, and Comcast
- Telecommunications: Centurylink, and AT&T
- Telephone: AT&TNatural Gas: PG&E

To mitigate for potential conflict and resulting schedule delays the Project Development Team (PDT) has begun locating underground facilities utilizing ground penetrating radar (GPR), electron detections, utility manhole dips, and positive-location via test holes.

Railroad involvement:

This alternative is proposing to include at-grade pedestrian crossing for the SR 32 couplet streets (8th St and 9th St). Pedestrian crossing will comply with UPRR design guidance and be located along the outside shoulder of each couplet. Existing UPRR electrical facilities may be upgraded.

Caltrans anticipate UPRR coordination and approval on the following items for project delivery.

- Construction and Maintenance (C&M) agreement
- Permanent and temporary easements
- Rights of entry for engineering design services
- Construction flagging agreement.
- Coordination for California Public Utility Commission (CPUC) approval

Right-of-way involvement:

Alternative 1 will require permanent right-of-way acquisition, temporary construction easements, and utility easements.

Alternative 2: CAPM with Roundabout at Single Intersection

This alternative would maintain the facility in a safe and serviceable condition for the traveling public by rehabilitating or replacing pavement in less than good condition, rehabilitating or replacing poor condition drainage systems; upgrading existing roadway lighting, adding or replacing traffic signals and upgrading signal timing; install a roundabout intersection, upgrading non-standard ADA features as needed; repair or extend existing sidewalk; improve bicycle facilities, and installing fiber optics for traffic operation capability improvement.

The final configuration of Alternative 2 would generally match the existing corridor with improvements being the addition of signalized intersections SR 32 (Walnut St) and 8th St, and SR 32 (Walnut St) and 9th St; and a roundabout for the intersection of SR 32 (Nord Ave) and W Lindo Ave.

The proposed scope of work for alternative 2 includes:

Rehabilitating or replacing pavement in less than good condition:

- Re-surfacing pavement for areas with regulatory speeds 45 MPH or greater:
 - Cold Plane Existing Roadway (0.30' below finished grade)
 - Pave 0.15' HMA-A
 - Pave 0.15' RHMA-G
 - Pave 0.10' RHMA-O
- Re-surfacing pavement for areas with regulatory speeds less than 45 MPH:
 - Cold Plane Existing Roadway (0.30' below finished grade)
 - o Pave 0.15' HMA-A
 - Pave 0.15' RHMA-G

- Reconstructing Pavement for areas with poor pavement conditions and failing structural sections or subgrade:
 - o 0.10' RHMA-O
 - o 0.20' RHMA-G
 - o 0.45' HMA-A
 - o 1.20' Class II AB
- Addressing corridor deficiencies related to shoulder backing and roadway taper edge where appropriate.

Installing roundabout at SR 32 (Nord Ave) and W Lindo Ave:

- Constructing roundabout traffic control at intersection of SR 32 (Nord Ave) and W Lindo Ave as an alternative to signalized traffic control
- Constructing Sidewalks and Class 1 facilities for pedestrian and bicycle access
- Installing highway planting and irrigation within median
- Installing delineation and signage compliant with standards
- Installing additional lighting as necessary for safe use of facilities

Repairing or Extending Sidewalk; or Upgrading Non-Standard ADA features:

- Upgrading or installing ADA ramps at 61 locations (approx. 2850 LF)
- Upgrading or installing bus stops facilities at four (4) locations (approx. 70 LF)
- Replacing or repairing existing sidewalks or driveways (approx. 2400 LF)
- Extending existing flatwork with new sidewalk and driveways (approx. 5000 LF)

Rehabilitating, replace and install drainage systems:

- Rehabilitating culverts with cured-in-place-pipe (CIPP) liners
 - o 23 systems in poor condition (approx. 1400 LF)
 - o 52 systems in fair condition (approx. 3611 LF)
- Maintaining drainage systems at locations with replaced sidewalks or ramps
- Installing drainage systems at locations where existing curb gutter and sidewalk are extending
- Upgrade existing drainage inlets and grates to current standards (105 locations)
- Installing new drainage systems at the SR 32/SR 99 interchange

Improving bicycle facilities:

- Coloring and delineate Class II bicycle facilities with contrast paving, pavement marking and wide delineations or buffers (PM 6.2 to 8.3)
- Delineating bike boxes to improve bicycle safety at signalized intersections
- Installing bike loop detection at signalized intersections

Installing or upgrading electrical facilities:

Installing new traffic signal and controller cabinets at two (2) intersections

- SR 32 (Walnut St) and WB (8th St)
- o SR 32 (Walnut St) and EB (9th St)
- Replacing traffic signal at twelve (12) intersections
 - SR 32 (Nord Ave) and W East Ave
 - SR 32 (Nord Ave) and W 8th Ave
 - SR 32 (Walnut St) and W 2nd St
 - o SR 32 (Walnut St) and W 3rd St
 - o SR 32 (Walnut St) and W 5th St
 - o SR 32 WB (8th St) and Broadway St
 - o SR 32 EB (9th St) and Broadway St
 - o SR 32 WB (8th St) and Main St
 - o SR 32 WB (8th St) and Pine St
 - o SR 32 EB (9th St) and Pine St
 - SR 32 WB (8th St) and Cypress St
 - o SR 32 EB (9th St) and Cypress St
- Installing new intersection lighting at two (2) intersections
 - o SR 32 WB (8th St) and Flume St
 - o SR 32 EB (9th St) and Flume St
- Replacing intersection lighting at seven (7) intersections
 - SR 32 (Nord Ave) and Stewart Ave
 - SR 32 (Walnut St) and W 1st St
 - o SR 32 EB (9th St) and Broadway St
 - o SR 32 WB (8th St) and Pine St
 - o SR 32 EB (9th St) and Pine St
 - SR 32 WB (8th St) and Cypress St
 - o SR 32 EB (9th St) and Cypress St
- Upgrading controller cabinets at five (5) intersections
 - SR 32 (Nord Ave) and W East Ave
 - SR 32 (Nord Ave) and W 8th Ave
 - Timber Apartment Pedestrian Crosswalk
 - SR 32 (Walnut St) and W 3rd St
 - SR 32 EB (9th St) and Salem St
- Installing pedestrian crossing signal and controller cabinet at SR 32 (Nord Ave) and Stewart Ave
- Upgrading UPRR Signal and crossing arms at two (2) at-grade crossings
 - At-grade crossing on SR 32 EB (9th St)
 - At-grade crossing on SR 32 WB (8th St)
- Installing Fiber optic cables for project length (5.2 miles)

Other proposed work:

Trimming or removing tree which existing within clear recovery zone

- Installing signs as needed
- Maintaining traffic during construction
- Complying with regulatory requirements
- Addressing conflicts with existing utilities

Utility owner involvement:

The following utility facilities existing within the project corridor and will either require relocation or protection in place:

Electrical: Pacific Gas and Electric (PG&E)

Water: California Water Service (CalWater)

Sewer: City of Chico

Storm Drain: City of Chico

• Fiber Optic: Sprint, PG&E, and Comcast

Telecommunications: Centurylink, and AT&T

Telephone: AT&TNatural Gas: PG&E

To mitigate for potential conflict and resulting schedule delays the PDT has begun locating underground facilities utilizing ground penetrating radar (GPR), electron detections, utility manhole dips, and positive-location via test holes.

Railroad involvement:

This alternative is proposing to include at-grade pedestrian crossing for the SR 32 couplet street (8th St and 9th St). Pedestrian crossing will comply with UPRR design guidance and be located along the outside shoulder of each couplet. Existing UPRR electrical facilities may be upgraded.

Caltrans anticipate UPRR coordination and approval on the following items for project delivery.

- Construction and Maintenance (C&M) agreement
- Permanent and temporary easements
- Rights of entry for engineering design services
- Construction flagging agreement.
- Coordination for California Public Utility Commission (CPUC) approval

Right-of-way involvement:

Alternative 2 will require permanent right-of-way acquisition, temporary construction easements, and utility easements.

Alternative 4: CAPM

This alternative would maintain the facility in a safe and serviceable condition for the traveling public by rehabilitating or replacing pavement in less than good condition, rehabilitating or replacing poor condition drainage systems; upgrading existing roadway lighting, adding or replacing traffic signals and upgrading signal timing; upgrading non-standard ADA features as needed; repair or extend existing sidewalk; and improve bicycle facilities.

The final configuration of Alternative 4 would generally match the existing corridor with improvement being the addition of signalized intersections at SR 32 (Nord Ave) and W Lindo Ave, SR 32 (Walnut St) and 8th St, and SR 32 (Walnut St) and 9th St.

The proposed scope of work for alternative 4 includes:

Rehabilitating or replacing pavement in less than good condition:

- Re-surfacing pavement for areas with regulatory speeds 45 MPH or greater:
 - Cold Plane Existing Roadway (0.30' below finished grade)
 - o Pave 0.15' HMA-A
 - o Pave 0.15' RHMA-G
 - o Pave 0.10' RHMA-O
- Re-surfacing pavement for areas with regulatory speeds less than 45 MPH:
 - Cold Plane Existing Roadway (0.30' below finished grade)
 - Pave 0.15' HMA-A
 - Pave 0.15' RHMA-G
- Reconstructing Pavement for areas with poor pavement conditions and failing structural sections or subgrade:
 - o 0.10' RHMA-O
 - o 0.20' RHMA-G
 - o 0.45' HMA-A
 - o 1.20' Class II AB
- Addressing corridor deficiencies related to shoulder backing and roadway taper edge where appropriate.

Repairing or Extending Sidewalk; or Upgrading Non-Standard ADA features:

- Upgrading or installing ADA ramps at 61 locations (approx. 2850 LF)
- Upgrading or installing bus stops facilities at four (4) locations (approx. 70 LF)
- Replacing or repairing existing sidewalks or driveways (approx. 2400 LF)
- Extending existing flatwork with new sidewalk and driveways (approx. 5000 LF)

Rehabilitating, replace and install drainage systems:

- Rehabilitating culverts with cured-in-place-pipe (CIPP) liners
 - o 23 systems in poor condition (approx. 1400 LF)
 - o 52 systems in fair condition (approx. 3611 LF)
- Maintaining drainage systems at locations with replaced sidewalks or ramps

- Installing drainage systems at locations where existing curb gutter and sidewalk are extending
- Installing new drainage systems at the SR 32/SR 99 interchange

Improving bicycle facilities:

- Coloring and delineate Class II bicycle facilities with contrast paving, pavement marking and wide delineations or buffers (PM 6.2 to 8.3)
- Delineating bike boxes to improve bicycle safety at signalized intersections

Installing or upgrading electrical facilities:

- Installing new traffic signal and controller cabinets at three (3) intersections
 - o SR 32 (Nord Ave) and W Lindo Ave.
 - o SR 32 (Walnut St) and SR 32 WB (8th St)
 - o SR 32 (Walnut St) and SR 32 EB (9th St)
- Replacing traffic signal at five (5) intersections
 - o SR 32 (Nord Ave) and W East Ave
 - o SR 32 (Nord Ave) and W 8th Ave
 - o SR 32 (Walnut St) and W 2nd St
 - o SR 32 (Walnut St) and W 3rd St
 - o SR 32 (Walnut St) and W 5th St
- Installing new intersection lighting at two (2) intersections
 - o SR 32 WB (8th St) and Flume St
 - o SR 32 EB (9th St) and Flume St
- Replacing intersection lighting at SR 32 (Walnut St) and W 1st St
- Upgrading controller cabinets at three (3) intersections
 - o SR 32 (Nord Ave) and W East Ave
 - o SR 32 (Nord Ave) and W 8th Ave
 - o SR 32 (Walnut St) and W 3rd St
- Installing pedestrian crossing signal and controller cabinet at SR 32 (Nord Ave) and Stewart Ave
- Upgrading UPRR Signal and crossing arms at two (2) at-grade crossings
 - At-grade crossing on SR 32 EB (9th St)
 - At-grade crossing on SR 32 WB (8th St)

Other proposed work:

- Trimming or removing tree which existing within clear recovery zone
- Installing signs as needed
- Maintaining traffic during construction

- Complying with regulatory requirements
- Addressing conflicts with existing utilities

Utility owner involvement:

The following utility facilities existing within the project corridor and will either require relocation or protection in place:

Electrical: Pacific Gas and Electric (PG&E)

Water: California Water Service (CalWater)

Sewer: City of Chico

Storm Drain: City of Chico

Fiber Optic: Sprint, PG&E, and Comcast

Telecommunications: Centurylink, and AT&T

Telephone: AT&TNatural Gas: PG&E

To mitigate for potential conflict and resulting schedule delays the PDT has begun locating underground facilities utilizing ground penetrating radar (GPR), electron detections, utility manhole dips, and positive-location via test holes.

Railroad involvement:

This alternative is proposing to include at grade pedestrian crossing for the SR 32 couplet (8th St and 9th St). Pedestrian crossing will comply with UPRR design guidance and be located along the outside shoulder of each couplet. Existing UPRR electrical facilities may be upgraded.

Caltrans anticipate UPRR coordination and approval on the following items for project delivery.

- Construction and Maintenance (C&M) agreement
- Permanent and temporary easements
- Rights of entry for engineering design services
- Construction flagging agreement.
- Coordination for California Public Utility Commission (CPUC) approval

Right-of-way involvement:

Alternative 4 will require permanent right-of-way acquisition, temporary construction easements, and utility easements.

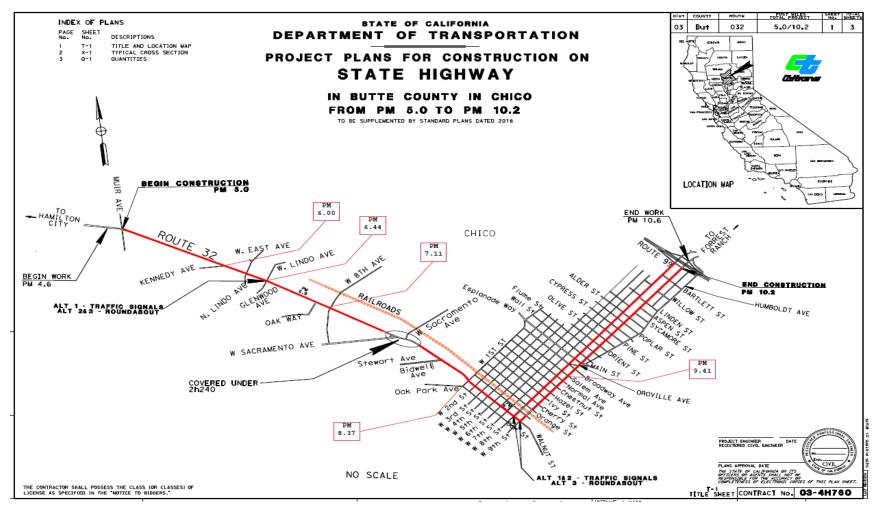


Figure 1. Project Vicinity Map

Alternative 5: No-Build Alternative

The "No-Build" alternative perpetuates the existing condition of facilities with no work performed addressing project needs.

Alternative Considered but Eliminated from Further Consideration

Alternative 3: CAPM With Roundabout at Multiple Intersections

Alternative 3 was considered but rejected after performing an initial evaluation as it is not a context sensitive solution due to significant impacts to adjacent student housing requiring full acquisition of developments, right-of-way acquisitions would likely delay project delivery, and the added costs for construction and right-of-way would be cost prohibitive. The high-density student housing developments likely impacted include Edge Apartments, 18 units and the 7th Street Manor apartments, 49 units. Detailed below is our evaluation of alternative 3 leading to the considered but rejected determination.

Alternative 3 proposed to perform all work identified in Alternative 1 with the variation being that three (3) intersection on SR 32 should be evaluated for roundabout configurations as an alternative intersection control strategy in accordance with the Traffic Operations Policy Directive (TOPD) 13-02.

The three intersections identified for roundabout configurations were:

- SR 32 (Nord Ave) and W. Lindo Ave
- SR 32 (Walnut St) and SR 32 WB (8th St)
- SR 32 (Walnut St) and SR 32 EB (9th St)

As part of the PDT evaluation of this alternative and following Traffic Operations Policy Directive (TOPD) 13-02 guidance, the first step is to evaluate the access strategy and configuration assessment/screening to determine if this is a context-appropriate solution and practical to implement.

The following corridor constraints were noted while developing designs:

- Parcels immediately adjacent to SR 32 (Walnut St) and between the intersections of SR 32 (Walnut St) and SR 32 WB (8th St), and SR 32 (Walnut St) and SR 32 EB (9th St) were developed as high-density student housing and would be impacted by construction of a roundabout.
- SR 32 is a STAA route in which the inscribed diameter for a single-lane roundabout ranges from 130-feet to 180-feet; and the total width required ranges from 150-feet to 200-feet when including adjacent Class I bikeway facilities. The existing SR 32 (Walnut St) corridor is approximately 65-feet wide measured flow line to flow line and 78-feet wide measured from back of walk to back of walk. Thus, the footprint required for the roundabout would be more than twice that which is available without impacting adjacent properties.

- Intersection spacing between SR 32 (Walnut St) and SR 32 WB (8th St), and SR 32 (Walnut St) and SR 32 EB (9th St) is approximately 320-feet. This spacing wouldn't allow for two independent intersections, but instead would require larger peanut configuration.
- Approaching intersection legs to peanut configuration would need to be realigned to reduce entry speeds, or intersection size could be increased to accommodate increased approach speeds.
- Construction of roundabout configurations near SR 32 (Walnut St) and SR 32 EB (8th St) or SR 32 WB (9th St) would have significant impacts to adjacent parcels and require full right-of-way acquisitions for construction.

Based upon the above, it was determined that this alternative was not a context sensitive solution due to significant right-of-way, schedule and cost impacts and should not be considered a viable alternative warranting further evaluation.

1.3 Permits and Approvals Needed

There are no permits, licenses, agreements, and certifications required for project construction.

1.4 Standard Measure and Best Management Practices Included In All Alternatives

Under CEQA, "mitigation" is defined as avoiding, minimizing, rectifying, reducing/ eliminating, and compensating for an impact. In contrast, Standard Measures and Best Management Practices (BMPs) are prescriptive and sufficiently standardized to be generally applicable, and do not require special tailoring for a project. They are measures that typically result from laws, permits, agreements, guidelines, and resource management plans. For this reason, the measures and practices are not considered "mitigation" under CEQA; rather, they are included as part of the project description in environmental documents.

The following section provides a list of project features, standard practices (measures), and Best Management Practices (BMPs) that are included as part of the project description. These avoidance and minimization measures are prescriptive and sufficiently standardized to be generally applicable and do not require special tailoring to a project situation. These are generally measures that result from laws, permits, guidelines, and resource management plans that are relevant to the project. They contain refinements in planning policies and implementing actions. These practices predate the project's proposal and apply to all similar projects. For this reason, these measures and practices do not qualify as project mitigation, and the effects of the project are analyzed with these measures in place.

Standard measures relevant to the protection of natural resources deemed applicable to the proposed project include the following:

Aesthetics/Visual Resources

AR-4: Where feasible, construction lighting would be limited to within the area of work.

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a Caltrans biologist or Environmental Coordinator Liaison (ECL) would meet with the contractor to brief them on environmental permit conditions and requirements relative to each stage of the proposed project, including, but not limited to, work windows, drilling site management, and how to identify and report regulated species within the project areas.

BR-2: Animal Species

A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within one week prior to vegetation removal. If an active nest is located, the biologist would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.

Cultural Resources

CR-1: Caltrans would coordinate with the Mechoopda Indian Tribe and incorporate measures to protect tribal resources, including potential work windows associated with tribal ceremonies.

CR-3: If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).

CR-4: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally owned lands would be treated in accordance with the Native American Graves Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.

Geology, Seismic/Topography, and Paleontology

GS2: In the unlikely event that paleontological resources (fossils) are encountered, all work within a 60-foot radius of the discovery would stop, the area would be secured, and the work would not resume until appropriate measures are taken.

Greenhouse Gas Emissions

- **GHG-1:** Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality.
- **GHG-2:** Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.
- **GHG-3:** Caltrans Standard Specification "Emissions Reduction" ensures construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB).
- **GHG-4:** Use of a Transportation Management Plan (TMP) to minimize vehicle delays and idling emissions. As part of this, construction traffic would be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along the highway during peak travel times.
- **GHG-5:** All areas temporarily disturbed during construction would be revegetated with appropriate native species. Landscaping reduces surface warming and, through photosynthesis, decreases CO₂. This replanting would help offset any potential CO₂ emissions increase.
- **GHG-6:** Pedestrian and bicycle access would be maintained on SR 32 during project activities.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would prepare a project-specific Lead Compliance Plan (CCR Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective

equipment, and other health and safety protocols and procedures for the handling of lead-impacted soil.

HW-2: When identified as containing hazardous levels of lead, traffic stripes would be removed and disposed of in accordance with Caltrans Standard Special Provision "Residue Containing Lead from Paint and Thermoplastic."

HW-3: If treated wood waste (such as removal of sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Standard Specification "Treated Wood Waste."

Traffic and Transportation

TT-1: Pedestrian and bicycle access would be maintained during construction.

TT-2: The contractor would be required to schedule and conduct work to avoid unnecessary inconvenience to the public and to maintain access to driveways, houses, and buildings within the work zones.

TT-3: A Transportation Management Plan (TMP) would be applied to the project.

Utilities and Emergency Services

UE-1: All emergency response agencies in the project area would be notified of the project construction schedule and would have access to SR 32 throughout the construction period.

UE-2: Caltrans would coordinate with utility providers to plan for relocation of any utilities to ensure utility customers would be notified of potential service disruptions before relocation.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the Provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2012-0011-DWQ) as amended by subsequent orders, which became effective July 1, 2013, for projects that result in a land disturbance of one acre or more, and the CGP (Order 2009-0009-DWQ).

Before any ground-disturbing activities, the contractor would prepare a Stormwater Pollution Prevention Plan (SWPPP) (per the CGP Order 2009-0009-DWQ) or Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre), that includes erosion control measures and construction waste containment measures to protect waters of the State during project construction.

The SWPPP or WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site BMPs to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project SWPPP or WPCP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction may require one or more of the following temporary construction site BMPs: (only include those relevant to the project)

Any spills or leaks from construction equipment (i.e., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.

Accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities would be removed by dewatering.

Water generated from the dewatering operations would be discharged on-site for dust control and/or to an infiltration basin, or disposed of offsite.

Temporary sediment control and soil stabilization devices would be installed.

Existing vegetated areas would be maintained to the maximum extent practicable.

Clearing, grubbing, and excavation would be limited to specific locations, as delineated on the plans, to maximize the preservation of existing vegetation.

Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.

Soil disturbing work would be limited during the rainy season.

WQ-2: The project would incorporate pollution prevention and design measures consistent with the *2016 Caltrans Storm Water Management Plan*. This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2012-0011-DWQ) as amended by subsequent orders.

The project design may include one or more of the following:

Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.

Where possible, stormwater would be directed in such a way as to sheet flow across vegetated slopes, thus providing filtration of any potential pollutants.

1.5 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with CEQA and other state laws and regulations. Separate environmental documentation supporting a Categorical Exclusion determination will be prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may

contain references to federal laws and/or regulations CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special-status species by the National Marine Fisheries Service and the United States Fish and Wildlife Service—in other words, species protected by the FESA).

Chapter 2 CEQA Evaluation

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Potential Impact Area	Impacted: Yes / No
Aesthetics	Yes
Agriculture and Forest Resources	Yes
Air Quality	Yes
Biological Resources	No
Cultural Resources	Yes
Energy	No
Geology and Soils	Yes
Greenhouse Gas Emissions	Yes
Hazards and Hazardous Materials	Yes
Hydrology and Water Quality	No
Land Use and Planning	No
Mineral Resources	No
Noise	Yes
Population and Housing	No
Public Services	Yes
Recreation	No
Transportation	Yes
Tribal Cultural Resources	No
Utilities and Service Systems	Yes
Wildfire	Yes
Mandatory Findings of Significance	No

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A "No Impact" answer in the last column of the checklist reflects this determination. The words "significant" and "significance" used throughout the checklist and this document are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project as well as standardized measures applied to all or most Caltrans projects (such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.4]), are an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 CCR § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project's possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a "statement of the objectives sought by the proposed project" (14 CCR § 15124(b)).

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the action, and ways to mitigate each significant effect. Significance is defined as "Substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and it's varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a state-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be circulated for public review, along with a document known as an Initial Study. CEQA allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review. The lead agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure. Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered "mitigation" under CEQA, these measures are often referred to in an Initial Study as "mitigation", Good Stewardship or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (CAL. PUB. RES. CODE § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

No-Build Alternative

For each of the following CEQA Environmental Checklist questions, the "No-Build" alternative has been determined to have "No Impact". Under the "No-Build" alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The "No-Build" alternative will not be discussed further in this document.

2.1.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

CEQA establishes that it is the policy of the state to take all action to provide the people of the state "with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

The "Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, and the Visual Impact Assessment (VIA) dated June 22, 2021.

Regulatory Setting

The proposed project is located on SR 32 in Butte County, between post miles 5.0 and 10.2. The total length of the project is approximately 5.2 miles long. The landscape is characterized as developed. The project area is zoned Community Commercial, Medium Density Residential, Industrial Office Mixed-Use, Services Commercial, and Secondary Open Space.

CEQA Significance Determinations for Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:

a) Have a substantial adverse effect on a scenic vista?

No Impact: In the City of Chico, SR 32 is not designated as a state scenic highway. The proposed project will not have a substantial adverse effect on a scenic vista. Therefore, the project would have no impact on scenic vistas.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact: The implementation of the proposed project would not damage scenic resources such as trees, rock outcroppings, and historic buildings. The project would not construct any buildings or structures that would block longrange views or interfere with scenic vistas. There are no designated state scenic highways within the City of Chico. Therefore, the project would have no impact to scenic resources.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact: The determination in this section is based on the project scope, setting, field reviews, for inclusion into the Visual Impact Assessment completed on June 22, 2021. The project site is located on land that is relatively flat and is developed. The project would not conflict with zoning and other regulations governing scenic quality. Therefore, the project would have no impact on local zoning or scenic quality regulation.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact: The proposed work is expected to be completed during normal working daylight hours but may necessitate some work during the night. All nighttime illumination sources coming from the project would comply with standard Caltrans practices controlling illumination for public safety and any light and glare from construction.

After project completion, new lighting will permanently increase the quality of illumination within the project limits. The surrounding area is urbanized with existing lighting. No new source of lighting or glare would substantially affect day or nighttime views; therefore, the impact is less than significant.

The following are measures to Reduce the Visual Effects:

The implementation of the minimization measures will help to diminish any possible visual impacts that may occur as a result of this project.

- Incorporate aesthetic/architectural treatment into the project.
 Aesthetic/architectural treatment shall be determined in consultation with the District Landscape Architect during the design phase.
- Planting scope and needs will be determined during the project design phase.
- All disturbed areas including access roads shall be re-graded to their preconstruction profiles and contours.
- At the end of construction all areas used for staging, access, or other construction activities shall be repaired pursuant to Section 5-1.36 "Property and Facility Preservation.

2.1.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				\boxtimes
d) Result in the loss of forest land or conversion of forest land to non-forest use?				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				\boxtimes

The "Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, location of the proposed project, and the California Department of Conservation Farmland Maps, and Natural Resources Conservation Service Soil Survey. Potential impacts to Agriculture and Forest Resources are not anticipated.

Regulatory Setting

CEQA requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to discourage the early conversion of agricultural and open space lands to other uses.

CEQA Significance Determinations for Agriculture and Forest Resources

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Less Than Significant Impact: The project area contains two parcels identified by the California Department of Conservation as Prime Farmland (these parcels are shown in the project mapping). Nevertheless, the City of Chico has land use authority. The project area is zoned Industrial Office Mixed-Use and Medium Density Residential, Light Manufacturing, Community Commercial, and Public/Quasi Public Facilities, not agriculture. Acquisition of narrow strips of land which potentially could be used for farming is required. Therefore, the impact to farmland is less than significant.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact: There are no parcels under the Williamson Act contract within the project limits. The project area is zoned Industrial Office Mixed-Use and Medium Density Residential, Light Manufacturing, Community Commercial, and Public/Quasi Public Facilities. Therefore, no impacts would occur towards agriculture zoning or Williamson Act properties.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact: The proposed project would not conflict with existing zoning for forestland/timberland; there is no forestland in the project area. Therefore, no impacts would occur to forest or timberland.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact: There is no forestland in the project area. Therefore, the project would not result in a loss or conversion of forestland.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact: The proposed project would not result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use. Therefore, no impacts would occur.

2.1.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?				
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?				
c) Expose sensitive receptors to substantial pollutant concentrations?				
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				

The "Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, and the Air Quality Compliance Memorandum dated September 9, 2021.

Regulatory Setting

The Federal Clean Air Act (CAA), as amended, is the primary federal law that governs air quality, while the California Air Act is its corresponding state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and California Air Resources Board (ARB), set standards for the concentration of pollutants in the air.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under NEPA. In addition to this analysis, a parallel "conformity" requirement under the CAA also applies.

CEQA Significance Determinations for Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact: Butte County is designated as to attainment-maintenance on 08/10/2018. The proposed modifications would not change traffic volume, fleet mix, speed, or any other factors that would cause an increase in emissions relative to the no build alternative; therefore, this project would not cause an increase in operational emissions and therefore, would have no impact to air quality.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non- attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact: The proposed project anticipates temporary short-term air quality impacts; however, these impacts will be reduced with incorporation of the minimization measures. The purpose of this project is to preserve the pavement life of SR 32, extending the life of drainage systems, improving pedestrian mobility and overall operations, and adding signals at intersections or constructing roundabouts. The proposed project would not cause an increase in operational emissions in comparison with the no-build alternative during the future years.

The proposed project is located in a nonattainment area for national O3 standard and a maintenance area for national PM2.5 standard. This project is listed and financially constrained in Federal Transportation Improvement Program, which was found to conform by BCAG, and the project is exempt from regional (40 CFR 93.127) conformity requirements. BCAG completed an Interagency Consultation Review and concluded that the proposed project is not a Project of Air Quality Concern (POAQC).

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact: Sensitive receptors include residential areas, schools, hospitals, other health care facilities, child/day care facilities, parks, and playgrounds. On the basis of research showing that the zone of greatest concern near roadways is within 500 feet (or 150 meters), sensitive receptors within 500 feet (or 150 meters) have been identified (see table 1). No considerable impacts to criteria

pollutants are anticipated as the project's operational emissions are not significant under the build alternatives.

For temporary construction emissions, construction dust and equipment exhaust emissions measures shall be implemented through Caltrans' special provisions and standard specifications, during all phases of construction work thus, the impact would be less than significant.

Table 1. Sensitive Receptors Located Within 150 meters of the Project Site

Receptor	Description	Distance Between Receptor and Project (ft)
Emma Wilson Elementary School	A public elementary school with K to 5	500
Oak Way Park	A neighborhood park with leisure activities including basketball courts, walking paths, open field space, and picnic areas	50
California State University, Chico	A public university in Chico	50
Rosedale Elementary School	A public elementary school with K to 5	400
Humboldt Avenue Skate Park	Chico area recreation & park	200
Lower Bidwell Park	A municipal park with biking trails, picnic areas, and swimming holes.	200
Humboldt Park/Windchime Park	A neighborhood park with walking path and open field space	300
Lollipop Kidz	A private day care center	400
Residential Areas	Residential areas adjacent to Route 32	50 - 500

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant: Temporary construction activities could generate fugitive dust from the operation of construction equipment. The project will comply with construction standards as well as Caltrans standardized procedures for minimizing air pollutants during construction. No mitigation is required.

2.1.4 Biological Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				\boxtimes

The "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, and the Natural Environmental Study dated July 23, 2021.

CEQA Significance Determinations for Biological Resources

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?

No Impact: Survey results have concluded that the Environmental Study Area (ESA) does not contain suitable habitat for any threatened, endangered, candidate, sensitive or special status species as recognized by California Department of Fish and Wildlife and U.S. Fish and Wildlife. Therefore, there are no impacts to special status species.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact: This project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service, as the project does not impacts any riparian habitat or other sensitive natural community. Therefore, there are no impacts to riparian habitat or other sensitive natural communities.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact: The proposed project will not result in the placement of permanent fill into a protected wetland. Therefore, there will be no impact to protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact: The Proposed project will not result in any impacts to wildlife movement or fish passage connectivity. Surveys conclude that no native wildlife nursery sites will be impacted.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact: There are no anticipated local ordinances or preservations policies protecting biological resources that will have the potential to occur within the ESA. Caltrans will work with the City of Chico to conform with Chapter 14.40 Street Trees, specifications and other regulations for removal and maintenance of trees and shrubs. Therefore, there will be no impact to biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact: This project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan because "...twelve biological communities have been identified within the Planning Area and are depicted on Figure 13. Dominant biological communities within the Planning Area include agriculture, annual grassland, blue oak savanna, blue oak woodland, chaparral, cottonwood-willow riparian, disturbed, dredger tailings, herbaceous riparian river bar, interior live oak woodland, mixed oak woodland, open water/riverine, ranchettes – open, ranchettes – wooded, urban, valley oak riparian, wetlands (including emergent wetland and vernal pool), and willow scrub. Each of the biological communities within the Planning Area, including common plant and wildlife species, is described further below." As shown in Figure 13, the project area is located in an urbanized area.

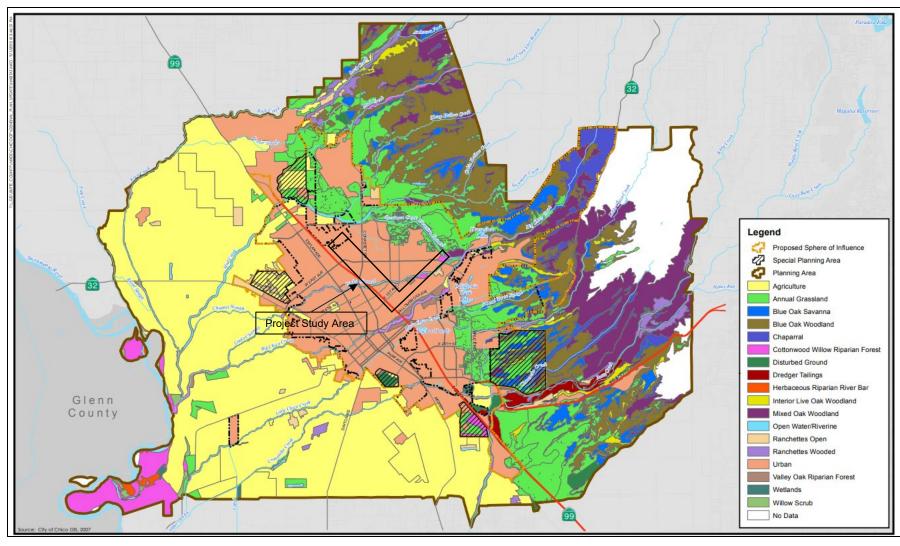


Figure 2 Biological Communities with Planning

2.1.5 Cultural Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?			\boxtimes	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?			\boxtimes	
c) Disturb any human remains, including those interred outside of dedicated cemeteries?				

The "Less Than Significant Impact" and "No Impact determinations" in this section are based on the scope, description, and location of the proposed project along with technical studies including a Historic Property Survey Report, Archaeological Survey Report/Extended Phase I Report, and Historical Resource Evaluation Report, all completed in 2021. Methods used to support the studies for analysis include records searches, field surveys including Phase I pedestrian surveys and Extended Phase I testing, field testing, historical society consultation, and Native American consultation with the Mechoopda Indian Rancheria.

CEQA Significance Determinations for Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact: Caltrans has determined that the project would not result in a significant adverse change to historic resources in the vicinity of the project such as the Chico Fire Suppression System, the Bettencourt Residence, and the Union Pacific Railroad.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact: The proposed project will not cause substantial adverse change in the significance of archaeological resources.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

No Impact: No burial sites were identified within the project APE as a result of studies. As the project is within an area of cultural sensitivity, the potential to identify human

remains exists in inaccessible locations. A Post-Review Discovery Plan is drafted that will monitor these locations and treat any human remains, should any be discovered.

2.1.6 Energy

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Noise, Air Quality, Greenhouse Gas, and Energy Analysis dated September 9, 2021. Potential impacts to energy are not anticipated.

CEQA Significance Determinations for Energy

Would the project:

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

No Impact: The determination is based on the project scope and purpose, which is to preserve the pavement, extend the life of drainage system, improve mobility and operations, and expand the multi-modal functions of the roadway. The project does not increase capacity.

The proposed project does not include maintenance activities which would result in long-term indirect energy consumption by requiring equipment use to operate and maintain in the roadway. The proposed project will not increase energy consumption through increased fuel usage because construction-related energy consumption would be temporary and not a permanent new source of energy demand, and demand for fuel would have no noticeable effect on peak or baseline demands for energy. Therefore, the project would not result in inefficiency, waste, and unnecessary consumption of energy.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

No Impact: The project will not conflict with state or local plans for renewable energy or energy efficiency.

2.1.7 Geology and Soils

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				\boxtimes
ii) Strong seismic ground shaking?				
iii) Seismic-related ground failure, including liquefaction?				
iv) Landslides?				
b) Result in substantial soil erosion or the loss of topsoil?			\boxtimes	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				

The "Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, and the and the California Geological Survey Maps, U.S. Geological Survey Landslide Inventory, Department of Conservation/Caltrans Highway Corridor Landslide Hazard Mapping program, California Geological Survey (CGS).

CEQA Significance Determinations for Geology and Soils

Would the project:

- a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
- i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
- ii) Strong seismic ground shaking?
- iii) Seismic-related ground failure, including liquefaction?
- iv) Landslides?

No Impact: No impact determination for geology and soil is based on the project scope, field reviews, California Geological Survey Maps, U.S. Geological Survey Landslide Inventory, Department of Conservation/Caltrans Highway Corridor Landslide Hazard Mapping program, California Geological Survey (CGS), Earthquake Zones of Required Investigation Map, and the Butte County Local Hazard Mitigation Plan Update.

The project is in a relatively flat area, located in one of the least active seismic regions and contains no active faults. There are no designated Alquist-Priolo Special Studies Zones within the project area. The potential for ground rupture within the project area is considered very low. Construction of structures is not part of the project. Therefore, the improvements proposed along SR 32 would not expose people or structures to a potential substantial adverse geologic effect including; risk of loss, injury or death from seismic-related ground failure, including liquefaction or collapse, lateral spreading, subsidence, or on-site or off-site landslides. Therefore, there is no impact regarding earthquakes.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact: Due to earth-moving activities having the potential to cause soil erosion or loss of topsoil during construction, construction site BMPs will be implemented to reduce the amount of erosion and topsoil loss. The project would have a less than significant impact from soil erosion and the loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact: The project is not located on a geologic unit or soil that is unstable or would become unstable as a result of the project according to the California Geological Survey. Therefore, no impact would occur to unstable geologic condition.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

No Impact: Soils compaction or expansion coefficient will be determined in the final geotechnical study and used to determine compaction requirements set in the construction standards. No substantial risk to life or property is anticipated regarding expansive soils. Therefore, there is no impact.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact: The project would not include a septic system or alternative wastewater disposal systems. There would be no impact to wastewater disposal systems as a result of the project.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact: There is no paleontological resource or geologic features. Therefore, there would be no impact to those resources.

2.1.8 Greenhouse Gas Emissions

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon

dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF₆), and various hydrofluorocarbons (HFCs). CO₂ is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO₂.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources.

FEDERAL

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea-level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the *Energy Policy and Conservation Act of 1975 (42 USC Section 6201)* and *Corporate Average Fuel Economy (CAFE) Standards*. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the

CAFE program based on each manufacturer's average fuel economy for the portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA, in conjunction with the National Highway Traffic Safety Administration (NHTSA), is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

STATE

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (CARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires the CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. The CARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires the CARB to set regional emissions reduction targets for

passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012): Orders State entities under the direction of the Governor, including the CARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015): Establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs the CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent (MMTCO2e). Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, Safeguarding California, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016: Codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016: Declared "it to be the policy of the state that the protection and management of natural and working lands ... is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017: Allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743, Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic-related air pollution and promoting

¹ GHGs differ in how much heat each trap in the atmosphere (global warming potential or GWP). CO₂ is the most important GHG, so amounts of other gases are expressed relative to CO₂, using a metric called "carbon dioxide equivalent" (CO₂e). The global warming potential of CO₂ is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO₂.

multimodal transportation while balancing the needs of congestion management and safety.

SB 150, Chapter 150, 2017, Regional Transportation Plans: This bill requires the CARB to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18 (September 2018): Sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

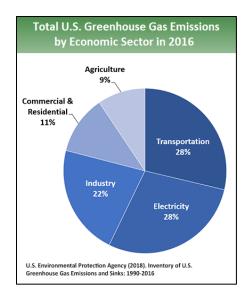
EO N-19-19 (September 2019): Advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs the CARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

Environmental Setting

The proposed project is in an urban area of Butte County with a well-developed road and street network. The project area is mainly residential, with some light industrial and commercial buildings. Traffic congestion during peak hours is not uncommon in the project area. An RTP/SCS by BCAG guides transportation and housing development in the project area.

NATIONAL GHG INVENTORY

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change (see Figure 3). The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO₂, CH₄, N₂O, HFCs, perfluorocarbons, SF₆, and nitrogen trifluoride. It also accounts for emissions of CO₂ that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO₂ (carbon sequestration). The 1990–2016 inventory found that of 6,511 MMTCO2e GHG emissions in 2016, 81% consist of CO₂, 10% are CH4, and 6% are N2O; the balance consists of fluorinated gases (U.S. EPA 2018a). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.



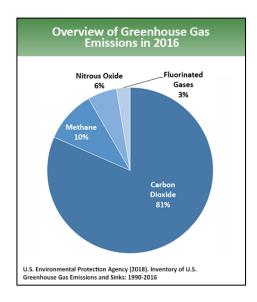


Figure 2. U.S. 2016 GHG Gas Emissions STATE GHG INVENTORY

The CARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 MMTCO2e for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (see Figure 4) (CARB 2019a).

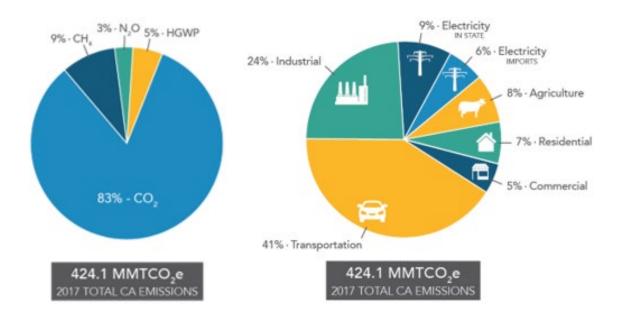


Figure 3. California 2017 Greenhouse Gas Emissions

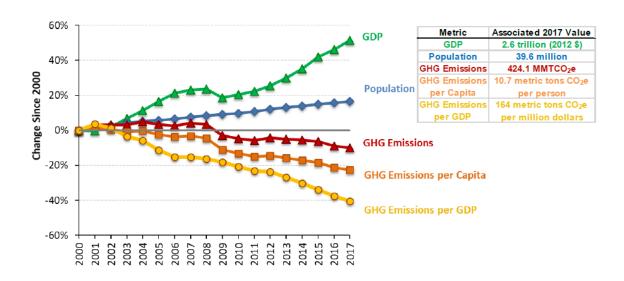


Figure 4. Change in California GDP, Population, and GHG Emissions Since 2000 (Source: CARB 2019b)

AB 32 required CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The CARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32

Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

REGIONAL PLANS

The proposed project is within the jurisdiction of Butte County Association of Government (BCAG), the regional transportation agency. The BCAG region shares the same boundary as Butte County. BCAG proposes a per capita GHG emissions reduction target of 7 percent in in 2035 relative to 2005 emissions. BCAG's original SB 375 targets were a positive one percent in 2020 and 2035 relative to 2005. Butte CAG's first SCS, adopted in December 2012, would, if implemented, achieve a 2 percent per capita GHG emission reduction in 2020 and 2035 compared with 2005 levels.

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the State Highway System (SHS) and those produced during construction. The primary GHGs produced by the transportation sector are CO₂, CH₄, N₂O, and HFCs. CO₂ emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH₄ and N₂O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines §§ 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The project proposes to replace pavement, add new striping and retroreflective pavement markers, enhance bike lanes on segments of 8th and 9th Streets along the roadway, rehabilitate the drainage system currently in poor condition, improve shoulders, add Americans with Disability Act (ADA) improvements, repair and replace existing failed sidewalks, and install new intersection lighting and traffic signals. The project would not increase capacity and would not change travel demands or traffic patterns when compared to existing conditions and the no-build alternative. Therefore, an increase in operational GHG emissions is not anticipated.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase. Their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

All construction contracts include Caltrans Standard Specifications Sections 7-1.02A and 7-1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

Construction emissions were estimated using the latest Caltrans' Model (CAL-CET2021). Construction-related emissions for the proposed project are presented in Table 2. The emissions presented are based on the best information available at the time of calculations. The data represent the projected total construction emissions.

		ROG (tons)			PM ₁₀ (tons)			PM _{2.5} (tons)			CO (tons)			NO _x (tons)	
	Alt. 1	Alt. 2	Alt. 4	Alt. 1	Alt. 2	Alt. 4	Alt. 1	Alt. 2	Alt. 4	Alt. 1	Alt. 2	Alt. 4	Alt. 1	Alt. 2	Alt. 4
Land Clearing/ Grubbing	0.002	0.002	0.001	0.240	0.240	0.240	0.025	0.025	0.025	0.010	0.013	0.008	0.011	0.013	0.009
Roadway Excavation/ Removal	0.316	0.364	0.232	0.403	0.428	0.359	0.184	0.209	0.142	1.993	2.297	1.469	2.089	2.408	1.540
Structural Excavation/ Removal	0.002	0.003	0.002	0.240	0.240	0.240	0.025	0.025	0.025	0.008	0.009	0.006	0.013	0.015	0.010
Base/Subbase/ Imported Borrow	0.146	0.166	0.106	0.318	0.328	0.296	0.101	0.111	0.079	1.016	1.154	0.735	0.978	1.111	0.708
Structure Concrete	0.018	0.021	0.013	0.006	0.007	0.004	0.006	0.007	0.004	0.065	0.075	0.048	0.092	0.106	0.068
Paving	0.268	0.305	0.194	0.143	0.162	0.103	0.140	0.159	0.101	0.929	1.054	0.671	1.939	2.202	1.403
Drainage/ Environment/ Landscaping	0.055	0.062	0.038	0.028	0.032	0.019	0.027	0.031	0.019	0.179	0.204	0.125	0.338	0.386	0.238
Traffic Signalization/ Signage/ Striping/Painting	0.106	0.113	0.074	0.046	0.050	0.032	0.045	0.049	0.032	0.711	0.747	0.497	0.793	0.841	0.553
Project Total (tons)	0.914	1.037	0.662	1.423	1.486	1.295	0.552	0.614	0.426	4.911	5.553	3.559	6.253	7.083	4.528

Table 2. Construction Emissions for Roadways

Implementation of the following measures will reduce air quality impacts resulting from construction activities. Please note that although these measures are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time.

- The construction contractor must comply with the Caltrans' Standard Specifications in Section 14-9 (2018).
 - Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.
- Water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.
- Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.
- Trucks will be washed
- Construction equipment and vehicles will be properly tuned and maintained. All
 construction equipment will use low sulfur fuel as required by CA Code of
 Regulations Title 17, Section 93114.

- A dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- Equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.
- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.
- All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust during transportation.
- Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to reduce PM emissions.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.

CEQA Conclusion

While the proposed project will result in temporary GHG emissions during construction, it is anticipated the project will not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

STATEWIDE EFFORTS

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals (see Figure 6) that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to fifty percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, Safeguarding California.

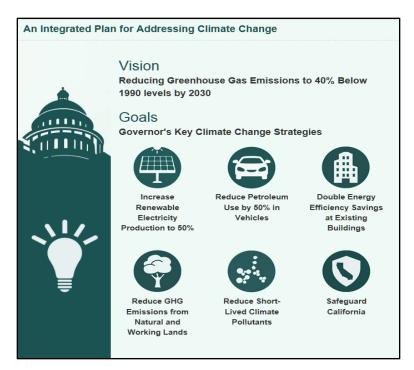


Figure 5. California Climate Strategy

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing GHG emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California 2019).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

CALTRANS ACTIVITIES

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the *California Transportation Plan 2040*, which establishes a new model for developing ground transportation systems, consistent with CO₂ reduction goals. It serves as an umbrella document for all the other statewide transportation planning documents. Over the next 25 years, rather than continuing to expand capacity on existing roadways, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding And Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land

use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives And Other Initiates

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Adaptation Strategies

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges, combined with a rising sea level, can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

FEDERAL EFFORTS

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGCRP) delivers a report to Congress and the President every four years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. Ch. 56A § 2921 et seq.). The Fourth National Climate Assessment, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (USGCRP 2018).

The *U.S. DOT Policy Statement on Climate Adaptation* in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (U.S. DOT 2011).

FHWA Order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events, December 15, 2014*) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2019).

STATE EFFORTS

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (2018) is the state's effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- Adaptation to climate change refers to adjustments in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- Adaptive capacity is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."
- Exposure is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- Resilience is the "capacity of any entity—an individual, a community, an
 organization, or a natural system—to prepare for disruptions, to recover from
 shocks and stresses, and to adapt and grow from a disruptive experience".
 Adaptation actions contribute to increasing resilience, which is a desired
 outcome or state of being.
- Sensitivity is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- Vulnerability is the "susceptibility to harm from exposure to stresses
 associated with environmental and social change and from the absence of
 capacity to adapt." Vulnerability can increase because of physical (built and

environmental), social, political, and/or economic factors. These factors include, but are not limited to, ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise and resulted in the California Climate Adaptation Strategy (2009), updated in 2014 as Safeguarding California: Reducing Climate Risk (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim State of California Sea-Level Rise Interim Guidance Document (SLR Guidance) in 2010, with instructions to state agencies on how to incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. Rising Seas in California—An Update on Sea-Level Rise Science was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the State of California Sea-Level Rise Guidance Update in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017 to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group, which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- Exposure—Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- Consequence—Determine what might occur to system assets in terms of loss of use or costs of repair.
- Prioritization—Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Sea-Level Rise

The proposed project is outside the Coastal Zone and is not in an area subject to sea-level rise. Accordingly, direct impacts to transportation facilities due to projected sea-level rise are not expected.

Floodplains Analysis

The project is located on SR 32 in the City of Chico. Portions of the City are located inside of the 1% and 0.2% annual chance flood zones as defined by the FEMA. The roadway is adjacent to residential area, commercial, and industrial areas. In the project area, the annual precipitation is about 28 inches of rain, on average, per year.

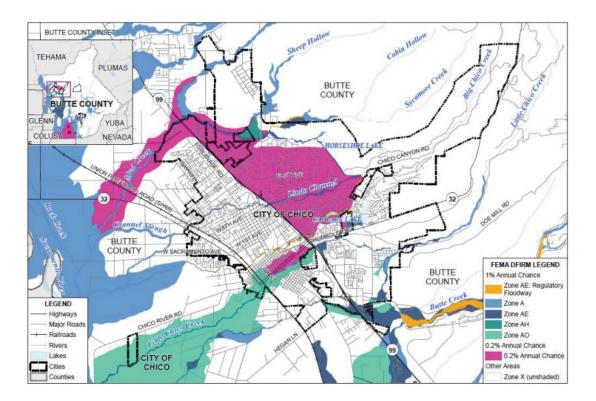


Figure 7. FEMA Flood Zone Map

The project will adhere to the <u>FHWA publication Highways in the River Environment–Floodplains</u>, <u>Extreme Events</u>, <u>Risk</u>, <u>and Resilience</u>. <u>Hydraulic Engineering Circular No. 17, 2nd Edition</u>. Chapter 6.65.040 describes Methods of reducing flood losses by detailing the following:

- A. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or flood heights or velocities;
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- D. Control filling, grading, dredging, and other development which may increase flood damage; and
- E. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters, or which may increase flood hazards in other areas. (Ord. 910 § 1 (1-4). Code 1997 § 34-4).

Wildfire

The project is located in state and local responsibility areas of low-fire hazard (Figure 13). The design features of the project focus on improving pavement and the safety on SR 32. Butte County has developed the Butte County Local Hazard Mitigation Plan (LHMP) Update. The purpose of the hazard mitigation plan is to reduce or eliminate long-term risk to people and property from hazards. The plan has developed Mitigation Strategies. Based on the results of the risk assessment, the participating jurisdictions and the Hazard Mitigation Planning Committee developed a mitigation strategy for reducing the County's and all participating jurisdictions' risk and vulnerability to hazards.

The resulting Mitigation Strategy for the Butte County Planning Area is comprised of LHMP goals and objectives and a mitigation action plan which includes a series of mitigation action projects and implementation measures. Based on the risk assessment, the HMPC identified goals and objectives for reducing the Butte County Planning Area's vulnerability to hazards. Goal 5 focuses on fire and states the following:

Goal 5: Reduce fire severity and intensity in Butte County and surrounding lands

- Reduce life safety issues, property loss, and damages associated with wildfires. Prevent and reduce wildfire ignitions and wildfire-related losses
- Implement a fuels management strategy for fuels reduction by all landowners on both public and private lands
- Manage and reduce large fuel loads on non-grazed agricultural and grass lands
- Minimize danger of evacuation on roadways by reducing adjacent fuels

Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant: The project would not increase capacity that would induce travel demand when compared to the no-build alternative. Therefore, an increase in operational GHG emissions is not anticipated. However, the proposed project will result in temporary GHG emissions during construction. With implementation of construction GHG-reduction measures, the GHG emissions impact from construction activities is less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

No Impact: The proposed project does not conflict with plans, policies or regulations intended to reduce greenhouse gas emissions.

2.1.9 Hazards and Hazardous Materials

Would the project:	I and I S I		Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				

The "Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project.

CEQA Significance Determinations for Hazards and Hazardous Materials

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact: This project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. If soil is to be removed from site, an Aerially Deposited Lead (ADL) survey will need to be conducted. Based on the results, hazardous waste can be produced, but it will be handled, transported, and disposed of properly.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact: Standard specifications for removal and handling of known hazardous materials such as treated wood waste, ADL, and yellow traffic striping will minimize the chances of accidental release into the environment. Therefore, there is no impact regarding significant hazards.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact: Five schools are within 0.25 mile of the project site: Emma Wilson Elementary School, located west of the project (1530 W 8th Ave, Chico); Rosedale Elementary School, located west of the project (100 Oak St, Chico); Lee Kindergarten Readiness, located north of the project (2550 CA-32, Chico); Chico Country Day Charter, located south of the project (102 W 11th St, Chico); Pivot Charter School, located between the project limit (1350 E 9th St Suite 150, Chico); New School of American Music, located between the project limit (1280 E 9th St A, Chico).

Accidental release of hazardous materials during construction near a school would be a less than significant impact. Given the temporary and short-term nature of construction, relatively small quantity of hazardous materials to be used, and distance to the nearest school, impacts on schools from potential hazardous substance emissions would be less than significant.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact: There are no Cortese Sites located within the project area. There is no impact to Cortese Sites.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact: The Ranchero Airport is .85 mile east of the project site. However, the project would not expose people to additional airport-related hazards. Due to the nature of the work. Therefore, the project would have no impact related to airports hazards

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact: SR 32 is identified as an evacuation route. It is a pivotal route for the transportation of goods. Traffic management plans finalized in later design stages of the project include provisions to allow evacuation efforts to be conducted in coordination with the California Highway Patrol and local emergency response personnel. Because of these provisions, there is a less than significant impact to emergency response and evacuations.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact: The proposed project would not exacerbate existing risks associated with wildfire caused by highway users. Standard construction specifications for equipment idling and fuel storage during construction are intended to minimize the risk associated with their use.

2.1.10 Hydrology and Water Quality

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) result in substantial erosion or siltation on- or off-site;				
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				
(iv) impede or redirect flood flows?				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				

No Impact determinations in this section are based on the scope, description, and location of the proposed project, as well as the Water Quality Assessment dated August 6, 2021. Potential impacts to hydrology and water quality are not anticipated.

CEQA Significance Determinations for Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

No Impact: The proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. The proposed project would comply with the conditions of the California SWRCB CGP. The CGP requires that the construction contractor prepare a project specific SWPPP, which identifies construction site BMPs to reduce construction impacts on receiving water quality based on potential pollutants and pollutant sources. Therefore, there is no impact.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. No municipal or domestic water supply reservoirs or ground water percolation facilities are present within or near the project limits. Therefore, there is no impact.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
- i) Result in substantial erosion or siltation on- or off-site;
- ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
- iv) Impede or redirect flood flows?

No Impact: The proposed project would not substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces. The proposed project will not result in substantial erosion or siltation on- or offsite. Appropriate

construction site BMPs will be implemented to minimize and reduce erosion or siltation from occurring during construction.

The proposed project would not substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. The project would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The project would not impede or redirect flood flows. Dewatering will not be required. Therefore, no impact will occur.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

No Impact: The proposed project is not in an area that is at risk of seiches or tsunamis. The project would not store pollutants and would not be constructed with hazardous materials that would pose a threat to the public if disturbed by a flood event. Therefore, there is no impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact: The proposed project does not conflict with or obstruct implementation of any water pollution control plan or sustainable groundwater management plan. Therefore, there is no impact.

Recommendations to Minimize and Avoid Impacts to Water Quality

In addition to the above items, adherence to the following is recommended to help ensure NPDES permit compliance and to further prevent receiving water pollution as a result of construction activities and/or operations related to the project:

- All temporary equipment and material storage areas on State property
 must be accounted for and included in the total land disturbance estimate,
 unless a stabilization method has been implemented, reviewed, and
 approved by NPDES or Storm Water staff.
- The estimated total soil disturbance is greater than 1.0 acre. Therefore, an approved SWPPP (Storm Water Pollution Prevention Plan) will be required, which specifies the level of temporary pollution control measures for the project.

- The project shall adhere to the conditions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) MS4 Permit CAS No. 000003 (Order No. 2012-0011-DWQ and all associated adopted amendments).
- Projects with a land disturbance equal to or exceeding 1 acre must adhere to the compliance requirements of the NPDES CGP CAS No. 000002 (Order No. 2009-0009-DWQ) for General Construction Activities (see special considerations within the SWDR).
- The Contractor prepared SWPPP shall provide and incorporate appropriate and approved temporary construction site BMPs that addresses the effective implementation, placement, handling, storage, use and disposal practices of all BMPs used during construction operations and field activities for the duration of the project.
- Coverage under the State Water Resources Control Board, Water Quality Permit Order No. 2003-0003-DWQ, Low Threat Discharges to Land may be necessary. However, if certain field conditions are met, a Waiver by the Regional Board could be utilized. The following is guidance received by the Regional Board and will be used to determine how the discharge of groundwater, resulting from dewatering, may be permitted or regulated for the project:
 - Waiver (No Discharge Monitoring Plan, No Fee are required):
 No known existing groundwater pollution or pollutant contact (i.e. cement); less than three weeks duration; and less than 10,000 gpd.
 - Waiver (Discharge Monitoring Plan, Fee, and Regional Board approval are required): No known existing groundwater pollution or pollutant contact (i.e. cement); less than three weeks duration; and up to 100,000 gpd (Regional Board will verify enough land is committed and good BMPs are proposed to contain the water).
 - Low Threat Discharge to Land Permit (Discharge Monitoring Plan, Fee, and Regional Board approval are required):
 Most everything else (e.g. groundwater and pollutant contact).

In addition to the above items, adherence to the following is recommended to help ensure NPDES Permit compliance and to further prevent receiving water pollution as a result of construction activities and/or operations related to the project:

All temporary equipment and material storage areas on State property must be accounted for and included in the total land disturbance estimate, unless a stabilization method has been implemented, reviewed, and approved by NPDES or Storm Water staff.

The estimated total soil disturbance is greater than 1.0 acre. Therefore, an approved SWPPP (Storm Water Pollution Prevention Plan) will be required, which specifies the level of temporary pollution control measures for the project.

The project shall adhere to the conditions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) MS4 Permit CAS No. 000003 (Order No. 2012-0011-DWQ and all associated adopted amendments).

Projects with a land disturbance equal to or exceeding 1 acre must adherence to the compliance requirements of the NPDES Construction General Permit (CGP) CAS No. 000002 (Order No. 2009-0009-DWQ) for General Construction Activities (see special considerations within the SWDR).

The Contractor prepared SWPPP shall provide and incorporate appropriate and approved temporary construction site BMPs that addresses the effective implementation, placement, handling, storage, use and disposal practices of all BMPs used during construction operations and field activities for the duration of the project.

Coverage under the State Water Resources Control Board, Water Quality Permit Order No. 2003-0003-DWQ, Low Threat Discharges to Land may be necessary. However, if certain field conditions are met a Waiver by the Regional Board could be utilized. The following is guidance received by the Regional Board and will be used to determine how the discharge of groundwater, resulting from dewatering, may be permitted or regulated for the project:

- Waiver (No Discharge Monitoring Plan, No Fee are required): No known existing groundwater pollution or pollutant contact (i.e. cement); less than three weeks duration; and less than 10,000 gpd.
- Waiver (Discharge Monitoring Plan, Fee, and Regional Board approval are required):

No known existing groundwater pollution or pollutant contact (i.e. cement); less than three weeks duration; and up to 100,000 gpd (Regional Board will verify enough land is committed and good BMPs are proposed to contain the water).

• Low Threat Discharge to Land Permit (Discharge Monitoring Plan, Fee, and Regional Board approval are required):

Almost everything else (e.g. groundwater and pollutant contact).

*Allow 30 days (approximately) after submittal of Discharge Monitoring Plan (conditions 2 and 3 above) to receive Regional Board approval

Proposed dewatering operations involving discharge to water will require consultation with the Regional Board and could involve special conditions within the 401 Permit. The Regional Board Permit that may be applicable (for this particular scenario) is the Low Threat Discharge to Surface Water Permit (General Order No. R5-2013-0074). Discharges covered by this General Order are either 4 months less in duration or have an average dry weather flow of less than 0.25 million gallons per day.

Caltrans' Storm Water Management Plan (SWMP), Project Planning and Design Guide (PPDG) Section 4, and Evaluation Documentation Form (EDF) provide detailed guidance in determining if a specific project requires the consideration of permanent Treatment BMPs. This information and related conclusions, specific to and corresponding with the project, can be found in the SWDR.

The project must follow all applicable guidelines and requirements listed in the 2018 Caltrans Standard Specifications (2018 CSS) Section 13, regarding water pollution control and general specifications for preventing, controlling, and abating pollutant discharges into streams, waterways, and other bodies of water.

Effort and focus (by field staff) should be placed on Section 13-4 (Job Site Management), to control potential sources of water pollution before they encounter storm water conveyance systems or receiving waters. This can be accomplished by controlling and managing materials, discarded waste, and non-storm water pollution at the construction site and within the project boundaries.

Some operations may require attention to Sections 13-9.02C and 13-9.02D, which relates to and addresses the handling of concrete waste during construction operations.

Attention should be given to Section 13-4.01C, prior to beginning dewatering operations. And as previously emphasized, the need to dewater should be identified as early as possible, so that excess groundwater accumulation and disposal options can be adequately evaluated and applicable permits and conditions for compliance can be determined.

Prior to the start of construction, existing drainage facilities should be identified and protected by the application of appropriate Temporary Construction Site BMPs.

If and where applicable, shoulder backing areas should be stabilized by Temporary Construction Site BMPs, or rolled and compacted in place, by the end of each day and prior to the onset of precipitation.

2.1.11 Land Use and Planning

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				

[&]quot;No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the location. Potential impacts to Land Use are not anticipated.

CEQA Significance Determinations for Land Use and Planning

Would the project:

a) Physically divide an established community?

No Impact: The purpose of the project is to maintain a serviceable facility and enhance safety for the traveling public. The project area is in the City of Chico and is surrounded by businesses, parks, and residences. The project will improve multi-modal travel access to the public space, businesses, schools, and residences. These enhanced multi-modal features are expected to enhance community cohesion and active transportation within and near the project area. Due to the scope of the project and location, the project would not divide an established community. Therefore, there is no impact.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact: The project is zoned Community Commercial, Medium Density Residential, Industrial Office Mixed-Use, Services Commercial, and Secondary Open Space. Potential impacts to land use planning are not anticipated as the

proposed project would not conflict with local plans, and polices, as outlined below.

In addition, the project does not include the construction of added lanes. As a result, there would be no change to existing land uses or motor vehicle circulation patterns. The project would not result in displacement of people or business activities. The project would have no impact on land use and planning as local plans are completed with, as local plans are complied with, as a result of this project. Therefore, there is no impact to community plans.

Local Community Plans and Policies Relevant to Project:

Chico Bicycle Plan 2019 Update. The following are some of the polices that support the project:

Goal 2: Improve safety, efficiency and comfort for bicyclists on the bikeway network.

Objectives: Minimize potential conflicts between autos, bikes, and pedestrians. Minimize or eliminate safety hazards. Use enforcement as a tool to promote safety.

Goal 5: Promote bicycling as a part of the multi-modal transportation system.

Objectives: Provide bicycle access to rail and transit transportation facilities. Promote bicycling as the solution to the transit first/last mile challenge.

City of Chico General Plan Land Use Element. The following are some of the polices that supports the project:

- Goal LU-2: Maintain a land use plan that provides a mix and distribution of uses that meet the identified needs of the community.
- Policy LU-2.1 (Planning for Future Housing and Jobs) Maintain an adequate land supply to support projected housing and job needs for the community
- Action LU-2.3.3 (Encourage Mixed-Use Development) Allow horizontal and vertical mixed uses in the following land use designations:
 - Residential Mixed Use
 - Neighborhood Commercial
 - Commercial Mixed Use
 - Regional Commercial
 - Office Mixed Use

- Industrial Office Mixed Use
- Goal LU-3: Enhance existing neighborhoods and create new neighborhoods with walkable access to recreation, places to gather, jobs, daily shopping needs, and other community services.
 - Policy LU-3.1 (Complete Neighborhoods) Direct growth into complete neighborhoods with a land use mix and distribution intended to reduce auto trips and support walking, biking, and transit use.
 - Policy LU-3.2 (Neighborhood Serving Centers) Promote the development of strategically located neighborhood serving centers that incorporate commercial, employment, cultural or entertainment uses and are within walking distance of surrounding residents. Neighborhood center designations are Neighborhood Commercial (NC) and Mixed Use Neighborhood Core (MUNC).
 - Policy LU-3.3 (Neighborhood Services) Recognize existing neighborhoods and support neighborhood-level planning in partnership with residents and property owners to preserve and enhance neighborhood character, identity, and livability.
 - Action LU-5.1.4 (Streetscape Enhancement) As part of future roadway improvement projects in the Corridor Opportunity Sites, incorporate streetscape enhancements such as bulb-outs, benches, wide and separated sidewalks, on street parking, public art, and street trees to improve the pedestrian environment and serve as a catalyst for revitalization.
 - Address infrastructure needs with particular attention to storm drainage and circulation, including north-south connections to East Avenue and improved access to State Route 32.

The project complies with the city of Chico General Circulation Element. The following are some of the polices that supports the project:

- Goal CIRC-2: Enhance and maintain mobility with a complete streets network for all modes of travel.
 - Policy CIRC-2.1 (Complete Streets) Develop an integrated, multi-modal circulation system that accommodates transit, bicycles, pedestrians, and vehicles; provides opportunities to reduce air pollution and greenhouse gas emissions; and reinforces the role of the street as a public space that unites the City.

- Action CIRC-2.1.1 (Complete Street Standards) With consideration of street classification and function, design new streets to accommodate all modes of travel, including transit, bicycles, pedestrians, vehicles and parking.
- Action CIRC-2.1.2 (Retrofitting Existing Streets) Retrofit and upgrade existing streets, as funding allows, to include complete street amenities where appropriate, prioritizing improvements in locations that will improve the overall connectivity of the City's network of bicycle and pedestrian facilities or result in increased safety.
- Action CIRC-2.1.3 (Multi-modal Connections) Provide connections between and within existing and new neighborhoods for bicycles, pedestrians, and automobiles.
- Policy CIRC-2.2 (Circulation Connectivity and Efficiency) Provide greater street connectivity and efficiency for all transportation modes.

2.1.12 Mineral Resources

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				

[&]quot;No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the location. Potential impacts to Mineral Resources are not anticipated.

CEQA Significance Determinations for Mineral Resources

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact: There are no known economically viable mineral sources within the project limit that would be affected by the proposed project. Mineral resource extraction is not proposed with this project. Therefore, there would be no impact to mineral resources.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact: The determinations in this section are based on the scope, description, and location of the proposed project, as well as the mineral resource maps from the California Department of Conservation. Potential impacts to mineral resources are not anticipated, and no mineral resources were identified within the project limits or would be affected by the proposed project. There would be no impact to mineral resources.

2.1.13 Noise

Would the project result in:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b) Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				

"Less than Significant" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the Noise Study dated September 9, 2021. Potential impacts to energy are not anticipated.

CEQA Significance Determinations for Noise

Would the project result in:

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

No Impact: The proposed project is not expected to result in substantial increases in noise as defined in the Protocol under CEQA; therefore, no significant noise impacts are anticipated.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant. Construction noise would be short-term, no adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specifications Section 14.8-02. Specification for noise to be restricted between 9 PM and 6 AM from exceeding 86 decibels at 50 feet from the job site will be applied to the project contract to minimize potential noise-related impacts.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact: The Ranchero Airport is .85 mile east of the project site. However, the project would not expose people to excessive noise levels. Due to the nature of the work, the project would have no impact related to excessive noise level.

2.1.14 Population and Housing

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to population and housing are not anticipated.

CEQA Significance Determinations for Population and Housing

Would the project:

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact: The proposed project would provide serviceable facilities for the traveling public with enhanced safety features and expanded multi-modal opportunities. The project does not involve any residential development or the extension of roadways or infrastructure, which could induce population growth in an area. Therefore, the proposed project would not directly or indirectly induce population growth in the area and there would be no impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact: The project would not introduce incompatible land uses. The work will occur along the roadway in small slivers and would not cause the displacement of the local population nor would it necessitate the construction of replacement housing elsewhere. The proposed project would not conflict with any applicable land use plan, policy, or regulation. Therefore, there would be no impact to displaced housing or people.

2.1.15 Public Services

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Significant and Unavoidable Impact		and Significant with Mitigation		Less Than Significant Impact	No Impact
Fire protection?						
Police protection?						
Schools?						
Parks?						
Other public facilities?						

"Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the location. Potential impacts to public services are not anticipated.

CEQA Significance Determinations for Public Services

a) Would the project result in substantial adverse physical impacts associated
with the provision of new or physically altered governmental facilities, need for
new or physically altered governmental facilities, the construction of which could
cause significant environmental impacts, in order to maintain acceptable service
ratios, response times or other performance objectives for any of the public
services:

Fire	protection?
------	-------------

Police protection?

Schools?
Parks?
Other public facilities?

Fire protection?

Less Than Significant Impact: Caltrans is aware that any roadway construction project related vehicles and activities could have the potential to temporarily interfere with safe access during construction. To maintain fire emergency access through construction, Caltrans will coordinate any road closures with emergency service providers so that response times would not be substantially affected. The closest fire station to the proposed project is Chico Fire Station 1, located at 842 Salem Street, adjacent to the project site.

Once the project is complete, the proposed project would improve circulation and decrease safety concerns at the project site. This would improve circulation for emergency vehicles. The proposed project would not increase the resident population in the project area and is not expected to result in a substantial increase in demand for any community facilities or services. Therefore, impacts to fire protection would be less than significant during project construction and operation.

Police protection?

No Impact: The closest police station to the proposed project is the Chico Police Department police station, located at 1460 Humboldt Road which is approximately, .21-mile southeast of the project site. The proposed project would result in no permanent increase in population and would introduce no new uses to the project site that would generate increased long-term demand for police protection services.

During project construction, Caltrans will coordinate any road closures with emergency service providers so that response times would not be affected. Therefore, the proposed project would have no impact on police protection services in the City.

Schools?

Less Than Significant Impact: The nearest schools to the proposed project are the following: Emma Wilson Elementary School, located west of the project; Rosedale Elementary School, located west of the project; Lee Kindergarten Readiness, located north of the project; Chico Country Day Charter, located

south of the project; Pivot Charter School, located between the project limit; New School of American Music, located between the project limit. Increased demand for public school services are typically associated with increases in the local population or demand for housing. The proposed project would not directly or indirectly result in an increase in population. Therefore, there would be less than significant impact.

Parks?

See Section 2.1.16 for a discussion of potential impacts on recreational facilities, including parks.

Other public facilities?

Less Than Significant Impact: The proposed project would not result in substantial adverse impacts related to other types of public facilities (e.g., public libraries, hospitals, or other civic uses) because the proposed project would not result in an increase of local population or housing, which is typically associated with increased demand for public facilities. The proposed project will provide safe and serviceable facilities for the traveling public and would not directly or indirectly induce growth or create a need for additional public services. Therefore, impacts would be less than significant.

2.1.16 Recreation

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				\boxtimes

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to recreation are not anticipated.

CEQA Significance Determinations for Recreation

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact: There are several parks situated near the project: One Way Park, located south of the project; California State University Chico, University Stadium and Nettleton Stadium, located .11-mile east of the project; Depot Park, located .10-mile east of the project; Humboldt Ave Skate Park, located .08-mile south of the project; Humboldt Park Windchime Park, located .13-mile south of the project, Lower Bidwell Park, located .16-mile north of the project. The project would not cause substantial physical deterioration of recreation facilities. Since the project will improve multi-modal travel access to the public space, the community access to parks will be enhanced

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact: The purpose of the project is to maintain the integrity of SR 32 through Chico and the project limits. No recreational facilities would be constructed, the project would not require the construction or expansion of recreational facilities, and no recreational facilities would be impacted due to the project. Therefore, no impact would occur recreational facilities and associated impacts to the environment.

2.1.17 Transportation

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
d) Result in inadequate emergency access?			\boxtimes	

"Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the location. Potential impacts to transportation are not anticipated.

CEQA Significance Determinations for Transportation

Would the project:

a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

No Impact: The project does not conflict with plans, ordinances or policy addressing transportation alternatives.

b) Conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact: The proposed project is an improvement project and will not increase vehicular capacity. Therefore, the impacts to CEQA Guidelines would have not impact.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact: No incompatible uses or hazardous design features are associated with operation of the proposed project. The project would improve SR 32 and improve intersection operations and enhance safety along this segment of the highway.

d) Result in inadequate emergency access?

Less Than Significant Impact: The project proposes to replace pavement, add new striping and retroreflective pavement markers, enhance bike lanes on segments of 8th and 9th Streets along the roadway. Temporary construction impacts could have the potential to impact emergency access during construction. However, a traffic control plan would provide continuous emergency access throughout construction. Thus, the temporary impact would be less than significant.

2.1.18 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or				
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.				

The "Less Than Significant Impact" determinations in this section are based on the scope, description, location of the proposed project, and cultural resources studies including consultation with local Native American Tribes. Potential impacts to Tribal Cultural are not anticipated.

CEQA Significance Determinations for Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less Than Significant: The project will not cause a substantial adverse change in the significance of a tribal cultural resource listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical

resources as defined in Public Resources Code section 5020.1(k), Therefore, the project will result in a less than significant impact.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant: The project will not cause a substantial adverse change in the significance of a tribal cultural resource determined to be significant pursuant to criteria set forth in subdivision (c) of Public Resources set forth in subdivision (c) of Public Resources Code Section 5024.1. Therefore, the project will result in a less than significant impact.

2.1.19 Utilities and Service Systems

Would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?				
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals??				
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?				

"Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the location. Potential impacts to utilities and service systems are not anticipated.

CEQA Significance Determinations for Utilities and Service Systems

Would the project:

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact: The purpose of the project is to preserve drainage function, stability of existing roadway sections, and enhance safety of the SR 32 corridor. The project would not require construction of new or expanded water or wastewater treatment, storm water drainage, electric power, natural gas or telecommunications facilities. The existing utilities would be protected in place. The improvements to the project area would not result in significant environmental effects, because the area of impact would be minimal. Therefore, impacts would be less than significant.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact: The project would not require any water during operation. During construction, water would only be used for dust control along the project corridor. Due to the minimal amount of water that would be required for dust control, the impact on the existing water supply would be less than significant

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact: No wastewater would be generated by the project. If dewatering is necessary in areas where groundwater is encountered, depending on surface and groundwater levels at the time of construction, a permit for discharge of extracted groundwater would be obtained from the RWQCB. This discharge shall be consistent with RWQCB requirement and as such would not result in a violation of water quality standards or waste discharge requirements. Therefore, impacts to wastewater treatment regarding adequate capacity determinations or the provider are less than significant.

d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact: Construction of the proposed project would generate some waste material. The amount of construction related waste would not be substantial, would be limited to the construction period and would not result in substantial reduction in the capacity of a landfill. Asphalt, concrete, trenching spoils and other excavated material would be reused on-site to the greatest extent feasible. Therefore, there is a less than significant impact to solid waste.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact: The project would comply with all federal, State, and local statutes and regulations related to solid waste. Therefore, there is no impact to compliance with solid waste policies.

2.1.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				

"Less Than Significant Impact" and "No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the location. Potential impacts to wildfire are not anticipated.

CEQA Significance Determinations for Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact: The proposed project includes a Traffic Management Plan which addresses emergency response actions and evacuations that may occur through the construction areas, including during temporary closures. Coordination with emergency response agencies is included in the Traffic Management Plan to avoid impairment of any response or evacuation. Therefore, impacts to emergency response times are less than significant.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact: The proposed project would not exacerbate wildfire risks due to slope, prevailing winds and other factors. Figure 13 shows the wildfire threat within the city ranges from minimal to very high. The areas of increased wildfire threat are located in the portions of the north and east of the City of Chico, where elevation changes occur. A small area of the northeast portion of the city in a canyon is considered a very high Fire Hazard Severity Zone. As revealed in Figure 13, the project area is not in a Fire Hazard Severity Zone. Therefore, there are no impacts to adjacent environmental factors which would otherwise exacerbate wildfire risks.

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact: The proposed project would not exacerbate fire risks that may result in temporary or ongoing impact to the environment. No additional water sources would be required, and no additional maintenance would be needed for the future of the project. Therefore, there would be no impact to fire risks associated with ongoing maintenance.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact: The project will not expose people or structures to significant risks. The drainage features of the proposed will not change the receiving waters. The project will improve the conditions of the roadway. Furthermore, the work will primarily be within the existing roadway and right of way; it will not expose people to fire related landslides and flooding. Therefore, there is no impact to people or structure regarding flooding, landslides, and/or slope instability.

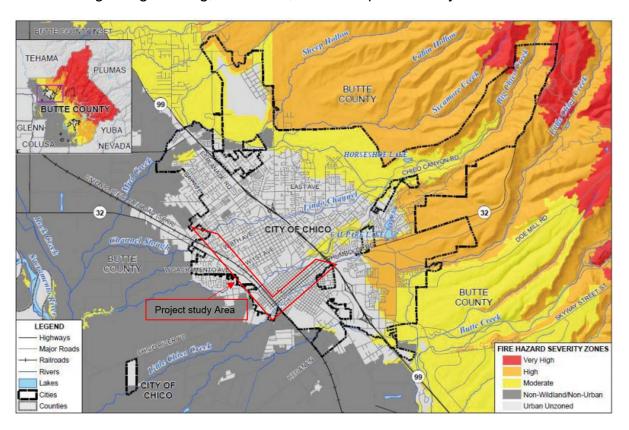


Figure 8. City of Chico - Fire Hazard Severity Zones

2.1.21 Mandatory Findings of Significance

	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				\boxtimes

CEQA Significance Determinations for Mandatory Findings of Significance

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

No Impact: The proposed project does not have the potential to directly or indirectly degrade the quality of the environment based on studies completed. The proposed project will not impact sensitive biological resources including listed species, sensitive plants/vegetation communities, wildlife, and their respective habitats. The project will not impact any jurisdictional waters or wetlands. Therefore, there are no impacts to biological resources and California history or prehistory.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

No Impact: The proposed project would not result in any adverse effects that, when considered in connection with other projects, would be considered cumulatively considerable.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Impact: Based on studies completed for the proposed project to analyze potential impacts, the project would not cause substantial adverse effects on human beings, either directly or indirectly.

Chapter 3 Agency and Public Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures, and related environmental requirements. Agency consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings, interagency coordination meetings. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

Public Comment Period

The Initial Study / Negative Declaration will be made available for public and agency review and comment for 30 days from October 19, 2021 – November 18, 2021. Caltrans ensured that the document was made available to all appropriate parties and agencies, including the following: 1) Responsible agencies, 2) Trustee agencies that have resources affected by the project, 3) other state, federal and local agencies which have regulatory jurisdiction, or that exercise authority over resources which may be affected by the project, 4) public. The document was made available online at https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs
Additional copies of the document were available at the at the Butte County Library, Chico Branch, 1108 Sherman Ave, Chico CA 95926. Caltrans District 3 Office, and available to send via postal mail by submitting a request to the project email address at But-32.Chico.Rehab.Project@dot.ca.gov.

California Department of Transportation Environmental Management, M-3 Branch 703 B Street, Marysville, CA, 95901 Attn: Butte 32 Chico Rehab

 Table 2.
 Agency Coordination and Professional Contacts

Date	Personnel	Notes
August 2020	Andrew Coolidge, Mayor, Mark Orme, City Manager, Bikram Kahlon, Senior Traffic Engineer, Brandam Ottoboni, Public Works Director - Engineering	Discussed the details of the proposed project.
April 8, 2021	Andrew Coolidge, Mayor, Mark Orme, City Manager, Bikram Kahlon, Senior Traffic Engineer, Brandam Ottoboni, Public Works Director - Engineering	Rehab Lane Configuration
September 9, 2021	City of Chico, Chico State, and Caltrans	Discussed the details of the proposed project.

Chapter 4 List of Preparers

The following individuals performed the work on this project:

Marta Martinez-Topete - Associate Environmental Planner. Contribution: Environmental Coordinator and Document Writer.

Cara Lambirth - Senior Environmental Planner. Contribution: Environmental Branch Chief.

William Larson - Associate Environmental Planner (Architectural History). Contribution: Cultural Resource Compliance Memo.

Sonia Miller - Associate Environmental Planner (Arch History). Contribution: Cultural Resource Compliance Memo.

Jennifer Greslik - Environmental Planner (Natural Sciences) or Project Biologist.

Julia Riggins - Landscape Architect. Contribution: Visual Impact Assessment.

Youngil Cho - Air and Noise Specialist. Contribution: Traffic Noise and Air Quality Impact Assessment and Greenhouse Gas Construction Emission Analysis.

Mark Melani - Hazardous Waste Specialist. Contribution: Initial Site Assessment (ISA) for Hazardous Waste.

Morgan Wright - Project Engineer. Contribution: Project Design.

Chadha Rajive - Transportation Engineer Water Quality Assessment.

Chapter 5 Distribution List

Federal and State Agencies

Native American Heritage Commission

1550 Harbor Blvd, Suite 100 West Sacramento, CA 95691

Fish & Game Region

1416 9th Street, 12th Floor Sacramento, CA 95814

Office of Historic Preservation

1725 23rd Street, Sacramento, CA 95816

Regional Water Quality Control Board

11020 Sun Center Drive, # 200 Rancho Cordova, CA 95670

Regional/County/Local Agencies

City of Chico

411 Main Street Chico, CA 95928

Chico Fire Station No:1

842 Salem Street Chico, CA 95928

Chico Police Department

1460 Humboldt Road Chico, CA 95928

California Highway Patrol

413 Southgate Ave Chico, CA 95928

Butte County Association of Governments

326 Huss Lane Chico, CA 95928

Chico Area Recreation & Park District (CARD)

545 Vallombrosa Ave Chico, CA 95926

Interested Groups, Organizations, and Individuals

John Pearson Chico Velo Cycling Club

125 W 3rd Street Chico, California 95928

Kelly Staley Superintendent, Chico Unified School District

1163 E 7th Street Chico, CA 95928

Melanie Bassett Downtown Chico Business Association

242 W 3rd Street Chico, CA 95928

Jane Dolan

Chapman Mulberry Neighborhood Organization

196 Memorial Way Chico, CA 95926

Cheri Chastain California State University Chico

400 W First Street Chico, CA 95929

Sierra Nevada Brewing Company

1075 E 20th Street Chico, CA 95928

Butte Bicycle Coalition

The Foundation Building 1811 Concord Ave., Ste. 220 Chico, CA 95928

Utilities, Service Systems, Businesses, and Other Property Owners

California Water Service, Chico

Water Utility Company 2222 Dr. Martin Luther King Jr Pkwy

Pacific Gas & Electric

350 Salem Street Chico, CA

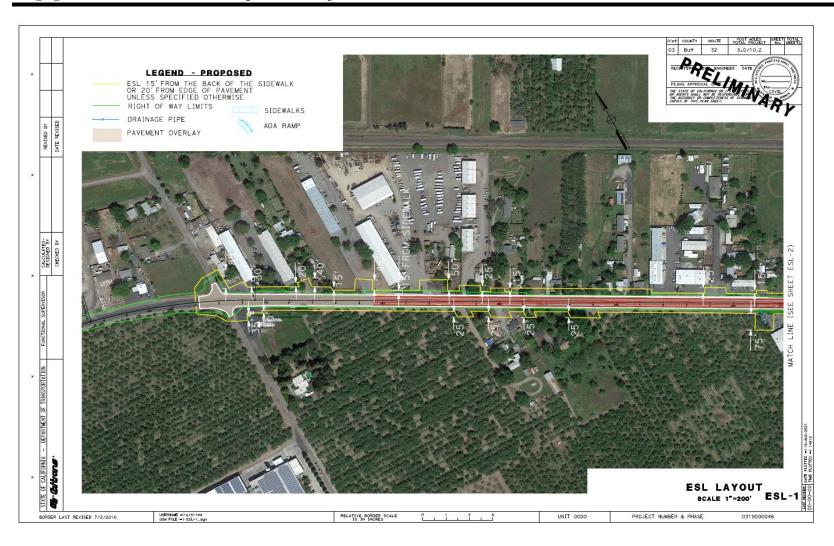
Chapter 6 References

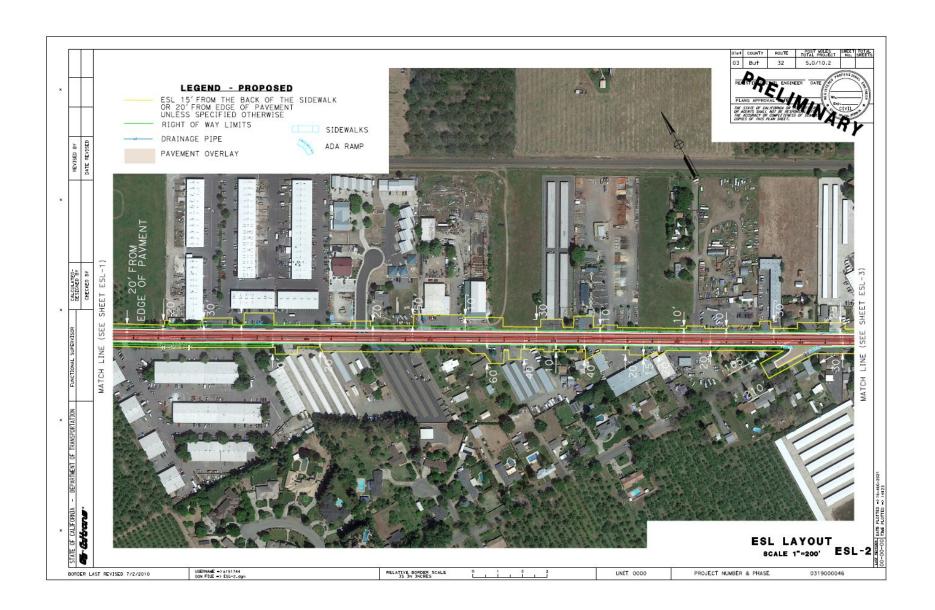
- City of Chico. 2021.Chico Bicycle Plan 2019. https://www.csuchico.edu/sustainability/_assets/documents/2019-city-of-chico-bike-plan.pdf. Accessed: July 7, 2021.
- Butte County. 2021. Local Hazard Mitigation Plan 2019. https://www.buttecounty.net/oem/mitigationplans. Accessed: July 7, 2021
- City of Chico. 2021. *Chico 2030 General Plan.* https://chico.ca.us/post/chico-2030-general-plan. Accessed: July 7, 2021.
- California Air Resources Board (ARB). 2019a. California Greenhouse Gas Emissions Inventory–2019 Edition. https://ww3.arb.ca.gov/cc/inventory/data/data.htm. Accessed: August 21, 2019.
- California Air Resources Board (ARB). 2019b. California Greenhouse Gas Emissions for 2000 to 2017. Trends of Emissions and Other Indicators. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory trends 00-17.pdf. Accessed: August 21, 2019.
- California Air Resources Board (ARB). 2019c. SB 375 Regional Plan Climate Targets. https://ww2.arb.ca.gov/our-work/programs/sustainablecommunities-program/regional-plan-targets. Accessed: August 21, 2019.
- California Department of Transportation. 2018. Caltrans Climate Change Vulnerability Assessments. District # Technical Report. December. Prepared by WSP. [Revise publication year and month and District number as needed. Only include if you have referenced this report. Modify as necessary for your District.]
- Federal Highway Administration (FHWA). 2019. Sustainability. https://www.fhwa.dot.gov/environment/sustainability/resilience/. Last updated February 7, 2019. Accessed: August 21, 2019.
- Federal Highway Administration (FHWA). No date. Sustainable Highways Initiative. https://www.sustainablehighways.dot.gov/overview.aspx. Accessed: August 21, 2019.
- State of California. 2018. *California's Fourth Climate Change Assessment*. http://www.climateassessment.ca.gov/. Accessed: August 21, 2019.
- State of California. 2019. *California Climate Strategy*. https://www.climatechange.ca.gov/. Accessed: August 21, 2019.

- U.S. Department of Transportation (U.S. DOT). 2011. *Policy Statement on Climate Change Adaptation*. June. https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm. Accessed: August 21, 2019.
- U.S. Environmental Protection Agency (U.S. EPA). 2009. Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Section 202(a) of the Clean Air Act.

 https://www.epa.gov/ghgemissions/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a-clean. Accessed: August 21, 2019.
- U.S. Environmental Protection Agency (U.S. EPA). 2018. *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed: August 21, 2019.
- U.S. Global Change Research Program (USGCRP). 2018. Fourth National Climate Assessment. https://nca2018.globalchange.gov/. Accessed: August 21, 2019

Appendix A Project Layouts



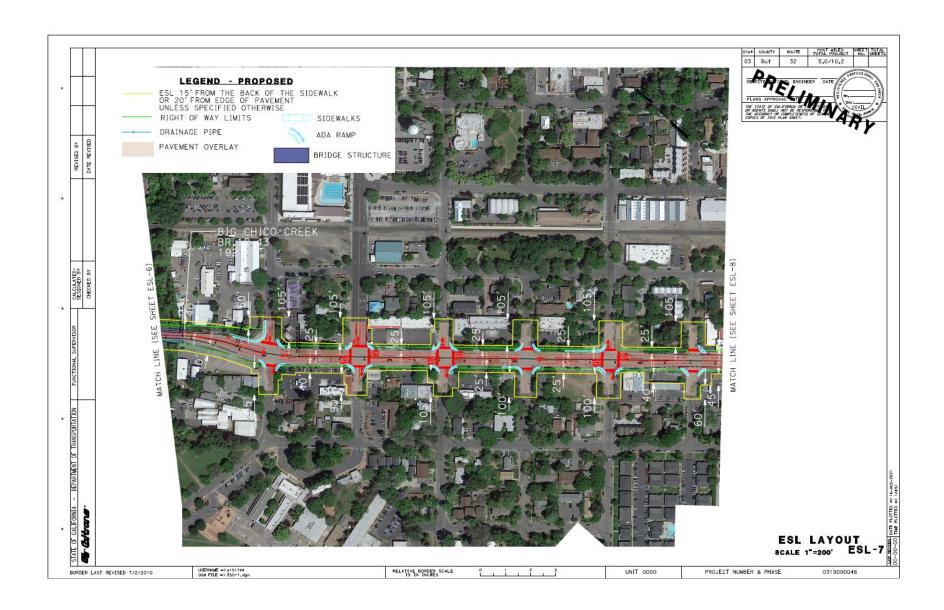




















Appendix B CNDDB, USFWS, and CNPS

CALIFORNIA DEPARTMENT OF

RareFind FISH and WILDLIFE

Query Summary: Quad IS (Chico (3912167) OR Nord (3912178) OR Ord Ferry (3912168)) AND County IS (Butte)





CNDDB Element Query Results CA Scientific Rare Common Taxonomic Total Returned Federal Habitats Name Group Code Occs Status Status Rank Rank Plant Status Rank BLM_S-Sensitive, CDFW SSC-Species of Special Concern, IUCN EN-Agelaius Freshwater marsh, Marsh & swamp, Swamp, tricolored ABPBXB0020 Birds 955 None Threatened G1G2 S1S2 null Endangered, NABCI_RWLtricolor blackbird Wetland Red Watch List, USFWS_BCC-Birds of Conservation Concern Anthicus Antioch Dunes Insects IICOL49020 6 None None G1 S1 null null Interior dunes antiochensis anthicid beetle Anthicus Sacramento IICOL49010 13 None None G1 S1 null IUCN_EN-Endangered Interior dunes anthicid beetle sacramento BLM S-Sensitive. Chaparral, Coastal scrub, Desert wash, Great CDFW SSC-Species of Basin grassland, Great Basin scrub, Moiavean Special Concern, IUCN_LC-Antrozous pallid bat Mammals AMACC10010 420 None None G4 S3 null desert scrub, Riparian woodland, Sonoran desert pallidus Least Concern, USFS_Sscrub, Upper montane coniferous forest, Valley & Sensitive, WBWG_H-High foothill grassland Priority CDF S-Sensitive, Brackish marsh, Estuary, Freshwater marsh, Birds ABNGA04040 43 G5 S4 Ardea alba great egret None None null IUCN LC-Least Concern Marsh & swamp, Riparian forest, Wetland CDF S-Sensitive. Brackish marsh, Estuary, Freshwater marsh, Ardea great blue S4 Birds ABNGA04010 156 None None G5 null IUCN LC-Least Concern herodias heron Marsh & swamp, Riparian forest, Wetland Astragalus Ferris' milk. Meadow & seep, Valley & foothill grassland, PDFAB0F8R3 Dicots None G2T1 S1 1B.1 null tener var. None Wetland vetch ferrisiae BLM S-Sensitive, CDFW_SSC-Species of Coastal prairie, Coastal scrub, Great Basin Special Concern, IUCN_LC-Athene grassland, Great Basin scrub, Mojavean desert burrowing owl Birds ABNSB10010 2011 2 None None G4 S3 scrub. Sonoran desert scrub, Valley & foothill cunicularia Least Concern. USFWS BCC-Birds of grassland Conservation Concern BLM_S-Sensitive, USFS_S-Balsamorhiza big-scale Chaparral, Cismontane woodland, Ultramafic, Dicots PDAST11061 51 None None G2 S2 1B.2 Valley & foothill grassland Branchine cta Crustaceans ICBRA03010 Endangered None G2 S2 null IUCN EN-Endangered Valley & foothill grassland, Vernal pool, Wetland conservatio fairy shrimp Branchine cta 791 10 G3 S3 IUCN_VU-Vulnerable Crustaceans ICBRA03030 Threatened None null Valley & foothill grassland, Vernal pool, Wetland lyn chi fairy shrimp Branchine cta midvalley fairy ICBRA03150 144 G2 Crustaceans None None S2S3 null Vernal pool, Wetland mesovalle nsis shrimp ABNKC19070 G5 S3 Buteo Rinds 2541 RLM S-Sensitive Great Basin grassland, Riparian forest, Riparian Swainson's None Threatened null IUCN LC-Least Concern. swainsoni hawk woodland, Valley & foothill grassland

https://apps.wildlife.ca.gov/rarefind/view/QuickElementListView.html

7/13/2021 Print View

To/2021 Print view												
											USFWS_BCC-Birds of Conservation Concern	
Castilleja rubicundula var. rubicundula	pink creamsacs	Dicots	PDSCR0D482	42	1	None	None	G5T2	S2	1B.2	BLM_S-Sensitive	Chaparral, Cismontane woodland, Meadow & seep, Ultramafic, Valley & foothill grassland
Coastal and Valley Freshwater Marsh	Coastal and Valley Freshwater Marsh	Marsh	CTT52410CA	60	3	None	None	G3	S2.1	null	null	Marsh & swamp, Wetland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	7	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, NABCI_RWL-Red Watch List, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Riparian forest
Desmocerus californicus dimorphus	valley elderberry longhom beetle	Insects	IICOL48011	271	9	Threatened	None	G3T2	S3	null	null	Riparian scrub
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1398	3	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU- Vulnerable, USFS_S- Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Erethizon dorsatum	North American porcupine	Mammals	AMAFJ01010	523	8	None	None	G5	S3	null	IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Closed-cone coniferous forest, Lower montane coniferous forest, North coast coniferous forest, Upper montane coniferous forest
Eumops perotis californicus	westem mastiff bat	Mammals	AMACD02011	296	4	None	None	G4G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, WBWG_H-High Priority	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Euphorbia hooveri	Hoover's spurge	Dicots	PDEUP0D150	29	1	Threatened	None	G1	S1	1B.2	null	Vernal pool, Wetland
Fritillaria eastwoodiae	Butte County fritillary	Monocots	PMLIL0V060	235	1	None	None	G3Q	S3	3.2	USFS_S-Sensitive	Chaparral, Cismontane woodland, Lower montane coniferous forest, Ultramafic
Fritillaria pluriflora	adobe-lily	Monocots	PMLIL0V0F0	114	2	None	None	G2G3	S2S3	1B.2	BLM_S-Sensitive, SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Cismontane woodland, Ultramafic, Valley & foothill grassland
Great Valley Cottonwood Riparian Forest	Great Valley Cottonwood Riparian Forest	Riparian	CTT61410CA	56	11	None	None	G2	S2.1	null	null	Riparian forest
Great Valley Mixed Riparian Forest	Great Valley Mixed Riparian Forest	Riparian	CTT61420CA	68	6	None	None	G2	S2.2	null	null	Riparian forest
Great Valley Valley Oak Riparian Forest	Great Valley Valley Oak Riparian Forest	Riparian	CTT61430CA	33	2	None	None	G1	S1.1	null	null	Riparian forest
Great Valley Willow Scrub	Great Valley Willow Scrub	Riparian	CTT63410CA	18	2	None	None	G3	S3.2	null	null	Riparian scrub
Hibiscus Iasiocarpos	woolly rose- mallow	Dicots	PDMAL0H0R3	173	1	None	None	G5T3	S3	1B.2	SB_CalBG/RSABG- California/Rancho Santa	Freshwater marsh, Marsh & swamp, Wetland

7/13/2021 Print View

var. occidentalis											Ana Botanic Garden, SB_UCBG-UC Botanical Garden at Berkeley	
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	2	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Lower montane coniferous forest, Oldgrowth, Riparian forest
Lasiurus blossevillii	western red bat	Mammals	AMACC05060	128	2	None	None	G4	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC- Least Concern, WBWG_H- High Priority	Cismontane woodland, Lower montane coniferous forest, Riparian forest, Riparian woodland
Lasiurus cinereus	hoary bat	Mammals	AMACC05030	238	4	None	None	G3G4	S4	null	IUCN_LC-Least Concern, WBWG_M-Medium Priority	Broadleaved upland forest, Cismontane woodland, Lower montane coniferous forest, North coast coniferous forest
Lepidurus packardi	vernal pool tadpole shrimp	Crustaceans	ICBRA10010	324	7	Endangered	None	G4	S3S4	null	IUCN_EN-Endangered	Valley & foothill grassland, Vernal pool, Wetland
Limnanthes floccosa ssp. californica	Butte County meadowfoam	Dicots	PDLIM02042	21	6	Endangered	Endangered	G4T1	S1	1B.1	SB_CalBG/RSABG- California/Rancho Santa Ana Botanic Garden	Valley & foothill grassland, Vernal pool, Wetland
Limnanthes floccosa ssp. floccosa	woolly meadowfoam	Dicots	PDLIM02043	54	1	None	None	G4T4	S3	4.2	SB_UCBG-UC Botanical Garden at Berkeley	Chaparral, Cismontane woodland, Valley & foothill grassland, Vernal pool, Wetland
Linderiella occidentalis	California linderiella	Crustaceans	ICBRA06010	508	3	None	None	G2G3	S2S3	null	IUCN_NT-Near Threatened	Vernal pool
Myotis yumanensis	Yuma myotis	Mammals	AMACC01020	265	2	None	None	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern, WBWG_LM-Low-Medium Priority	Lower montane coniferous forest, Riparian forest, Riparian woodland, Upper montane coniferous forest
Northern Hardpan Vernal Pool	Northern Hardpan Vernal Pool	Herbaceous	CTT44110CA	126	1	None	None	G3	S3.1	null	null	Vernal pool, Wetland
Oncorhynchus mykiss irideus pop. 11	steelhead - Central Valley DPS	Fish	AFCHA0209K	31	4	Threatened	None	G5T2Q	S2	null	AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
Oncorhynchus tshawytscha pop. 11	chinook salmon - Central Valley spring-run ESU	Fish	AFCHA0205L	13	1	Threatened	Threatened	G5T1T2Q	S2	null	AFS_TH-Threatened	Aquatic, Sacramento/San Joaquin flowing waters
Pandion haliaetus	osprey	Birds	ABNKC01010	504	3	None	None	G5	S4	null	CDF_S-Sensitive, CDFW_WL-Watch List, IUCN_LC-Least Concern	Riparian forest
Rana boylii	foothill yellow- legged frog	Amphibians	AAABH01050	2468	1	None	Endangered	G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT- Near Threatened, USFS_S- Sensitive	Aquatic, Chaparral, Cismontane woodland, Coastal scrub, Klamath/North coast flowing waters, Lower montane coniferous forest, Meadow & seep, Riparian forest, Riparian woodland, Sacramento/San Joaquin flowing waters
Riparia riparia	bank swallow	Birds	ABPAU08010	298	14	None	Threatened	G5	S2	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Sidalcea robusta	Butte County checkerbloom	Dicots	PDMAL110P0	38	2	None	None	G2	S2	1B.2	BLM_S-Sensitive	Chaparral, Cismontane woodland
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1422	1	None	None	G2G3	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT- Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Stuckenia filiformis ssp. alpina	northern slender pondweed	Monocots	PMPOT03091	21	1	None	None	G5T5	S2S3	2B.2	null	Marsh & swamp, Wetland
Thamnophis gigas	giant gartersnake	Reptiles	ARADB36150	366	3	Threatened	Threatened	G2	S2	null	IUCN_VU-Vulnerable	Marsh & swamp, Riparian scrub, Wetland

7/13/2021 Print View

Tuctoria greenei	Greene's tuctoria	Monocots	PMPOA6N010	50	1	Endangered	Rare	G1	S1	1B.1	null	Vernal pool, Wetland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	503	1	Endangered	Endangered	G5T2	S2	null		Riparian forest, Riparian scrub, Riparian woodland
	Brazilian watermeal	Monocots	PMLEM03020	6	1	None	Nane	G5	S2	2B.3	null	Marsh & swamp, Wetland

Inventory of Rare and Endangered Plants of California



HOME ABOUT V CHANGES REVIEW HELP



Search Results

Back	Export Results
------	----------------

20 matches found. Click on scientific name for details

Search Criteria: County is one of [BUT], Quad is one of [3912167,3912178,3912168]

Scientific Name	Common Nan	ne Family Lifefor	m Blooming Per	iod Fed Li	st State List	Global F	Rank State Rank	
CA Rare Plant R	General H	abitats Micro Habit	Lowest Eleva	tion Highe	est Elevation	CA Endem	nic Date Added	Photo
Search:								
▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED STATE	CA RARE PLANT RANK G	GENERAL HABITATS	PHOTO
<u>Astragalus</u>	depauperate	Fabaceae	annual herb	Mar-Jun	None None	4.3	Chaparral, Cismont	
pauperculus	milk-vetch						voodland, Valley an oothill grassland	nd No Photo Available
<u>Astragalus</u>	Ferris' milk-	Fabaceae	annual herb	Apr-May	None None		Meadows and seep	
tener var. ferrisiae	vetch						/alley and foothill grassland	No Photo Available
Balsamorhiza macrolepis	big-scale balsamroot	Asteraceae	perennial herb	Mar-Jun	None None	1B,2 C	Chaparral, Cismont woodland, Valley ar oothill grassland	ane
Brodiaea rosea ssp. vallicola	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr- May(Jun)	None None		/alley and foothill grassland, Vernal po	ools No Photo Available
Calycadenia appositifolia	Butte County calycadenia	Asteraceae	annual herb	Apr-Jul	None None	v n fo	Chaparral, Cismonto woodland, Lower montane coniferous forest, Meadows an eeps, Vallley and fo grassland	No Photo S Available
Castilleja rubicundula var. rubicundula	pink creamsacs	Orobanchaceae	annual herb (hemiparasitic)	Apr-Jun	None None	v s	Chaparral, Cismonto woodland, Meadow reeps, Valley and fo grassland	s and No Photo
<u>Claytonia</u> palustris	marsh claytonia	Montiaceae	perennial herb	May-Oct	None None	N.	Marshes and swam Meadows and seep Jpper montane coniferous forest	

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK	GENERAL HABITATS	РНОТО
Erythranthe glaucescens	shield- bracted monkeyflower	Phrymaceae	annual herb	Feb- Aug (Sep)	None	None	4.3	Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland	Neal Kramer 2020
Euphorbia hooveri	Hoover's spurge	Euphorbiaceae	annual herb	Jul- Sep(Oct)	FT	None	1B.2	Vernal pools	No Photo Available
Fritillaria eastwoodiae	Butte County fritillary	Lillaceae	perennial bulbiferous herb	Mar-Jun	None	None	3.2	Chaparral, Cismontane wo odland, Lower montane coni ferous forest	No Photo Available
Fritillaria pluriflora	adobe-lily	Liliaceae	perennial bulbiferous herb	Feb-Apr	None	None	1B.2	Chaparral, Cismontane woodland, Valley and foothill grassland	No Photo Available
Hesperevax caulescens	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	4.2	Valley and foothill grassland, Vernal pools	No Photo Available
Hibiscus lasiocarpos var. occidentalis	woolly rose- mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	1B.2	Marshes and swamps	No Photo Available
Limnanthes floccosa ssp. californica	Butte County meadowfoam	Limnanthaceae	annual herb	Mar-May	FE	CE	18.1	Valley and foothill grassland, Vernal pools	No Photo Available
Limnanthes Loccosa ssp. Loccosa	woolly meadowfoam	Limmanthaceae	annual herb	Mar- May(Jun)	None	None	4.2	Chaparral, Cismontane woodland, Valley and foothill grassland, Vernal pools	© 2021Scot Laring
Navarretia heterandra	Tehama navarretia	Polemoniaceae	annual herb	Apr-Jun	None	None	4.3	Valley and foothill grassland, Vernal pools	©2021 Scot
Sidalcea robusta	Butte County checkerbloom	Malvaceae	perennial rhizomatous herb	Apr-Jun	None	None	1B.2	Chaparral, Cismontane woodland	No Photo Available
Stuckenia Lliformis ssp. alpina	slender- leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	May-Jul	None	None	2B.2	Marshes and swamps	Dana York (2016)
Tuctoria greene i	Greene's tuctoria	Poaceae	annual herb	May- Jul(Sep)	FE	CR	18,1	Vernal pools	No Photo

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	CA RARE PLANT RANK	GENERAL HABITATS	РНОТО
<u>Wolffia</u> brasiliensis	Brazilian watermeal	Araceae	perennial herb (aquatic)	Apr-Dec	None	None	2B.3	Marshes and swamps	© 2021Scot

Showing 1 to 20 of 20 entries

CONTACT US ABOUT THIS WEBSITE ABOUT CNPS CONTRIBUTORS Send questions and comments About the Inventory About the Rare Plant Program The Calflora Database to <u>rareplants@cnps.org</u>. Release Notes CNPS Home Page The California Lichen Society Advanced Search About CNPS Cali fornia Natural Diversity Glossary Join CNPS Database The Jepson Flora Project Developed by Rincon Consultants, Inc. The Consortium of California Herbaria CalPhotos

Log in

Copyright © 2010-2021 California Native Plant Society, All rights reserved.

Olive Ridley Sea Turtle (T/E) -Leatherback Sea Turtle (E) -North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) Fin Whale (E) Humpback Whale (E) Southern Resident Killer Whale (E) North Pacific Right Whale (E) Sei Whale (E) Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH Chinook Salmon EFH
Groundfish EFH Coastal Pelagics EFH Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -MMPA Pinnipeds -

Quad Name Ord Ferry
Quad Number 39121-F8

ESA Anadromous Fish

SONCC Coho ESU (T) CCC Coho ESU (E) CC Chinook Salmon ESU (T) CVSR Chinook Salmon ESU (T) -

4

SRWR Chinook Salmon ESU (E) - X
NC Steelhead DPS (T) CCC Steelhead DPS (T) SCCC Steelhead DPS (T) SC Steelhead DPS (E) CCV Steelhead DPS (T) X
Eulachon (T) SDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat CCC Coho Critical Habitat CC Chinook Salmon Critical Habitat CVSR Chinook Salmon Critical Habitat X
SRWR Chinook Salmon Critical Habitat X
NC Steelhead Critical Habitat CCC Steelhead Critical Habitat SCCC Steelhead Critical Habitat SC Steelhead Critical Habitat X
CCV Steelhead Critical Habitat X
Eulachon Critical Habitat SDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) Olive Ridley Sea Turtle (T/E) Leatherback Sea Turtle (E) North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -Fin Whale (E) -

5

Humpback Whale (E) -Southern Resident Killer Whale (E) -North Pacific Right Whale (E) -Sei Whale (E) -Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH Chinook Salmon EFH Groundfish EFH Coastal Pelagics EFH Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds See list at left and consult the NMFS Long Beach office 562-980-4000

MMPA Cetaceans -MMPA Pinnipeds -

Jennifer Greslik

Associate Environmental Planner (Biologist) Caltrans–North Region 703 B Street Marysville, CA 95901 (530)720-0170





Appendix C Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY

Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION

OFFICE OF THE DIRECTOR P.O. BOX 942873, MS-49 SACRAMENTO, CA 94273-0001 PHONE (916) 654-6130 FAX (916) 653-5776 TTY 711 www.dot.ca.gov



November 2019

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/business-and-economic-opportunity/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at Title.VI@dot.ca.gov.

Toks Omishakin Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability