

Final Initial Study

Chuckwalla Valley Road Bridge Replacement Project over Aztec Ditch (Bridge No. 56C0102), Tarantula Ditch (Bridge No. 56C0103), Sutro Ditch (Bridge No. 56C0104), and Acari Ditch (Bridge No. 56C0108)

Riverside County, California

Chuckwalla Valley Road (Corn Springs Road west to Ford Dry Lake Road east)



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August 2023

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Table of Contents

1	Introduction.....	1
1.1	Introduction.....	1
1.2	Purpose.....	1
1.3	Intended Use of this Initial Study	2
2	Project Setting and Description	2
3	California Environmental Quality Act (CEQA) Evaluation.....	8
3.1	Environmental Factors Potentially Affected:.....	8
4	CEQA Environmental Checklist.....	10
4.1	Aesthetics	11
4.2	Agriculture and Forest Resources	15
4.3	Air Quality	16
4.4	Biological Resources	20
4.5	Cultural Resources	44
4.6	Energy	57
4.7	Geology and Soils.....	59
4.8	Greenhouse Gas Emissions.....	63
4.9	Hazards and Hazardous Materials	68
4.10	Hydrology and Water Quality.....	73
4.11	Land Use Planning.....	79
4.12	Mineral Resources	80
4.13	Noise	81
4.14	Population and Housing.....	83
4.15	Public Services.....	84
4.16	Recreation	86
4.17	Transportation.....	87
4.18	Tribal Cultural Resources	89
4.19	Utilities and Service Systems	94
4.20	Wildfire	96
4.21	Mandatory Findings of Significance.....	99
5	Conclusion.....	100
6	References.....	101
7	List of Preparers	115
8	List of Technical Studies (Bound Under Separate Cover).....	116

List of Tables

Table 1.	Permits and Approvals.....	7
Table 2.	Estimated Construction Emissions of Criteria Pollutants (lbs./day).....	18
Table 3.	Summary of Vegetation Communities and Land Use Type within the BSAs.....	27
Table 4.	Summary of Potential USACE, RWQCB, and CDFW Jurisdiction (acres).....	35
Table 5.	Estimated Construction Emissions of Criteria Pollutants (lbs./day).....	65
Table 6.	Estimated Construction GHG Emissions (metric tons/phase).....	66

List of Figures

Figure 1. Regional Project Location	5
Figure 2. Project Location.....	6
Figure 3. View from Bridge over Aztec Ditch	13
Figure 4. View from Bridge over Tarantula Ditch	13
Figure 5. View from Bridge over Sutro Ditch	13
Figure 6. View from Bridge over Acari Ditch.....	14
Figure 7. Biological Study Area at Aztec Ditch Bridge	23
Figure 8. Biological Study Area at Tarantula Ditch Bridge	23
Figure 9. Biological Study Area at Sutro Ditch Bridge	25
Figure 10. Biological Study Area at Acari Ditch Bridge.....	26
Figure 11. Vegetation Communities/Land Use Types at Aztec Ditch Bridge.....	28
Figure 12. Vegetation Communities at Tarantula Ditch Bridge	29
Figure 13. Vegetation Communities at Sutro Ditch Bridge.....	30
Figure 14. Vegetation Communities at Acari Ditch Bridge	31
Figure 15. Locations of CDFW Jurisdictional Resources at Aztec Ditch	36
Figure 16. Locations of Non-Wetland Waters of the U.S. at Aztec Ditch	37
Figure 17. Locations of CDFW Jurisdictional Resources at Tarantula Ditch	38
Figure 18. Locations of Non-Wetland Waters of the U.S. at Tarantula Ditch	39
Figure 19. Locations of CDFW Jurisdictional Resources at Sutro Ditch	40
Figure 20. Locations of Non-Wetland Waters of the U.S. at Sutro Ditch	41
Figure 21. Locations of CDFW Jurisdictional Resources at Acari Ditch.....	42
Figure 22. Locations of Non-Wetland Waters of the U.S. at Acari Ditch.....	43

List of Acronyms

A	
AB	Assembly Bill
ACM	Asbestos Containing Materials
ADT	Average Daily Traffic
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
ASR	Archaeological Survey Report
B	
BMP	Best Management Practice
BSA	Biological Study Area
C	
CA CGP	California Construction General Permit
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Resources Board
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CGP	Construction General Permit
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon monoxide
County	County of Riverside Transportation Department
CRHR	California Register of Historic Resources
CWA	Clean Water Act

D	
DPR	Department of Parks and Recreation
DTC/C-AMA	Desert Training Center/California-Arizona Maneuver Area
DTSC	Department of Toxic Substances Control
E	
EIR	Environmental Impact Report
F	
FCR	Field Contact Representative
FED	Final Environmental Document
FEMA	Federal Emergency Management Agency
G	
GHG	Greenhouse Gas
H	
HCP	Habitat Conservation Plan
HPSR	Historic Properties Survey Report
I	
I	Interstate
IS	Initial Study
L	
LBP	Lead-Based Paint
LED	Light Emitting Diode
LOD	Limits of Disturbance
M	
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin

MDAQMD	Mojave Desert Air Quality Management District
MLD	Most Likely Descendent
MND	Mitigated Negative Declaration
MOA	Memorandum of Agreement
N	
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NO₂	Nitrogen Dioxide
O	
O₃	Ozone
P	
PBFs	Physical Biological Features
PM	Particulate Matter
PM₁₀	Particulate matter broken down for regulatory purposes into particles of 10 micrometers and smaller
PM_{2.5}	Particulate matter broken into particles of 2.5 micrometers and smaller
PRC	Public Resources Code
PRIMP	Paleontological Resource Impact Mitigation Program
Project	Chuckwalla Valley Road Bridge Replacement Project
R	
RWQCB	Regional Water Quality Control Board
S	
SC	Source Control
SCAQMD	South Coast Air Quality Management District

SHPO	State Historic Preservation Officer
SO₂	Sulfur Dioxide
SR	Sufficiency Rating
SSC	Species of Special Concern
SWPPP	Storm Water Pollution Prevention Plan
T	
TMP	Traffic Management Plan
TWW	Treated Wood Waste
U	
UPRR	Union Pacific Railroad
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
W	
WEAP	Worker Environmental Awareness Program
WoUS	Waters of the U.S.

1 Introduction

1.1 Introduction

The California Environmental Quality Act (CEQA) is a Statewide environmental law contained in Public Resources Code (PRC) §§ 21000-21177 and applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to adversely affect the environment. This Initial Study (IS) evaluates resource areas found in the CEQA Environmental Checklist provided in Section 4. This document is intended for use by the County of Riverside Transportation Department (County) as the CEQA Lead Agency, responsible agencies, and members of the general public in evaluating the physical environmental effects resulting from planning and constructing the proposed Chuckwalla Valley Road Bridge Replacement Project over Aztec Ditch (Bridge No. 56C0102), Tarantula Ditch (Bridge No. 56C0103), Sutro Ditch (Bridge No. 56C0104), and Acari Ditch (Bridge No. 56C0108) (Project).

The Initial Study is organized as follows:

- Section 1. Introduction* provides details on the purpose of this Initial Study, its intended use, and legal requirements.
- Section 2. Project Setting and Description* provides details of the project location, background, description, and purpose. This section also identifies required permits, approvals or agreements for the Project.
- Section 3. CEQA Environmental Evaluation* provides a summary and determination of the environmental factors potentially affected by the project.
- Section 4. CEQA Environmental Checklist* discusses the potential effects the project may have on the environment, provides the evaluated significance of those effects, and identifies potential avoidance, minimization, and/or mitigation measures that would reduce or minimize the project's effects on the environment.
- Section 5. Conclusion* summarizes the findings in this Initial Study and the next steps in the environmental clearance process.
- Section 6. References* lists the full text details of in-text citations used in the document.
- Section 7. Preparers* lists federal, state, or local agency personnel, including consultants, who were primarily responsible for preparing this document.
- Section 8. List of Technical Studies* provides a list of studies that can be reviewed for additional details.

1.2 Purpose

The purpose of this Initial Study is to evaluate the potential environmental impacts that may result from implementing the proposed Project. The Initial Study provides the County with information to use as the basis for determining whether to prepare an EIR, Negative Declaration (ND), or Mitigated ND (MND). In evaluating the significance of a project's environmental effect, the

County shall consider direct physical changes in the environment and reasonably foreseeable indirect physical changes in the environment which may be caused by the project. The analyses evaluates whether the Project would have no impact, a less than significant impact, a less than significant impact with implementation of mitigation measures, or a significant impact even if mitigation measures are implemented. If there is substantial evidence before a Lead Agency that a project may have a significant effect on the environment, the Lead Agency is required to prepare an Environmental Impact Report (EIR).

1.3 Intended Use of this Initial Study

The intended use of this Initial Study is to inform County decisionmakers, representatives of other affected/responsible agencies, the public, and interested parties of the potential environmental consequences of the Project. The County used the scientific and factual data provided in this document and supporting technical studies prepared for the Project, to evaluate whether the Project would result in significant environmental effects associated with project implementation. Guidance on how a significant effect was determined is provided in Section 4. Based on the analysis provided in this Initial Study the County determined that proposed Project may result in a significant effect on the environment and that an EIR should be prepared.

The following technical analyses were prepared in support of this Initial Study and are available for public review via the County's website at <https://reprojects.org/chuckwalla>:

- Biological Resources Technical Report
 - Natural Environmental Study (Minimal Impacts) (includes as appendix Jurisdictional Delineation Report)
 - Biological Opinion
- HPSR/ASR/HRER (Confidential- Not for Public Distribution)
- Initial Site Assessment
- Location Hydraulic Study and Summary Floodplain Encroachment Report
- Paleontological Technical Memorandum
- Traffic Technical Memorandum
- Visual Impact Assessment Memorandum
- Water Quality Assessment Report

2 Project Setting and Description

1. Project Title: Chuckwalla Valley Road Bridge Replacement Project over Aztec Ditch (Bridge No. 56C0102), Tarantula Ditch (Bridge No. 56C0103), Sutro Ditch (Bridge No. 56C0104), and Acari Ditch (Bridge No. 56C0108).

2. Lead Agency Name and Address:
County of Riverside Transportation Department
3525 14th Street
Riverside, CA 92501

3. Contact Person and Phone Number:

Frances Segovia, Senior Transportation Planner
(951) 955-1646

4. Project Location:

Along Chuckwalla Valley Road near Desert Center in Riverside County between Corn Springs Road and Ford Dry Lake Road.

5. Project Sponsor's Name and Address:

County of Riverside Transportation Department
3525 14th Street
Riverside, CA 92501

6. General Plan Designation:

Open space rural

7. Zoning:

Controlled Environmental (W-2-10) and Natural Assets (N-A)

8. Project Description:

The County, in cooperation with Caltrans, proposes to replace the following four (4) existing structurally deficient timber bridges along Chuckwalla Valley Road near Desert Center in Riverside County, California:

- Chuckwalla Valley Road Bridge over Aztec Ditch (Br. No. 56C0102) (Federal Aid Project No. BRLO-5956(239))
- Chuckwalla Valley Road Bridge over Tarantula Ditch (Br. No. 56C0103) (Federal Aid Project No. BRLO-5956(227))
- Chuckwalla Valley Road Bridge over Sutro Ditch (Br. No. 56C0104) (Federal Aid Project No. BRLO-5956(226))
- Chuckwalla Valley Road Bridge over Acari Ditch (Br. No. 56C0108) (Federal Aid Project No. BRLO-5956(225))

Chuckwalla Valley Road is a two-lane frontage road that occasionally accepts diverted traffic from the Interstate 10 (I-10) Freeway (see **Figure 1** and **Figure 2**). Chuckwalla Valley Road, an approximately 16.75-mile stretch of frontage road, is classified as a Local Rural Road. It runs nearly parallel with I-10 and connects Corn Springs Road and I-10 at the west end and Ford Dry Lake Road and I-10 at the east end. Although the road mostly serves vehicles accessing local utilities, off-road recreation and only carries an average daily traffic (ADT) volume of approximately 40 vehicles, the road occasionally experiences a heavier volume when traffic is detoured from I-10 during temporary closures for construction or emergency incidents. Currently the bridges are load limited to weights below current standards.

The bridges are listed in the federal Eligible Bridge List (EBL) as "Structurally Deficient (SD)" with a low Sufficiency Rating (SR) between 39.3 and 49.2. A SR is essentially an overall rating

of a functional/geometric obsolescence, and its essentiality to the public. A low SR may be due to structural defects, narrow lanes, low vertical clearance, or any of many possible issues. A bridge is healthy when its SR is more than 80.0. Bridges with SR equal to or less than 80.0 and more than 50.0 require rehabilitation or widening. When the SR falls below 50.0, bridge replacement shall be considered for public safety.

The proposed Project will replace the existing 2-lane timber bridges with new 2-lane modern bridges with a curb-to-curb roadway width of 32 feet at the same locations. The proposed road width would consist of two 12-foot-wide travel lanes, one lane in each direction, and a 4-foot-wide shoulder on each side. Modern traffic barriers/railings meeting current Caltrans safety design standards would be constructed. The proposed bridges would be approximately 60 to 80 feet long depending on the channel hydraulic capacity and water surface freeboard requirements. Raising the elevation of the bridges is not anticipated. However, if raising the bridge elevation is found to be necessary to meet freeboard requirements, the total vertical increase is not anticipated to exceed one foot. Additionally, approach roadway improvements would be provided, and channel improvements would be administered to avoid future scour problems. It is envisioned that the channel bottom will remain earthen.

The existing bridges do not carry any utilities and the proposed bridge construction is not expected to include new utilities. A telephone line runs along the north side of the Project area and is not expected to be affected by construction. The construction contractor, in coordination with the County, will coordinate with the utility provider to determine how the utility will be protected in place.

All construction activities would be conducted within the existing roadway right of way with construction staging and material laydown areas on the roadway itself. Chuckwalla Valley Road between the Corn Springs Road intersection to 6.3 miles east of the intersection would be closed during construction. The construction duration will take approximately 18 months. It is envisioned that all four bridges will be either constructed at the same time or staged in sequence depending on available access to adjacent utilities and properties. A Traffic Management Plan (TMP) would be prepared to address closure of the road and access to local utilities and properties.

Figure 1. Regional Project Location



Figure 2. Project Location



9. Surrounding Land Uses and Setting:

The County of Riverside General Plan Land Use Element identifies the Project area as open space rural. The closest community to the Project area is Desert Center which is approximately 9 miles away.

10. Other Agencies Whose Approval is Required:

Table 1 below, lists the permits and approvals that are required for project construction.

Table 1. Permits and Approvals

Agency	Permits, Licenses, Agreements, and Certifications	Status
State Historic Preservation Officer	Section 4(f) Concurrence on the Finding of Effect (FOE)	Concurrence received on September 22, 2022.
Regional Water Quality Control Board	Section 401 for water discharge	Application for 401 permit expected after Final Environmental Document (FED) approval.
State Water Resources Control Board	California Construction General Permit (CA CGP) Coverage	Application for CA CGP coverage is expected after FED approval.
United States Army Corps of Engineers	Section 404 Permit for filling or dredging waters of the United States.	Application for 404 permit expected after FED approval.
California Department of Fish and Wildlife	1602 Agreement for Streambed Alteration	Application for 1602 permit expected after FED approval.
United States Fish and Wildlife Service	Informal Section 7 Consultation for Threatened and Endangered Species	Concurrence received on July 2, 2020.
State Historic Preservation Officer	Memorandum of Agreement (MOA)	MOA expected following public review of the Draft Environmental Document.
Union Pacific Railroad (UPRR)	Temporary Construction Easement (TCE)	Application for TCE permit expected prior to construction.
Riverside County Department of Waste Resources – El Sobrante Landfill	Permit for disposal of Treated Wood Waste, as necessary	Application for Treated Wood Waste permit expected during construction, as necessary.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Assembly Bill (AB) 52 notification letters were sent on September 23, 2019 to ten Native American Tribes to provide information on the proposed Project and initiate formal consultation, if desired. Four of the ten Native American Tribes responded to the letter. Details regarding consultation efforts to date can be found in Section 4.18, Tribal Cultural Resources and Appendix B.

3 California Environmental Quality Act (CEQA) Evaluation

3.1 Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is “Potentially Significant Impact”, as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forest Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use Planning | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

The proposed Project would have no effect on: Agriculture and Forest Resources, Land Use Planning, Mineral Resources, Population/Housing, Recreation, and Transportation.

The proposed Project would have a Less than Significant Impact on: Aesthetics, Air Quality, Energy, Geology/Soils, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology/Water Quality, Noise, Public Services, Utilities/Service Systems, and Wildfire.

The proposed Project would have a Potentially Significant Impact on: Biological, Cultural, Tribal Cultural Resources, and Mandatory Findings of Significance. Impacts on these resource areas will be analyzed in the EIR.

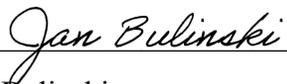
DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Jan Bulinski
Environmental Project Manager
County of Riverside Transportation Department

8/22/2023

Date

4 CEQA Environmental Checklist

Below is a description of the evaluation for environmental impacts:

1. A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors, as well as general standards (e.g., the project would not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
4. “Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level.
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a) Earlier Analyses Used. Identify and state where they are available for review.
 - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. The explanation of each issue should identify the significance criteria or threshold, if any, used to evaluate each question; and the mitigation measure identified, if any, to reduce the impact to less than significance.

4.1 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on field visits and the *Memorandum of Scenic Resources Evaluation and Visual Impact Assessment* (March 2020).

Regulatory Setting:

CEQA policy requires the state to take all necessary 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]).

Environmental Setting:

As described in the Memorandum of Scenic Resources Evaluation and Visual Impact Assessment completed for the Project, Chuckwalla Valley is a large desert valley bound by the distinctive ridgelines of the Chuckwalla and Palen Mountains. The Project area is characterized by rural, relatively undisturbed natural open space, encompassing ephemeral sandy channels and desert vegetative communities. Due to high winds within the Project area, most vegetation across the landscape is low lying scrub. The low-lying scrub tends to grow in clusters among the rocky, slightly sloped edges of the alluvial channels. Small trees, such as palo verde, are scattered closest to the edges of Chuckwalla Valley Road. The channel bottoms are composed of coarse sandy soil splays from past rain events. The channel bottoms have no vegetation or are sparsely vegetated with species from the adjacent creosote bush scrub.

Land use within the Project area is primarily rural open space. The built setting is composed of transportation and utility infrastructure, such as Chuckwalla Valley Road, I-10, transmission lines, utility poles, and solar panels. From Chuckwalla Valley Road, locally recognized and visually prominent natural and built features, such as the Little Chuckwalla and Palen Mountains (background views), utility poles and transmission lines (mid-ground views) and low-lying desert

scrub (foreground views) are visible. Views from the bridges include the distant skyline, large utility poles running parallel to the roadway, local mountain ranges, and large-scale vegetation clustered alongside the channel edges. Chuckwalla Valley Road is classified as a local rural road and has no streetlights or sidewalk improvements. The roadway is unstriped with weathered asphalt paving.

Views of the bridge structures themselves are limited as they are not elevated and can only be seen from the floor of the channel washes (see **Figure 3** through **Figure 6**). Barriers consisting of both rusted metal and paint-chipped wood are visible along the roadway edges at the bridge structures and are the only features that identify the bridge structures from Chuckwalla Valley Road. The Project area does not include any scenic vistas or scenic resources and is not located near a State Scenic Highway.

Aztec Ditch Bridge is situated approximately three feet above the wash floor, supported by log piles treated with tar or creosote that are arranged against concrete abutments. The superstructure consists of a concrete deck covered with asphalt with timber posts lining the sides of the deck which support the metal guardrails. The structure appears to be in good condition.

Tarantula Ditch Bridge is situated approximately three feet above the wash floor, supported by log piles treated with tar or creosote arranged against timber abutments. The superstructure consists of a laminated wood and concrete deck, with timber posts lining the deck that support timber guardrails. The structure appears to be in good condition with some checks and staining in the wood.

Sutro Ditch Bridge is situated approximately three feet above the wash floor, supported by log piles treated with tar or creosote arranged against timber abutments. The superstructure consists of a laminated wood and concrete deck, with timber posts lining the deck that support timber guardrails. Metal guardrails on wooden posts also lead to the bridge at the road approaches. The structure appears to be in good condition with some checks and staining in the wood.

Acari Ditch Bridge is situated approximately seven feet above the wash floor, supported by redwood log piles treated with tar or creosote arranged against concrete abutments. The superstructure consists of a concrete deck covered with asphalt, with timber posts lining the deck that supports metal guardrails. Metal guardrails on wooden posts also lead to the bridge at the road approaches. The structure appears to be in good condition.

The bridges' substructure materials and construction style are characteristic of the time at which they were built (1931). Likewise, the wooden barriers/railings along the bridge deck portray a character reminiscent of past eras. As seen from the channel washes, the bridges add to the rural character and unique past of the area. From the roadway itself, the bridges are less notable.

Figure 3. View from Bridge over Aztec Ditch

View Approaching Aztec Bridge



View from Aztec Ditch



Source: CNS, November 2018

Figure 4. View from Bridge over Tarantula Ditch

View from Tarantula Bridge



View from Tarantula Ditch



Source: CNS, November 2018

Figure 5. View from Bridge over Sutro Ditch

View from Sutro Bridge



View from Sutro Ditch



Source: CNS, November 2018

Figure 6. View from Bridge over Acari Ditch

View from Acari Bridge



View from Acari Ditch



Source: CNS, November 2018

Impact Analysis:

a) and b) No Impact. The Project area does not include any scenic vistas or scenic resources and is not located near a State Scenic Highway. Therefore, no impact would occur.

c) Less than Significant Impact. The Project is located in a non-urbanized area. The new modern bridges would be similar in size, alignment, and elevation to the existing timber bridges. Once construction is completed the general character and aesthetic quality of the roadway and bridge structures are expected to be compatible with the existing visual character of the landscape. Therefore, the Project is not anticipated to degrade the overall visual quality of the existing corridor, block existing views, or negatively affect viewers. During construction, measure **VIA-1** would be implemented to minimize visual impacts of construction activities. Impacts to visual resources would be minimized to a less than significant level.

d) No Impact. The Project would not install any new permanent lighting and construction would primarily be limited to daylight hours. Therefore, the Project is not anticipated to result in new light or glare sources that would affect day or nighttime views of the area. Therefore, no impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

The following minimization measure would be implemented as part of the Project to reduce potential impacts on aesthetic resources. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

VIA-1: The construction contractor shall preserve existing vegetation where feasible, use the existing roadway right of way for storage and laydown areas, limit construction to daylight hours, as feasible, and minimize the use of lighting to only what is required for directional and safety purposes to reduce the effects of construction on the visual environment.

4.2 Agriculture and Forest Resources

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the California Department of Conservation Farmland Mapping and Monitoring Program, the 2016 Riverside County Important Farmland Map (California Department of Conservation 2016a), and a Williamson Act records search.

Regulatory Setting:

The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California’s agricultural resources. Agricultural land is rated according to soil quality and irrigation status; the best quality land is called Prime Farmland. The maps are updated every two years with the use of a computer mapping system, aerial imagery, public review, and field reconnaissance.

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, 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.

Environmental Setting:

The Land Use Plan in the County of Riverside General Plan identifies the Project area as “Open Space Rural”. The Project area is classified as ‘Other Land’ by the California Department of Conservation Farmland Mapping and Monitoring program. ‘Other Land’ is defined as land not included in any other mapping category (i.e., vacant and nonagricultural land surrounded by urban development and greater than 40 acres).

The Project area is characterized by rural, relatively undisturbed natural open space, containing ephemeral sandy channels and desert vegetative communities. Forests and timberlands are not present within the Project area.

Impact Analysis:

a) through e) No Impact. No unique or prime farmlands exist within proximity to the Project area and no conversion of prime farmland, unique or farmland of local importance would result from the Project. The proposed Project would not conflict with existing zoning for agricultural use, or a Williamson Act contract as there are no parcels under a Williamson Act contract within the Project area. There are no forests or timberlands within the Project area. Therefore, no impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.3 Air Quality

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the Riverside County General Plan Air Quality Element, 2016 South Coast Air Quality Management District’s Air Quality Management Plan, and the Construction Emissions Analysis prepared for the Project.

Regulatory Setting:*Federal Clean Air Act*

The Federal Clean Air Act is the primary federal law that governs air quality while the California Clean Air Act is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and State Ambient Air Quality Standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM)—which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM₁₀) and particles of 2.5 micrometers and smaller (PM_{2.5})—and sulfur dioxide (SO₂).

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD or District) was created to ensure regional and local compliance with the Federal Clean Air Act and to implement the state air quality program. The SCAQMD prepared the 2016 Air Quality Management Plan (AQMP) which is a tool used to identify strategies for meeting state and federal ambient air quality standards. The SCAQMD coordinates with local planning agencies to determine assumptions and projections that inform the significance thresholds and strategies that are required to meet compliance standards. If a project exceeds the SCAQMD significance thresholds and cannot implement mitigation measures that reduce the impact level to less than significant, then the project would conflict with the AQMP.

Environmental Setting:

The proposed Project is within the Mojave Desert Air Basin (MDAB) which falls under the SCAQMD jurisdiction and the 2016 AQMP. The MDAB, comprised of 21,000 square miles, encompasses the eastern portion of Riverside County consisting of the Palo Verde Valley along with portions of Los Angeles, Kern and San Bernardino Counties. Air quality conditions in the Riverside County MDAB are partly under the jurisdiction of the SCAQMD and partly under the jurisdiction of the Mojave Desert Air Quality Management District (MDAQMD).

The Riverside County General Plan Air Quality Element provides the six-criteria air pollutant attainment status for each air basin within the County. As identified in the Air Quality Element, the MDAB is designated as a non-attainment area for federal and state O₂ standards. The MDAB is designated as a non-attainment area for state PM₁₀ standards, but as an attainment unclassified area for Federal standards (after meeting federal attainment standards, the MDAQMD discontinued monitoring efforts; consequently, it cannot be given full attainment status). The MDAB is designated as an attainment area for federal and state CO, NO₂, SO₂, and Lead standards.

Impact Analysis:

a) and b) Less Than Significant Impact. During construction, short-term degradation of air quality may occur due to fugitive dust generated by construction activities involving clearing vegetation, demolishing existing bridges, site grading, and reconstructing the four bridges. If construction activities are not properly controlled, they could temporarily generate small amounts

of fugitive dust which is attributed to impacting air quality. In addition, particulate emissions from diesel-powered construction equipment such as excavators, trucks, and pile drivers, is also anticipated.

The SCAQMD’s Road Construction Emissions Model, Version 8.1.0 was used to estimate construction emissions for the Project. As such, the construction phase regional emissions were compared to the SCAQMD “significance” thresholds, which are as follows:

- 100 pounds per day of No_x
- 75 pounds per day of volatile organic compounds (VOC)
- 150 pounds per day of PM_{10}
- 55 pounds per day of $\text{PM}_{2.5}$
- 150 pounds per day of SO_x
- 550 pounds per day of CO
- 10,000 metric tons/year of carbon dioxide equivalent (CO_2_e) for industrial facilities

Projects with construction-related emissions that exceed any of these emission thresholds are considered significant.

Table 2 below, summarizes emissions of criteria pollutants per phase and the maximum emissions in pounds/day; emissions include both vehicle exhaust and fugitive dust.

Table 2. Estimated Construction Emissions of Criteria Pollutants (lbs./day)

Project Phase	No_x	VOC	Total PM_{10}	Total $\text{PM}_{2.5}$	So_x	CO
Grubbing/Land Clearing	0	0	0	0	0	0
Grading/Excavation	74.0	7.6	9.1	4.1	0.2	69.4
Drainage/Utilities/Sub-Grade	50.5	5.3	8.0	3.2	0.1	50.8
Paving	7.7	0.8	0.4	0.3	0.1	12.7
Maximum (pounds/day)	74.0	7.6	9.1	4.1	0.2	69.4
SCAQMD Threshold	100	75	150	55	150	550
Exceeds Threshold?	No	No	No	No	No	No

As shown in the table above, construction emissions would not exceed SCAQMD thresholds.

The Project would replace four existing bridge structures which would not increase the number of travel lanes or facilitate additional vehicle trips or traffic. Therefore, the Project would not result in any change in long-term regional emissions or exceed the SCAQMD’s significance threshold and would not conflict with or obstruct implementation of the 2016 AQMP. In addition, the Project is exempt from air quality conformity per 40 CFR 93.126 because the Project is classified as a Safety-Railroad/Highway Crossing project. Projects that are exempt from conformity are generally those that are air quality neutral and include safety, mass transit, air quality (i.e., ride-share, bicycle

and/or pedestrian facilities) and other similar projects. To further reduce the effects of construction activities on air quality, measures **AQ-1** through **AQ-3** would be implemented. Therefore, air quality impacts would be less than significant.

c) and d) No Impact. A sensitive receptor is a person or population group who is particularly susceptible to health effects due to exposure to an air contaminant, such as children and the elderly. Sensitive receptors include schools, hospitals, retirement homes and residences where occupants include these sensitive groups.

The Project is located on a frontage road in a remote area. The closest residential area is approximately 11 miles northwest of the bridge over Aztec Wash. Therefore, the Project would not expose sensitive receptors to a substantial concentration of pollutants or other emissions, including emissions leading to odors that would adversely impact a substantial number of people.

Avoidance, Minimization and/or Mitigation Measure(s):

Implementation of the following minimization measures would address temporary air quality effects related to construction activities. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

AQ-1: During clearing, grading, earthmoving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering, or other dust preventive measures using the following procedures as specified in the South Coast Air Quality Management District Rules and Regulations:

- Onsite vehicle speed shall be limited to 25 miles per hour;
- All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering should occur at least twice daily with complete coverage preferable in the late morning and after work is done for the day;
- All material transported onsite or offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust;
- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive dust;
- Visible dust beyond the property line emanating from the Project shall be prevented to the maximum extent feasible.

AQ-2: Ozone precursor emissions from construction vehicles shall be controlled by maintaining equipment engines in good condition and properly tuned per manufacturer's specifications, to the satisfaction of the resident engineer.

AQ-3: All trucks that are to haul excavated or graded material onsite shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b), I(2) and I(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

4.4 Biological Resources

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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 Game or U.S. Fish and Wildlife Service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section is based on the *Natural Environment Study (Minimal Impacts)* (February 2020), *Biological Assessment* (February 2020), *Jurisdictional Delineation Report* (August 2019) and U.S. Fish and Wildlife Service Informal Consultation Letter (July 2020).

Regulatory Setting:

Federal and State Special-Status Species

Under Section 7 of the Federal Endangered Species Act, federal agencies are required to consult with the U.S. Fish and Wildlife Service (USFWS) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat.

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing the CESA. The CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. Species listed under FESA and CESA that require a Biological Opinion under Section 7 may also need a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

Under the Migratory Bird Treaty Act (MBTA), the killing, possessing, or trading of migratory birds is prohibited unless exempt by regulations prescribed by the Secretary of the Interior. The MBTA prohibits the possession of protected bird species and their nests, regardless of whether nests are active.

Birds of prey, such as owls and hawks, are protected in California under provisions of the State Fish and Game Code, which states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

Clean Water Act (1972)

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The following are important CWA sections related to wetland and riparian habitat:

- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the state that the discharge will comply with other provisions of the act.
- Section 402 establishes the National Pollutant Discharge Elimination System (NPDES), a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation’s waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. EPA.

Environmental Setting:

The Project's biological setting and affected environment was determined based on a Biological Study Area (BSA) for each bridge, which included the proposed Project disturbance limits and a 300-foot buffer (see **Figure 7** through **Figure 10**). A reconnaissance survey and habitat assessment for plants, animals, and natural communities were performed in each of the four BSAs, and the BSAs were reviewed for potential sensitive biological and aquatic resources. The project sites were evaluated for over 136 special-status plant and wildlife species. Focused surveys were performed for desert tortoise, burrowing owl, rare plants, and special-status bats. None of these species were found during focused studies.

No sensitive natural vegetation communities were identified within the BSAs. However, the Project occurs within the federally designated Critical Habitat for desert tortoise. The creosote bush scrub and desert wash vegetation communities provide low quality Physical Biological Features (PBFs) necessary for the species' conservation. The BSAs occur near the edge of desert tortoise Critical Habitat and maintaining unimpeded movement, including via bridge undercrossings, within and among populations throughout the Chuckwalla Valley is essential for the conservation of desert tortoise.

Figure 7. Biological Study Area at Aztec Ditch Bridge



Figure 8. Biological Study Area at Tarantula Ditch Bridge



Figure 9. Biological Study Area at Sutro Ditch Bridge



Figure 10. Biological Study Area at Acari Ditch Bridge



The vegetation communities and land use type mapped within the BSAs of each bridge were similar, which was expected as the bridges occur within the same geographic area and within relatively short distance from each other (see **Figure 11** to **Figure 14**). Two vegetation communities and one land use type were identified within the BSAs: creosote bush scrub, desert wash, and developed/disturbed, respectively. **Table 3** below, provides a summary of the vegetation communities and land use types within each of the BSAs.

Table 3. Summary of Vegetation Communities and Land Use Type within the BSAs

Vegetation Community	Aztec Ditch Bridge (acres)	Tarantula Ditch Bridge (acres)	Sutro Ditch Bridge (acres)	Acari Ditch Bridge (acres)
Creosote Bush Scrub	18.96	19.02	20.38	17.48
Desert Wash	4.27	3.94	3.06	2.82
Developed/Disturbed	1.50	1.41	1.30	1.11
Total within Study Area (acres)	24.73	24.37	24.74	21.41

The creosote bush scrub vegetation community is dominated by creosote bush but may also include other shrubs, such as white bursage. The community may also include a low cover of emergent trees, such as smoketree, catclaw acacia, and palo verde, as well as seasonal annuals or perennial grasses. Within the bridge BSAs, the community is composed primarily of creosote bush, white bursage, cheesebush, kidney leaf buckwheat, and Thomas' eriogonum, along with other small herbaceous species.

The desert wash vegetation community occurs within Aztec Ditch, Tarantula Ditch, Sutro Ditch, and Acari Ditch BSAs. The bottom of the channel washes is composed of coarse sandy soil splays from past rain events. The channel washes have no vegetation or are sparsely vegetated with species from the adjacent creosote bush scrub vegetation communities described above. Within the bridge BSAs, cheesebush and palo verde were observed sparsely scattered within and adjacent to these desert washes.

The developed/disturbed land use type was designated for the existing paved roadway and shoulders that have been mechanically disturbed by road maintenance activities.

Figure 11. Vegetation Communities/Land Use Types at Aztec Ditch Bridge

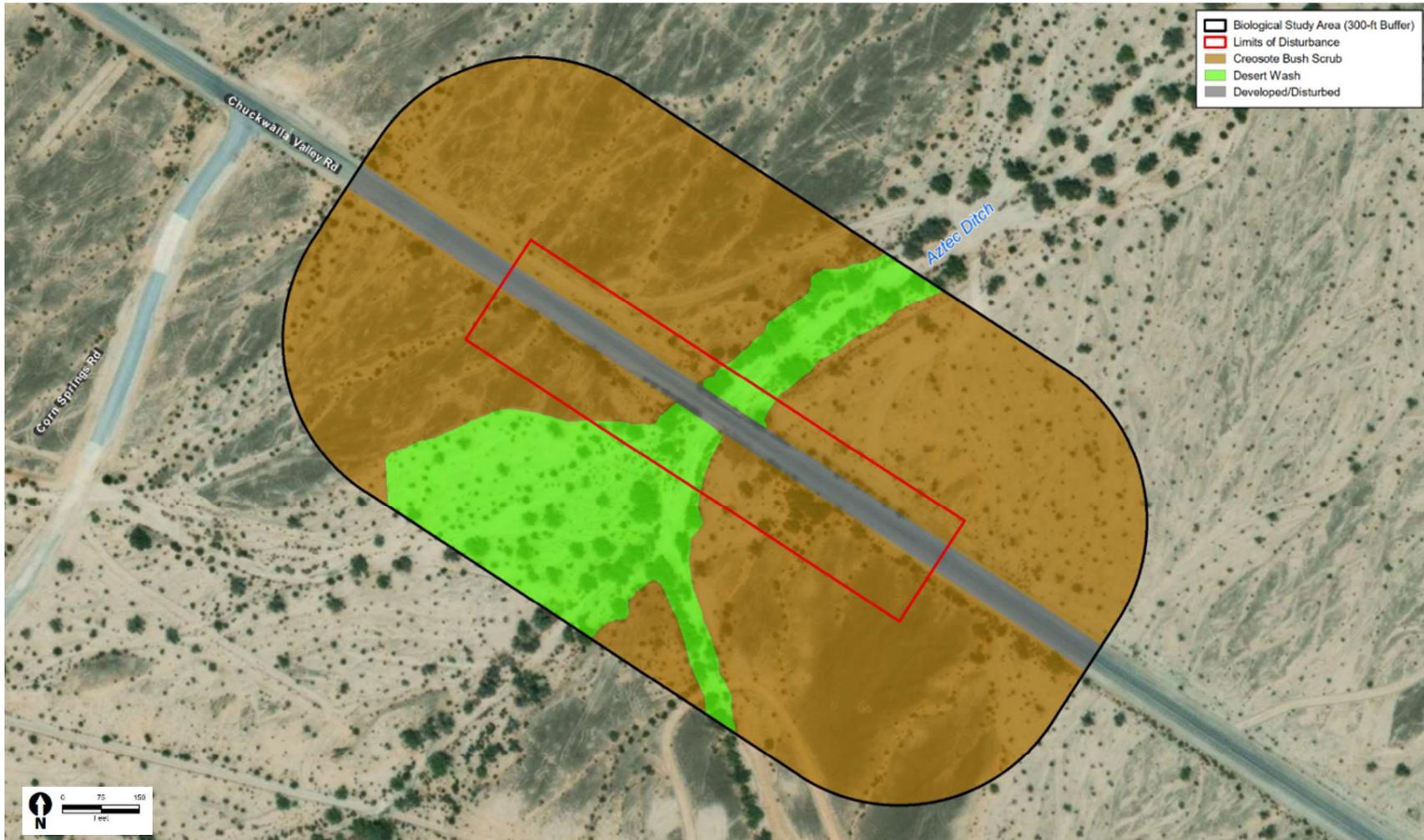


Figure 12. Vegetation Communities at Tarantula Ditch Bridge

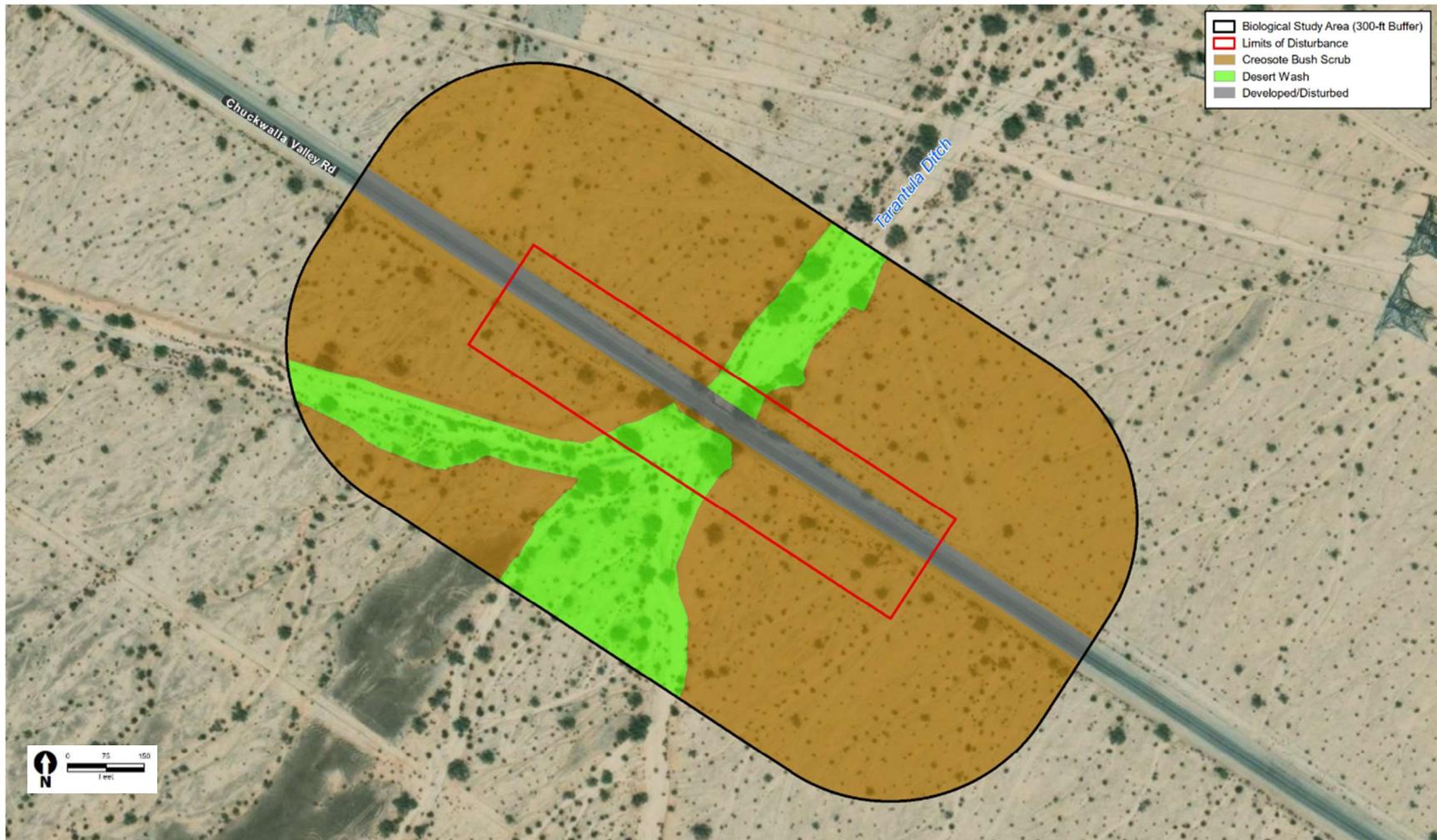


Figure 13. Vegetation Communities at Sutro Ditch Bridge

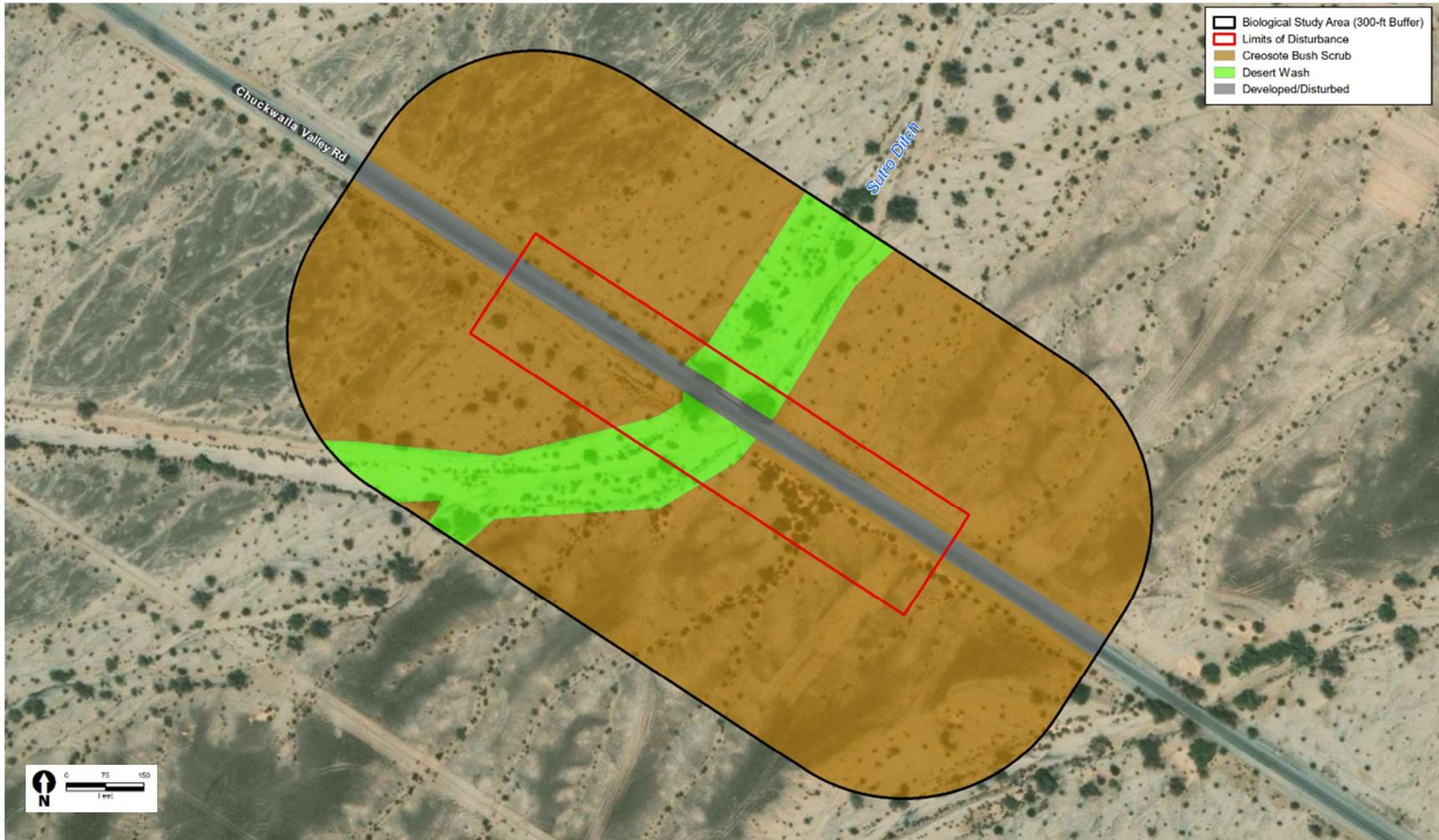
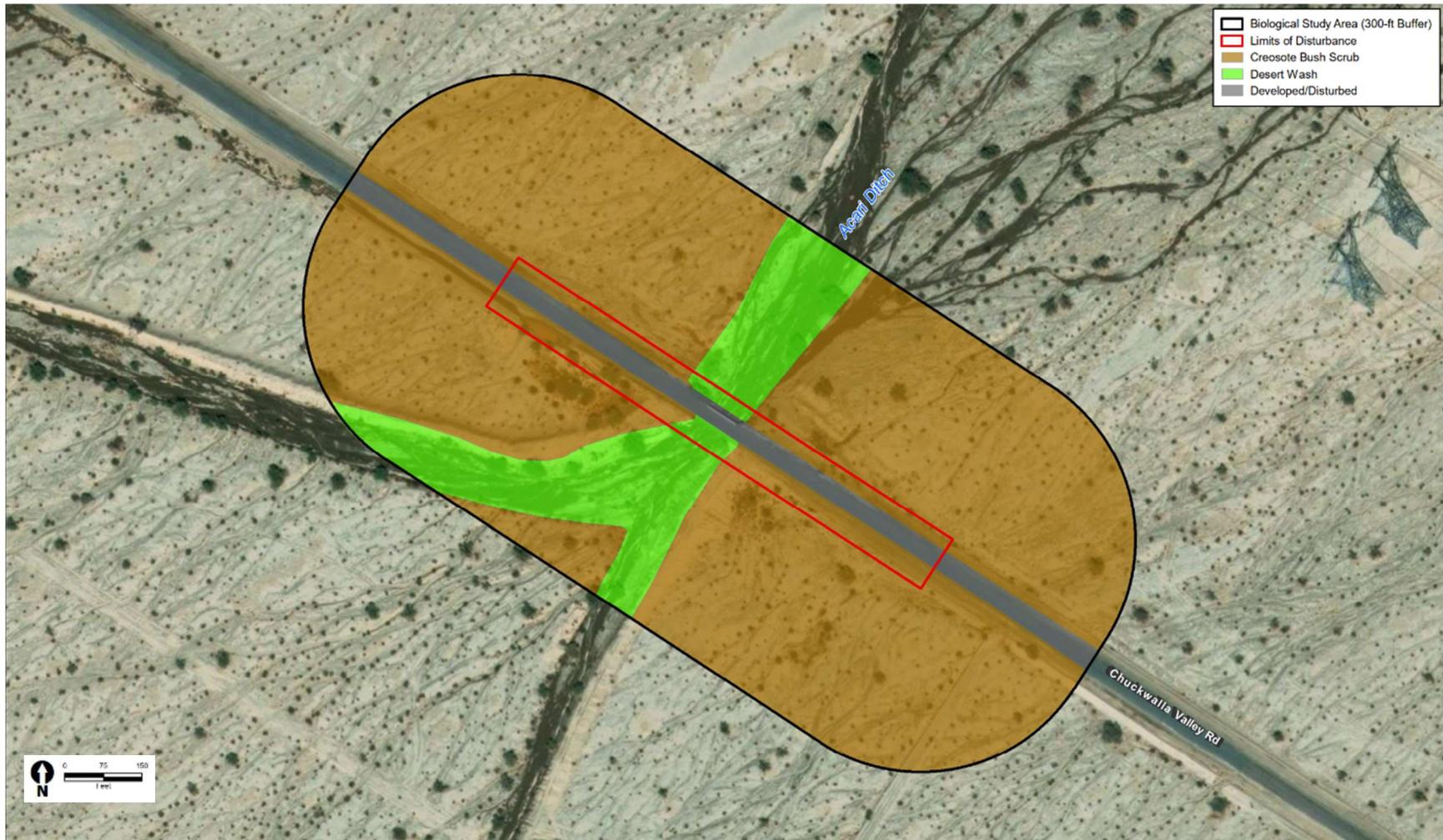


Figure 14. Vegetation Communities at Acari Ditch Bridge



Based on the literature search and field review, additional focused surveys were conducted for special-status plants and mammals, burrowing owls, desert tortoise, special-status bats, wildlife corridors, and jurisdictional waters. Below is a description of each survey, the methods used, and results.

Special-Status Plants

Review of relevant literature indicated 28 special-status plant species had the potential to occur within the BSAs. After further evaluation, suitable habitat was present for 22 special-status plant species. However, none of these species were found during the rare plant focused surveys. Therefore, no impacts on special-status plants species would occur and no measures are required.

Similar to the special-status plant species review, of the 12 special-status animal species with potential to occur within the BSAs, suitable habitat was present for 7 species: desert tortoise (federally and state-listed as endangered), burrowing owl (species of special concern [SSC]), Western mastiff bat (*Eumops perotis californicus*, SSC), Pallid bat (*Antrozous pallidus*, SSC), desert bighorn sheep (*Ovis canadensis nelsoni*, California Fully Protected Species), American badger (*Taxidea taxus*, SSC) and loggerhead shrike (SSC). A reconnaissance survey and habitat assessment for plant, animals, and natural communities were performed in each of the four BSAs, and the BSAs were reviewed for potential sensitive biological and aquatic resources. Vegetation communities were mapped on an iPad with integrated aerial-based imagery. All the BSAs were fully accessible as lands occurred within the County right of way. A habitat assessment and focused survey for special-status plants were conducted in May and October of 2017. Due to slight revisions of the study areas, additional site visits were performed at each bridge in the spring of 2019 to ensure all areas of the BSA were studied for rare plants. The Guidelines for Conducting and Reporting Botanical Inventories (USFWS 2000) was followed. To ensure each target special status species was detected during the blooming period, the 2017 survey was performed during three separate survey windows (spring, summer, and fall season) to increase species detection. If feasible, reference populations were visited to determine whether known populations of target species were in bloom during the survey windows. The 2019 focused surveys were performed in the late spring based on the special-status species having potential to occur with the expanded BSAs of each bridge.

Of the 28 special-status plant species evaluated for the proposed Project, suitable habitat was present for 22 special-status plant species. The special-status plants with suitable habitat are chaparral sand-verbena (*Abronia villosa* var. *aurita*), Harwood's milk-vetch (*Astragalus insularis* var. *harwoodii*), pink fairy-duster (*Calliandra eriophylla*), Emory's crucifixion-thorn (*Castela emoryi*), Las Animas colubrina (*Colubrina californica*), spiny abrojo (*Condalia globosa* var. *pubescens*), Alverson's foxtail cactus (*Coryphantha alversonii*), glandular ditaxis (*Ditaxis claryana*), California ditaxis (*Ditaxis serrata* var. *californica*), Harwood's eriastrum (*Eriastrum harwoodii*), Abram's spurge (*Euphorbia abramsiana*), Utah vine milkweed (*Funastrum utahense*), ribbed cryptantha (*Johnstonella costata*), Torrey's box-thorn (*Lycium torreyi*), Darlington's blazing star (*Mentzelia puberula*), desert beardtongue (*Penstemon pseudospectabilis* ssp. *pseudospectabilis*), narrow-leaf sandpaper-plant (*Petalonyx linearis*), desert unicorn-plant (*Proboscidea althaeifolia*), Orocopia sage (*Salvia greatae*), desert spike moss (*Selaginella eremophila*), Cove's cassia (*Senna covesii*), and Palmer's jackass clover (*Wislizenia refracta* ssp. *palmeri*). None of these species were found during the rare plant focused studies within each of the BSAs.

Special Status Mammals

The BSAs provides suitable habitat for desert bighorn sheep and American badger to forage while moving between the Chocolate Mountains and Palen McCoy Mountains. Desert bighorn sheep typically spend most of their time in high elevations with rocky steep terrain and sparse vegetation; however, this species may use the washes as a water source and for foraging. Valleys are used to move between mountain ranges to access more resources or lambing habitat. Additionally, the BSAs contains open habitat that is suitable for American badger; however, no burrows were observed that were suitable for American badger during field surveys.

Burrowing Owl

The desert tortoise is a federally and state-listed threatened species found throughout the Mojave and Sonoran Desert regions within canyons, washes, rocky foothills, alluvial fans, and other open areas. The species is found within succulent scrub, creosote bush scrub, and blue paloverde (*Parkinsonia florida*)-ironwood (*Olneya tesota*)-smoke tree (*Psoralea argemone*) vegetation communities high in species richness (USFWS 2009). The desert tortoise inhabits burrows and is most active from March through June and from September through October.

A habitat assessment for burrowing owl (a state SSC) consisted of a pedestrian survey within the BSAs. The burrowing owl survey consisted of a 500-foot buffer around each of the existing bridge locations. Physical access occurred only within the BSAs and a visual assessment using binoculars was used for the additional 200-foot buffer area due to access restrictions. Following the habitat assessment, a focused survey was initiated. The focused survey was conducted on four separate visits from February 15 to July 15, 2017, to identify potential suitable habitat for burrowing owl. The survey results concluded that there is a total of 89.93 acres of suitable habitat for burrowing owls; however, no burrowing owls or signs of burrowing owls (i.e., whitewash, tracks) were found.

Special-Status Bats

Based on the literature review and reconnaissance survey, western mastiff bat (CA SSC) and pallid bat (CA SSC) could potentially occur within the BSA. These bat species are known to roost in tree crevices, bridges, rock crevices, caves, culverts, and buildings.

A habitat assessment was performed in June 2017 to evaluate the presence of potential bat roosts within the BSA of each bridge. Each bridge was closely reviewed for potential structures and conditions suitable for bat roosts. In July 2017, a focused emergence survey for colonial bats was performed by visually observing bridges at dusk when bats would be emerging from their roosts and foraging. Bat echolocation calls were recorded using Anabat Bat Detection System and analyzed using Sonobat software to identify the bat species in the vicinity of the bridges. No signs of bat roosting, such as guano or urine stains, were observed during the habitat assessment of the bridges. One species of bat, the canyon bat, was documented during the acoustic surveys. Canyon bat is common regionally and could potentially roost within the bridges or in rock outcrops in the area.

No special-status bats were documented during acoustic and emergence surveys; therefore, they are not expected to occur. Based on the habitat evaluation, the four bridges are not expected to support large colonial bat roosts but are suitable for individual bats for a stop-over visit.

Desert Tortoise

The desert tortoise is a federally and state-listed threatened species found throughout the Mojave and Sonoran Desert regions within canyons, washes, rocky foothills, alluvial fans, and other open areas. The species is found within succulent scrub, creosote bush scrub and blue paloverde paloverde (*Parkinsonia florida*)-ironwood (*Olneya tesota*)-smoke tree (*Psoralea argophylla*) vegetation communities high in species richness (USFWS 2009). The desert tortoise inhabits burrows and is most active from March through June and from September through October. Protocol surveys for desert tortoise were performed in May 2017 and April 2019. The survey completed in 2017 used the 2010 protocol methodology and was conducted throughout the Project's Limit of Disturbance (LOD). The survey completed in 2019 followed the 2018 USFWS Guidance using the Small Project survey method. This survey consisted of evaluating the BSA at approximately 30-foot transects to allow for one hundred percent ground coverage.

A total of 89.93 acres of suitable habitat for desert tortoise was found within desert wash and creosote bush scrub communities of the BSAs. However, no desert tortoise or definite tortoise signs were observed during the survey. Since the species was not found during the focused surveys, and no sign of their presence was observed, the species is considered absent.

Wildlife Corridors

During the surveys, the majority of wildlife species detected were birds, followed by mammals and reptiles. Common bird species included northern mockingbird (*Mimus polyglottos*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), mourning dove (*Zenaidura macroura*), rock pigeon (*Columba livia*), cactus wren (*Campylorhynchus brunneicapillus*), and Costa's hummingbird (*Calypte costae*). Two reptiles were observed: gopher snake (*Pituophis catenifer*) and side-blotched lizard (*Uta stansburiana*). Mammals included black-tailed jackrabbit (*Lepus californicus*), woodrat (*Neotoma sp.*), and canyon bat (*Parastrellus hesperus*).

Wildlife movement corridors are habitat linkages used by wildlife for movement between suitable wildlife habitat areas in a region otherwise fragmented by rugged terrain, substantial changes in vegetation communities, or human disturbance. Wildlife corridors are important as they offer species access to resources; allow species dispersal and migration; and facilitate genetic connectivity between populations.

Regionally, the Chuckwalla Valley acts as a natural corridor between the Chuckwalla Mountains and Little San Bernardino Mountains in eastern Riverside County. Most of the areas surrounding the bridges are open and relatively flat. There is low disturbance from human development, with I-10 being the major impediment to wildlife movement in the region. There is a potential that diversion dikes south of Chuckwalla Valley Road could funnel some wildlife toward each bridge undercrossing and provide value for wildlife connectivity. The openness of each bridge undercrossing is sufficient to facilitate movement of species should they choose to move through the washes and under the bridges. However, Chuckwalla Valley Road is for the most part at-grade, and the bridge undercrossings are small compared to the entirety of Chuckwalla Valley Road. In addition, many species, including desert tortoise, can climb the channel dikes and are not restricted to the channel ditches. Because there are no obstructions or barriers that would prevent wildlife from crossing Chuckwalla Valley Road, wildlife is not forced to utilize the bridge undercrossings.

Jurisdictional Waters and Wetlands

In February 2019, a delineation of jurisdictional waters and wetlands was conducted to support the federal and state regulatory permitting processes for the Project. A total of 34 features were mapped within the bridge BSAs. All features consist of ephemeral sandy channels, small shallow channels formed by swales or road runoff, and large channels that have been altered with human-made dikes designed to convey flows toward the bridges. As shown in **Table 4**, a total of 6.23 acres of USACE/RWQCB non-wetland Waters of the U.S. (WoUS), 7.25 acres of CDFW unvegetated streambed, and 1.33 acres of vegetated streambed were mapped within the bridge BSAs. No wetlands were identified within the bridge BSAs. **Figure 15** through **Figure 22** illustrate locations of jurisdictional waters within the bridge BSAs.

Table 4. Summary of Potential USACE, RWQCB, and CDFW Jurisdiction (acres)

Bridge	USACE/RWQCB Non-Wetland	CDFW Unvegetated Streambed	CDFW Riparian
Aztec Ditch	1.86	2.08	0.38
Tarantula Ditch	2.01	2.27	0.51
Sutro Ditch	1.03	1.34	0.33
Acari Ditch	1.33	1.56	0.11
Total	6.23	7.25	1.33

Figure 15. Locations of CDFW Jurisdictional Resources at Aztec Ditch

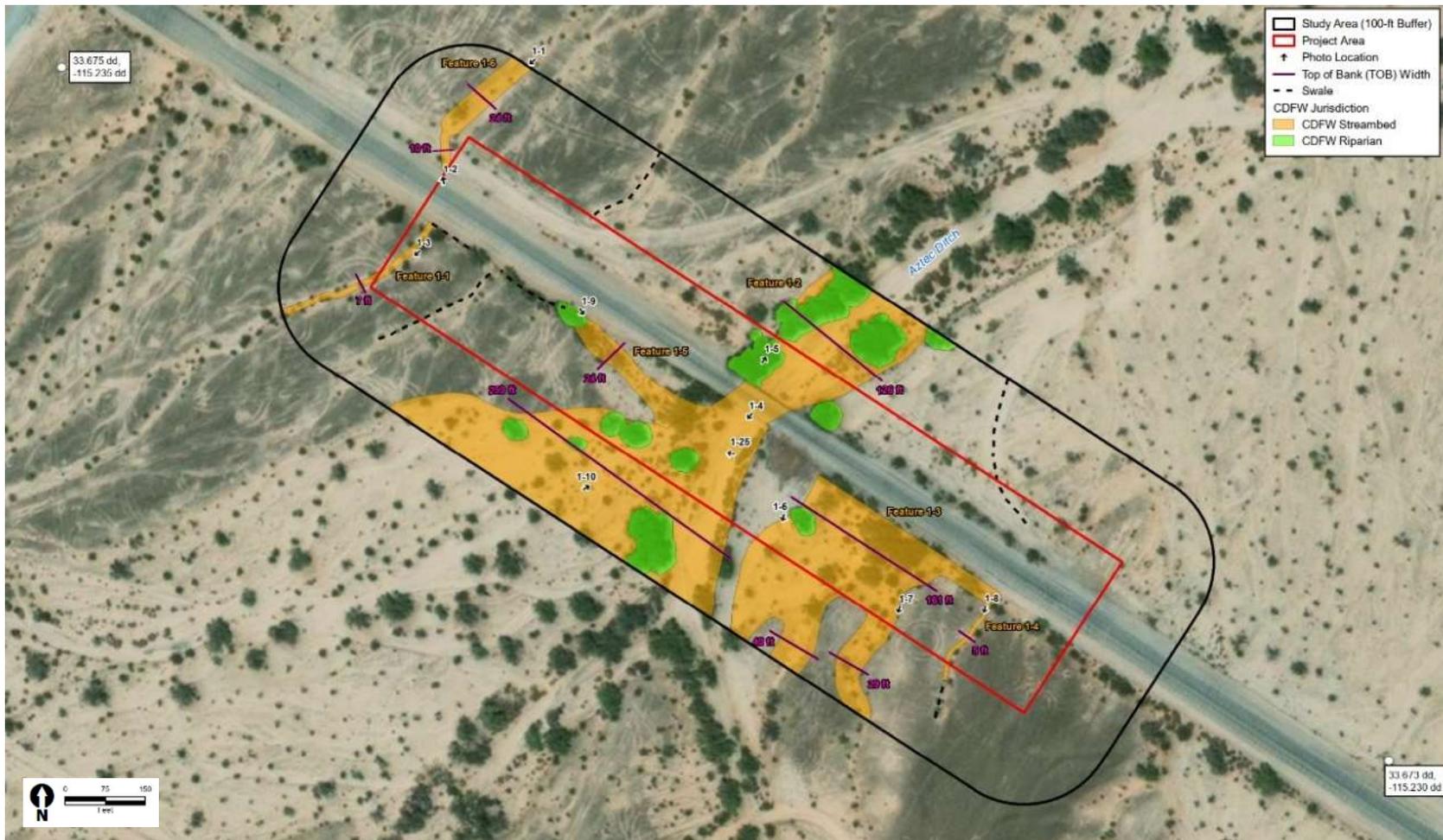


Figure 16. Locations of Non-Wetland Waters of the U.S. at Aztec Ditch

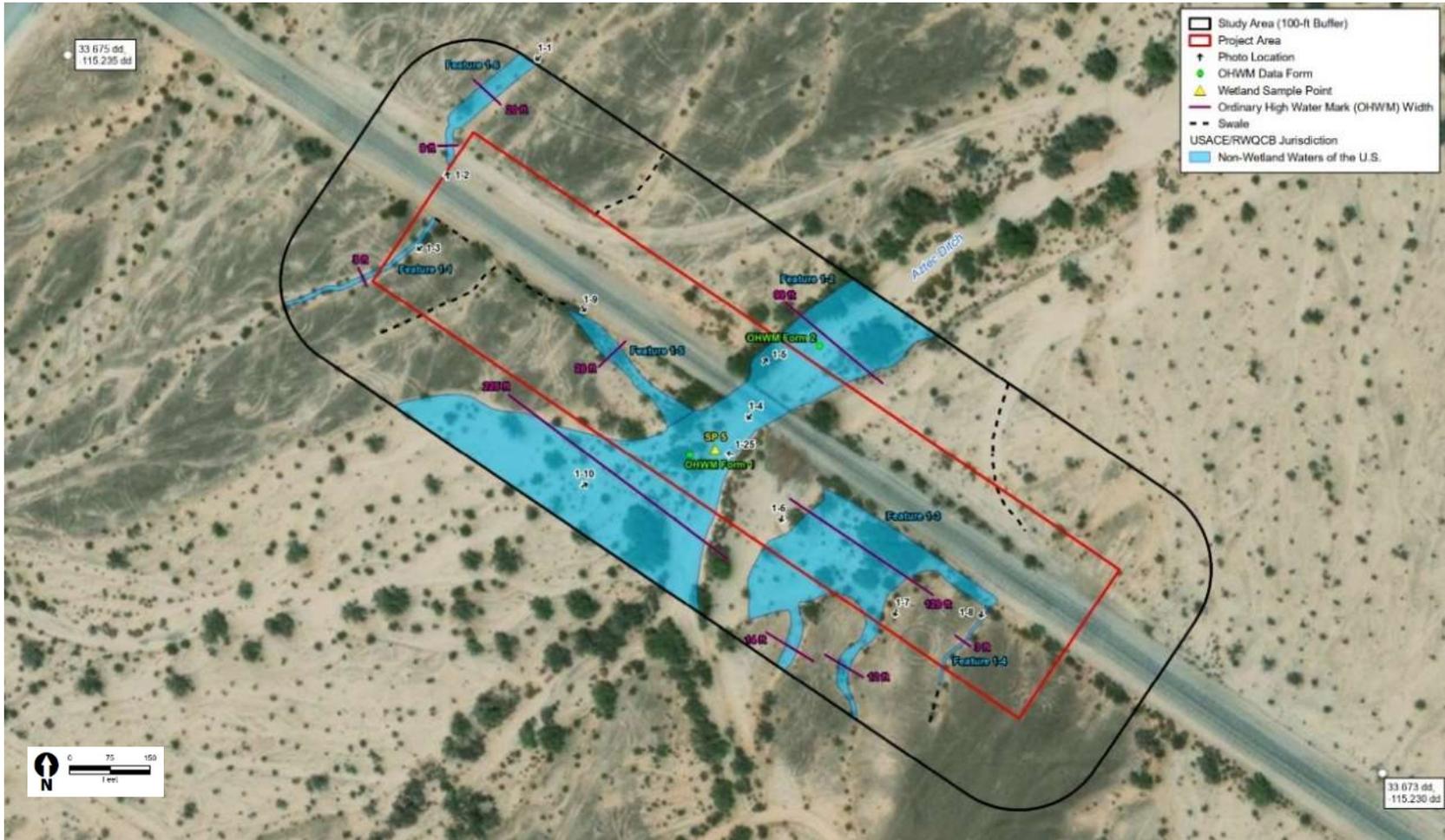


Figure 17. Locations of CDFW Jurisdictional Resources at Tarantula Ditch

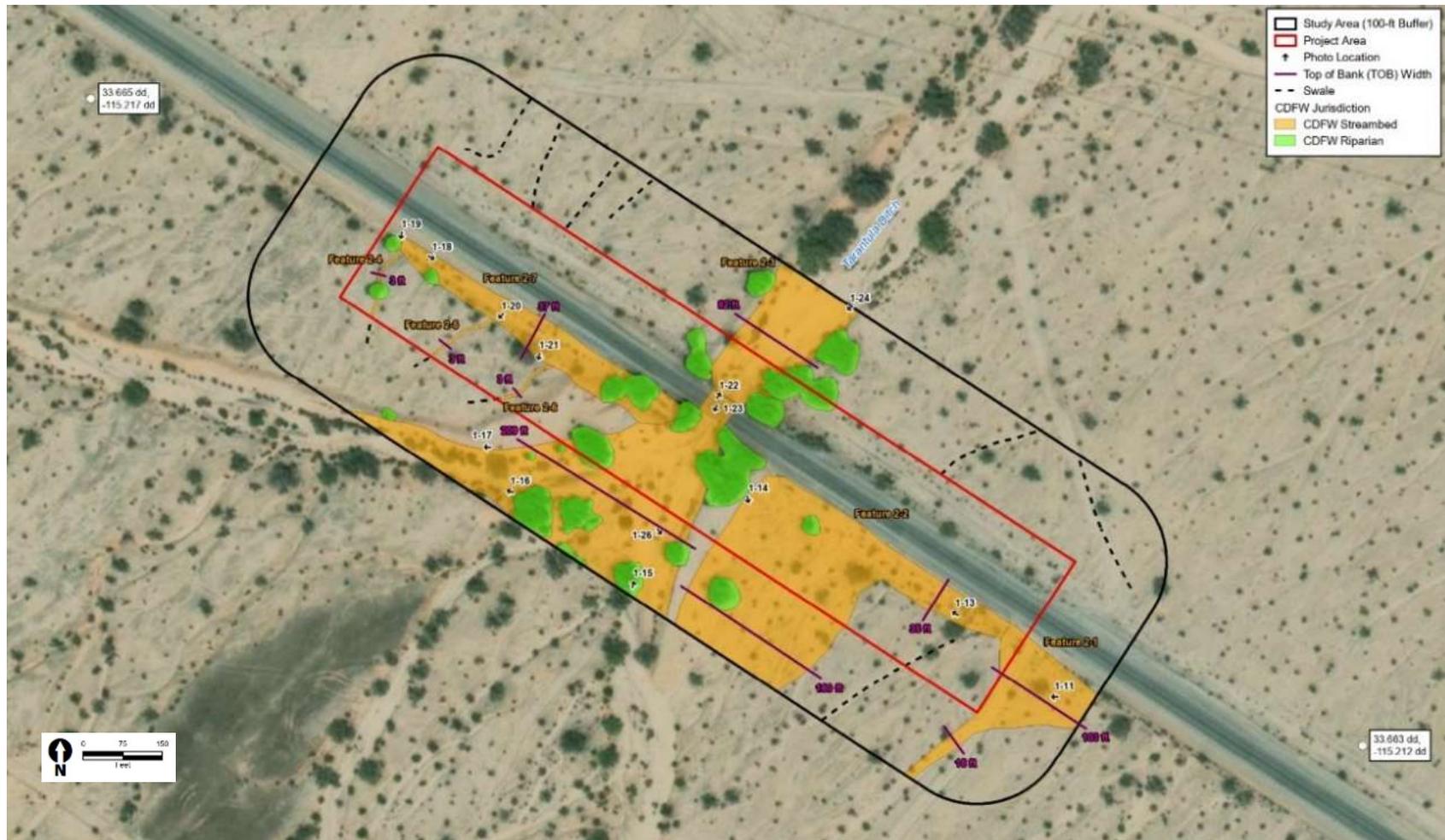


Figure 18. Locations of Non-Wetland Waters of the U.S. at Tarantula Ditch

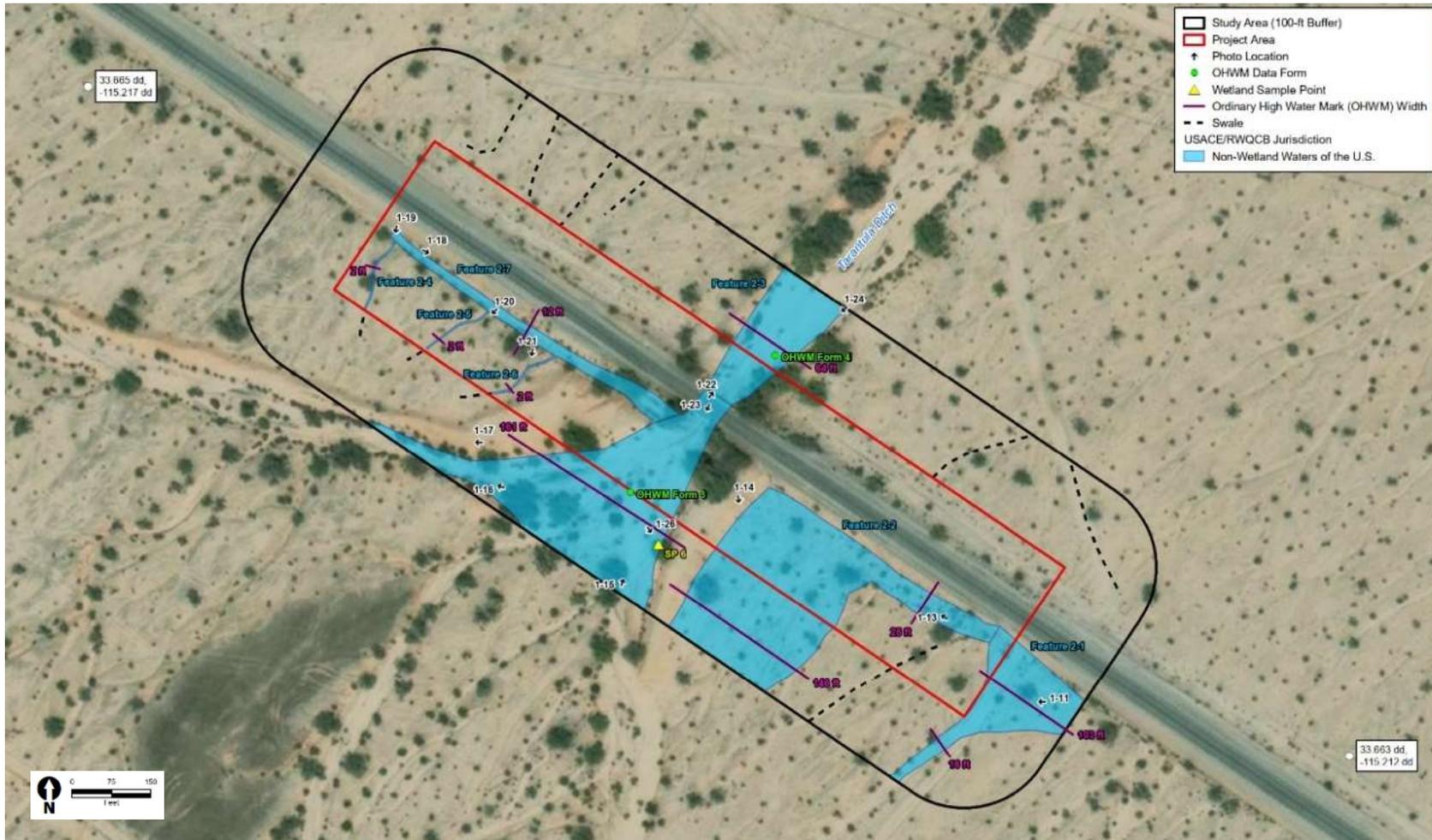


Figure 19. Locations of CDFW Jurisdictional Resources at Sutro Ditch

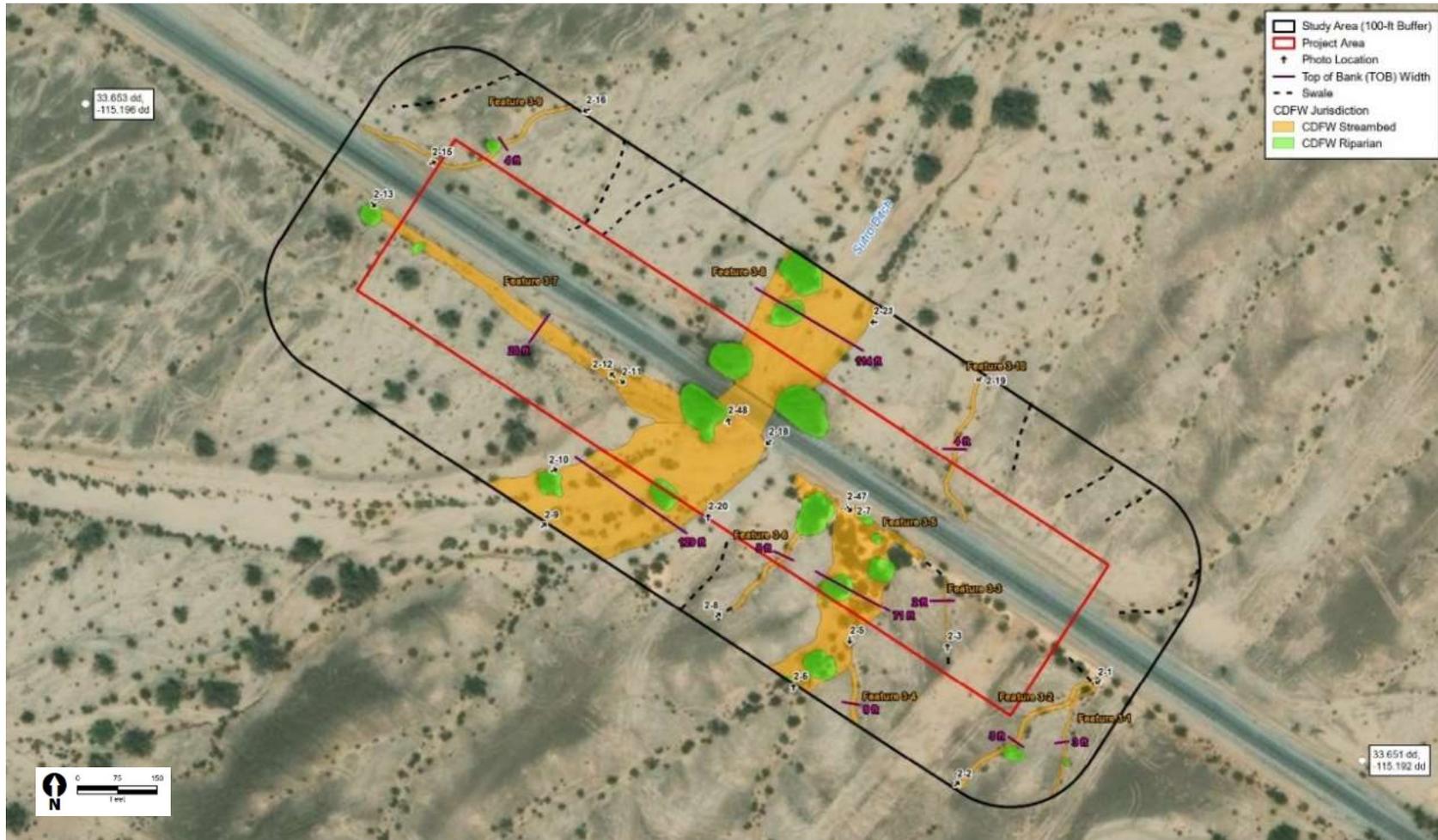


Figure 20. Locations of Non-Wetland Waters of the U.S. at Sutro Ditch

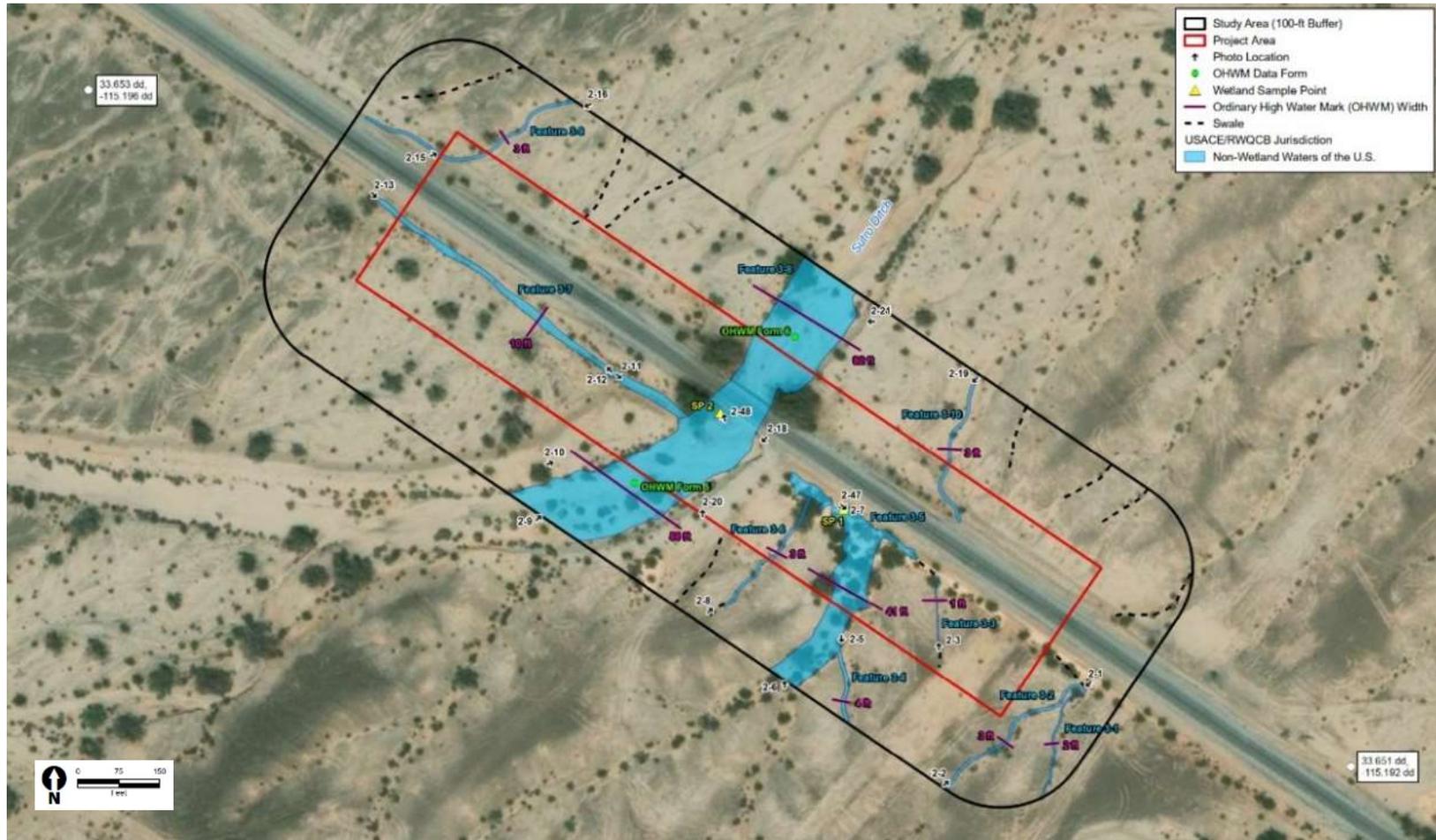
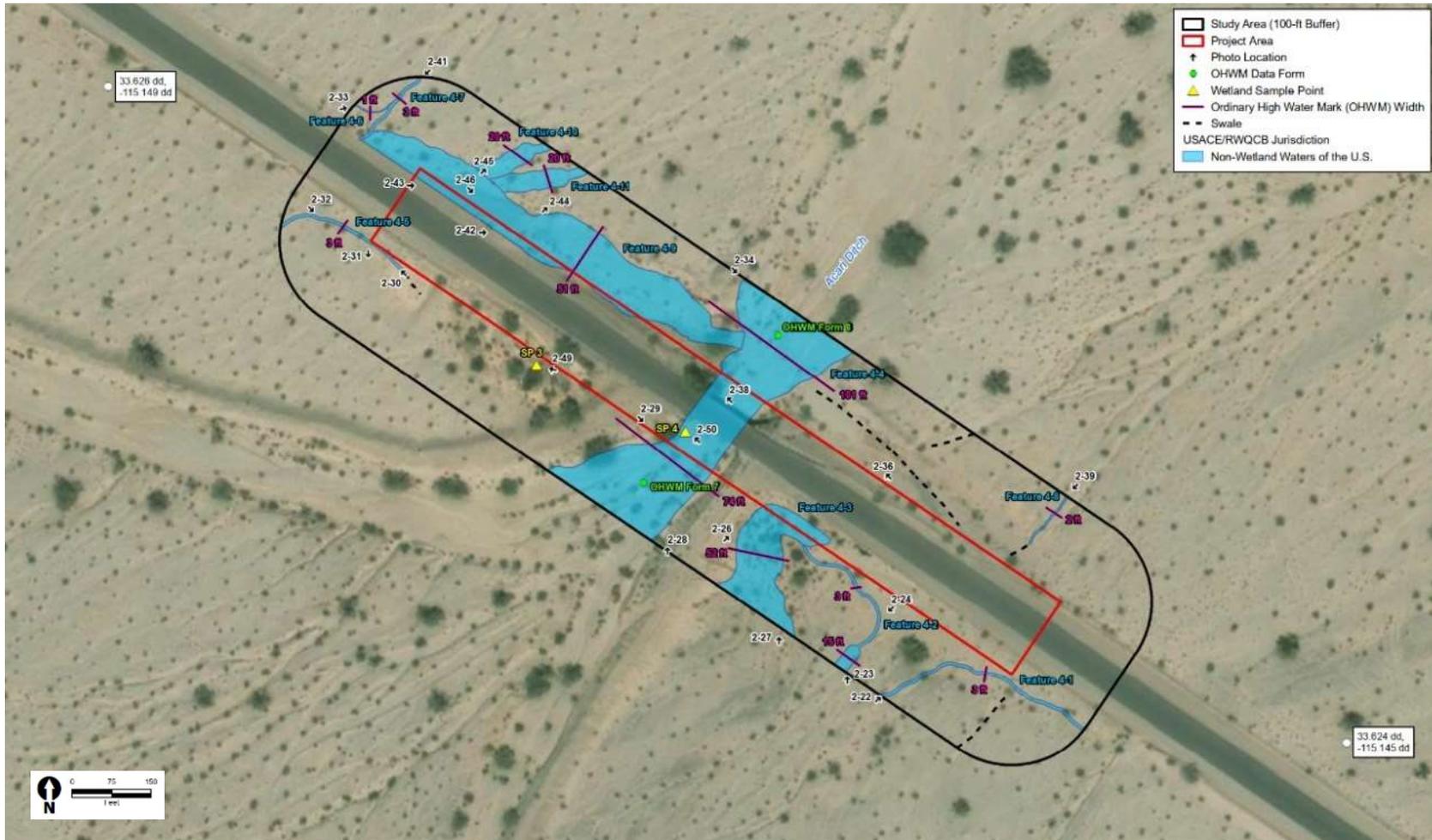


Figure 22. Locations of Non-Wetland Waters of the U.S. at Acari Ditch



Impact Analysis:

a) – f) Potentially Significant Impact. Based on the existing conditions, it is not anticipated for the project to have a significant impact on all subsections under Biological Resources. However, as described in the Environmental Setting section above, there is suitable habitat for desert tortoise, burrowing owl, bats, American badger, desert bighorn sheep, and nesting birds. Additionally, Project-related construction may result in temporary and permanent impacts to wetlands and/or waters of the U.S., non-wetland waters of the U.S. subject to USACE jurisdiction, and/or unvegetated streambed subject to CDFW jurisdiction. Therefore, all subsections under Section 4.4, Biological Resources will be further analyzed and addressed in the EIR.

Avoidance, Minimization and/or Mitigation Measure(s):

Measures to mitigate potentially significant impacts on biological resources will be evaluated in the EIR.

4.5 Cultural Resources

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section is based on a cultural resources literature and records search, a review of the California Native American Heritage Commission’s (NAHC) Sacred Lands File, Native American consultation, and a field survey. Additionally, the information is sourced from the Historic Property Survey Report (HPSR), Historical Resources Evaluation Report, Archaeological Survey Report (ASR), and Department of Parks and Recreation (DPR) Forms (September 2021) and Finding of Effect (June 2022) prepared for the Project.

Regulatory Setting:

National Historic Preservation Act (NHPA)

The National Historic Preservation Act (NHPA) of 1966, sets forth national policy and eligibility procedures for defining significant historic properties defined as districts, sites, buildings, and structures. Significance eligibility is determined based on the integrity of the resource and its association to American history, architecture, and culture. The NHPA’s implementing regulations (36 CFR Par 800) require federal agencies and their designees, permittees, licensees, or grantees to initiate consultation with the State Historic Preservation Office (SHPO). The NHPA also established the National Register of Historic Places (National Register) and procedures for qualifying a historic property for listing in the National Register.

Integrity is the ability of a property to convey its significance. To be listed in the National Register, a property must not only be shown to be significant under the National Register criteria, but it also

must have integrity. The National Register criteria recognize seven aspects or qualities that, in various combinations, define integrity. The criteria include location, design, setting, materials, workmanship, feeling, and association.

California Register of Historical Resources (CRHR)

The CEQA requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as “unique” archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (California Register) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the California Register. Historical resources are defined in PRC Section 5020.1(j). The criteria and integrity evaluation are like the National Register criteria. An eligible resource is identified as a property greater than 50 years old and that meets one or more of the following criteria:

- Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States (Criterion 1).
- Associated with the lives of persons important to local, California or national history (Criterion 2).
- Embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic value (Criterion 3).
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or the nation (Criterion 4).

Under the California Register, integrity is the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Historical resources eligible for listing in the California Register must meet one of the criteria of significance described above and retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Historical resources that have been rehabilitated or restored may be evaluated for listing.

Public Resources Code Section 21083.2

CEQA also requires the consideration of “unique” archaeological resources. Unique archaeological resources are defined in PRC Section 21083.2(g) as an artifact, object, or site that meets the following criteria:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

State CEQA Guidelines Section 15064.5

Section 15064.5 of the State CEQA Guidelines provides guidance on determining the significance of impacts to archaeological and historical resources. A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), shall be considered as mitigated to a level of less than a significant impact on the historical resource.

The lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.

California Code Section 15064.5 provides guidance on determining the significance of impacts to archaeological and historical resources. A project that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment.

The Secretary of the Interior's Standards for the Treatment of Historic Properties

The Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR Part 68, 1995) consists of four treatment standards—Preservation, Rehabilitation, Restoration, and Reconstruction. The Guidelines are intended to promote responsible preservation practices that help protect the nation's irreplaceable cultural resources. Below is a description of the four treatment standards.

- **Preservation** is defined as the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic materials and features rather than extensive replacement and new construction. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a preservation project. However, new exterior additions are not within the scope of this treatment.
- **Rehabilitation** is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.
- **Restoration** is defined as the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time by means of the removal of features from other periods in its history and reconstruction of missing features from the restoration period. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate within a restoration project.
- **Reconstruction** is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location.

Environmental Setting:

The Area of Potential Effect (APE) for the Project includes four discontinuous segments centered around each individual bridge. The APE was established from the Project footprint and includes all potential areas directly or indirectly affected by the Project, all construction areas and construction signage and staging. In total, the discontinuous APE encompasses approximately 13.84 acres and includes the Project footprint plus an approximate 50-foot-wide buffer around the Project footprint. Regarding the vertical limits of the APE, excavations associated with construction of the bridge footings would extend to 20 feet in depth.

Historical Overview:

Regional Development

The Project is in a historically remote area away from centers of development and settlement. From the Spanish exploration era of the Colorado Desert to the present, the regional area has encompassed transportation routes, mining claims, homesteads, military training grounds, farms, and residences. In the 1820s, limited placer mining began in the eastern Colorado Desert. Regionally, mining, and prospecting activities were most intense in the mountains and high deserts of the Mojave, but small-scale mining has been a consistent feature of the Colorado Desert from the 1800s to the present day.

Significant economic development of the Colorado Desert region began in the 1870s and came to fruition in the early part of the twentieth century. Development of transportation came in 1872 with the construction of the Southern Pacific Railroad from Los Angeles to present-day Indio and, eventually, Yuma. The railroad was the single most important boost to mining in the southeastern

Colorado Desert, offering convenient transportation of heavy mining equipment, supplies, personnel, and bullion. By 1880, the Southern Pacific Railroad was providing regional access to gold and silver ore deposits in the Chocolate Mountains, Cargo Muchachos, and Palo Verde Mountains. When mines opened around the turn of the twentieth century, stamp mills and small tracks leading from the mines to the stamp mills were built. Mining productivity in the southeastern Colorado Desert was greatest between 1890 and 1910, with a brief resurgence in the 1930s.

Road and Highway Development in the Inland and Desert Regions of Southern California

State legislation regarding road development began in 1895 when the California Legislature created the Bureau of Highways, which surveyed the state's existing roads and recommended new routes for development. In 1897, the Department of Highways replaced the Bureau of Highways. Passage of the State Highways Act in 1909 replaced the Department of Highways with the new California Highway Commission and empowered the California Department of Engineering to issue \$18 million in bonds for development of an integrated state highway system. The Legislature authorized an additional \$15 million bond issue for highway development in 1915. By the summer of 1919, the State of California had funded a total of \$73 million in highway improvements.

By 1920, the state system included highway segments in Riverside County and three highway routes through the desert directing traffic to and from San Bernardino, Riverside, and Los Angeles. Also, by 1920, a lateral and newly designated state highway route extended east from the trunk-line highway at Indio approximating the old Bradshaw Road route through the Chuckwalla Valley and on to Blythe at the Colorado River. On the national level, a new national highway numbering system took shape during the 1920s. This lateral desert route eventually became designated as a segment of U.S. Highway 60, a transcontinental route from Virginia Beach, Virginia, to Los Angeles. Road builders completed U.S. Highway 60 between Blyth and Indio in 1932. Later planners designated it as a segment of U.S. Highway 70, a transcontinental route initially from Morehead City, North Carolina, to Holbrook, Arizona, that planners extended into California along U.S. 60 and U.S. 99.

U.S. Highway 60/70

U.S. Highway 60/70, along with U.S. Route 66 (Route 66) and U.S. Route 80, are the three primary, early transcontinental automobile routes that had their western termini in Southern California. All three had their origins in early automobile travel across the country and were cobbled together from multiple pre-existing state and local routes. Route 66 and U.S. Highway 80 were the first two routes, established by 1926. U.S. Highway 60/70 was cosigned across the Colorado Desert between Blythe and Beaumont between approximately 1932 until approximately 1966 when I-10 replaced the route.

U.S. Highway 60/70 in 1932 did not compare in usage to Route 66 and U.S. Highway 80. However, by 1933, entries into California via U.S. Highway 60/70 surpassed Route 66 at Daggett and doubled within another year. Traffic across U.S. Highway 60/70 steadily increased from the mid-1930s through World War II. U.S. Highway 60/70 was popular both as a tourist route that carried passengers to the popular travel spots of Redlands, Riverside, and Los Angeles, but also to the newly glamorized destination of Palm Springs. In 1936, the California Department of Agriculture began to track commercial vehicles separately from other traffic. The statistics gathered clearly revealed that U.S. Highway 60/70 was the preferred trucking route. U.S. Highway 60/70 remained the most highly traveled truck route into the post-World War II period. While truck traffic along U.S. Highway 60/70 continued to increase into the 1950s, U.S. Highway 80 became the primary

east-west truck route into Southern California in the post-war era. U.S. Highway 60/70 was cosigned between approximately 1932, when the route was established, until the I-10 and U.S. Highway 60 replaced the route by approximately 1966.

Chuckwalla Valley Road

In 1952, the federal government under the leadership of Dwight D. Eisenhower proposed an interstate highway system which eventually resulted in the passage of the Federal Aid Highway Act of 1956 and facilitated the completion of I-10. Between 1964 and 1967, a new, more direct route through Chuckwalla Valley was determined for the I-10. Construction of the I-10 resulted in grading over and subsuming majority of the original 150-mile-long segment of U.S. Highway 60/70. In some areas, when deemed necessary for a more direct route, the original U.S. Highway 60/70 was severed, leaving small, orphaned segments. Today, approximately 77 miles (51 percent) of the original U.S. Highway 60/70 remains in 16 separate segments ranging from 0.4 mile (Chiriaco Road) to 16.75 miles (Chuckwalla Valley Road). Chuckwalla Valley Road is the longest, most well preserved of the extant, orphaned segment of U.S. Highway 60/70 and most distinctive in terms of embodying engineering techniques developed to maintain automobile travel across challenging desert terrain. Currently, Chuckwalla Valley Road is a local, rural road south of I-10 with associated ditches and dikes, timber bridges/culverts, and C-monuments along its length.

Ditch and Dike System

Traversing the desert has always been a challenge due to difficult topography and limited water availability. Chuckwalla Valley always presented travelers with persistent challenges including shifting sands and sand dunes, intermittent wet/dry lakes, and flash flooding. State of California, Department of Public Works (1993) noted that roads without proper protection from these conditions are subject to serious damage and washouts. To address this problem, the Division of Highways developed what they called the ditch and dike system as a means of protecting the roadbed.

The Division of Highways ditch and dike system did, and still does, provide protection for desert roadways through the Chuckwalla Valley from the ravages of most desert storms. However, in September 1939, a historic-level storm that carried torrential rains washed out 35 miles of highway, several diversion dikes, and approaches to six bridges on U.S. Highway 60/70 between Indio and Blythe. Along this same stretch of road, the storm caused at least six serious road washouts that stopped traffic for five days. The most serious damage occurred between Blythe and Desert Center where the soil is very silty and sandy. The Division of Highways made repairs to the highway and the ditch and dike system to allow continued use, and then between 1944–1961, federal funding was used to re-deck, and reconstruct and widen bridges along Chuckwalla Valley Road. The ditch/dike and bridge/culvert system are still extant along Chuckwalla Valley Road, but only survives in limited form along much smaller orphaned segments of the former highway.

Timber Bridges

Wood stringer bridges are an old type of design that dates to the origins of bridge construction. Timber-stringer bridges are constructed of a series of closely spaced stringers that typically span between timber bents with multiple columns. This type of bridge was generally used for small, straightforward span crossings, such as over ditches/culverts, that presented no engineering difficulties. Even after the availability of other materials such as concrete and steel, timber bridges were still built due to their simplicity and the ready availability of materials. Today, this bridge

type is still constructed utilizing rot-resistant materials, primarily on low-trafficked rural and backcountry roads.

The earliest bridges in California were constructed of timber, most likely because it was the only material available. With the growing demands of automobile usage in the state in the late nineteenth and early twentieth centuries, engineers increasingly chose steel and concrete over timber for bridges and utilized new technological advancements in bridge design. However, despite these design advancements and the availability of new materials, timber bridges were still constructed on primarily secondary or lower-use roads. As of 2004, there were 530 timber-stringer bridges remaining in California that were built before 1960. The majority of these were constructed in the 1930s through the 1950s on local roads; only 16 were built before 1930, and only three before 1920.

Military Land Use and Military Training Activities

Evidence of military training is present across the Mojave and Colorado deserts. Major General George S. Patton's World War II Desert Training Center/California-Arizona Maneuver Area (DTC/C-AMA) and the Cold War-era U.S. Strike Command's Joint Exercise Desert Strike (Desert Strike) have left many artifacts, features, and military training sites across the region. The DTC/C-AMA was established in the 1940s to prepare U.S. troops for possible deployment to North Africa. The Project is on the southern edge of where previous military training took place. The entire APE is within the 18,000-square mile DTC/C-AMA and the Desert Strike exercise area.

Description of Cultural Resources:

Pursuant to sections a and b of 36 CFR 800.4 Identification of Historic Properties and to PRC Section 5024.1, the Project's APE was surveyed for historic properties. The APE for the Project includes four discontinuous segments, centered around each individual bridge. The APE was established from the Project footprint and includes all potential areas directly or indirectly affected by the proposed undertaking, all construction areas and construction signage and staging. In total, the discontinuous APE encompasses approximately 13.84 acres and includes the Project footprint plus an approximate 50-foot-wide buffer around the Project footprint.

Six historical-period resources and three historical-period roadside refuse scatters were located within the APE. All properties within the APE containing buildings and/or structures that are 45 years of age or older (i.e., constructed in or before 1974) were evaluated for eligibility for listing in the NRHP and the CRHR. A reconnaissance-level architectural field survey was conducted on June 11, 2019, to inventory properties with standing buildings, groups of buildings, or structures within the APE. Digital photographs and notes were taken for all built-environment resources. State of California Department of Parks and Recreation (DPR) Primary Records and Building, Structure, and Object Forms were completed for all architectural resources identified within the APE constructed in or prior to 1974. In April 2021, a desktop integrity analysis of Chuckwalla Valley Road (33-017766) was conducted utilizing Google Earth and historical aerials and maps as part of the documentation and integrity evaluation of the 150-mile Colorado Desert corridor of U.S. Highway 60/70.

DTSC/C-AMA

The entire APE is within the boundaries of the DTC/C-AMA. The DTC/C-AMA is clearly "associated with events that had made a significant contribution to the broad patterns of our history" (Criterion A/1). America's home-front training preparations for World War II were

unprecedented in the 1940s. For the DTC/C-AMA, the U.S. Army Ground Forces developed more than 18,000 square miles of the California and Arizona desert as a training facility. The DTC/C-AMA was the first and largest training facility built by the American military, and it is one of a kind in U.S. military history. It represents a paradigm shift in preparation for war. This was the first time the army had simulated a theater of operations. The monumental undertaking of the DTC/C-AMA represents the United States government's commitment to winning the war, and it demonstrates the conviction of military leaders that specialized training, such as simulations of desert warfare, would be necessary for victory in a global conflict. One million soldiers, 10 percent of America's World War II fighting force, trained in the desert at the DTC/C-AMA. Whether or not these soldiers fought in North Africa, the conditioning, training, and psychological preparation for battle that the difficult conditions of desert training provided most assuredly made a significant contribution to the effectiveness and preparedness of the American soldier (Bischoff 2000; Bischoff et al. 2012). No historical property types associated with the DTC/C-AMA (i.e., maneuver areas, divisional camps, small unit training areas, air facilities and crash sites, bivouacs, campsites, ranges, supply depots and railroad sidings, and hospitals and medical centers) are located within the Project APE.

U.S. Highway 60/70

U.S. Highway 60/70 in California is the western terminus of the 1930s-era historical U.S. Highway 60/70 transcontinental highway or auto trail. U.S. Highway 60/70 is the last designated of three transcontinental routes into California along with U.S. Highway 66 (Route 66) and U.S. Highway 80. Both transcontinental U.S. Highway 60 and U.S. Highway 70 originated on the east coast in Virginia and North Carolina, respectively. This recordation focuses on the 150-mile corridor of the highway through the Colorado Desert in California. In this desert corridor, U.S. Highway 60/70 was cosigned between Blythe and Beaumont. After this point, Highway 60 continued west toward Los Angeles through Riverside and Highway 70 continued west toward Los Angeles through San Bernardino. The two highways converged again near Pomona and were cosigned together to a common terminus in downtown Los Angeles. During construction of I-10 in the mid to late 1960s, approximately 49 percent of the original 150-mile Colorado Desert corridor, between Blythe and Beaumont, was either graded over and subsumed under I-10, or, in some areas, the original route was severed, leaving 16 orphaned segments (51%) of various lengths ranging from one-half mile in the Chiriaco Summit (Chiriaco Road) to an almost 17-mile segment in the Chuckwalla Valley (Chuckwalla Valley Road).

Chuckwalla Valley Road

The original recording documented a 16.75-mile-long bypassed segment of former U.S. Highway 60/70 south of I-10, commonly known as Chuckwalla Valley Road (Shaver 2009). The resource was updated in 2010 to include Ragsdale Road, a bypassed segment of former U.S. Highway 60/70 north of I-10 that passes through the town of Desert Center (Chandler and Cunningham 2010). Combined bypassed segments of former U.S. Highway 60/70 were evaluated in 2011 and found eligible for the NRHP and CRHR under Criterion A/1 as an important transcontinental route from the 1930s through the 1950s; however, no evidence could be located of the State Historic Preservation Officer's (SHPO) concurrence with this finding (Chandler et al. 2011). In 2012, the period of significance was refined from the time of its construction in 1931 to 1967 when the road was severed and orphaned by the construction of the I-10 (Smallwood et al. 2012). Finally, in 2015, the Chuckwalla Valley Road primary record was updated as a historic district including

road-related infrastructure such as bridges, culverts, and dikes (Chasteen 2015). No evidence of the SHPO's concurrence on this finding of eligibility could be located.

Through review and analysis of the previous documentation, the current study determined Chuckwalla Valley Road is a historical linear resource consisting of a 16.75-mile-long intact bypassed segment of U.S. Highway 60/70 south of I-10, in agreement with the original 2009 recording. For the current Project, Chuckwalla Valley Road was evaluated under all four NRHP/CRHR criteria. The condition of the road is commensurate with its age and no substantial changes or additions to the road were visible during the survey for the current study.

Timber Bridges

The four subject bridges are generally described as three-span timber bridges constructed in 1931 and widened in 1944 (Acari Ditch Bridge was widened in 1952). The bridges span ditches constructed along U.S. Highway 60/70 that divert flood waters under the highway. The bridges range in length and width from approximately 58 (shortest) to 60 feet in length (longest) and approximately 26 (narrowest) to 28 feet wide (widest). The bridges superstructures consist of 6-inch-thick concrete deck overlaid with asphalt (bridge deck) on 24 treated Douglas-fir stringer beams (substructure) (Acari Ditch Bridge has 38 stringer beams). The superstructure is supported by timber bents (combination of piles [columns or posts] and pile caps) and timber abutments (Acari Ditch Bridge has one board-form poured concrete abutment on the east end). The bridges have timber guard rails, except Acari Ditch Bridge which has contemporary metal guardrails at both elevations. The bridges pile columns are approximately 16 inches in diameter and are treated with tar or creosote. Many of the log piles are topped with a cap of burlap which is saturated with a tan-colored mastic and secured with a wire tie. Backfill at the abutments are supported by timber bulkhead planks that are laterally supported by abutment piles and timber wingwalls. The bridge decks are approximately 3 feet above the wash floor except for Acari Ditch Bridge, which is approximately 7 feet above the wash floor. Metal warning paddle signs and reflectors are attached at the road approaches on Aztec and Acari Ditch Bridges. Metal guardrails with wood posts lead to the bridges at the road approaches on Tarantula and Sutro Ditch Bridges. According to Caltrans Local Agency Historic Bridge inventory, the bridges are designated as "Structurally Deficient".

Historical-Period Roadside Refuse Scatters

Three historical-period roadside refuse scatters were found near three of the four bridges (Acari Ditch Bridge, Sutro Ditch Bridge, and Tarantula Ditch Bridge). Below is a description of each roadside refuse scatters found at each bridge:

- **Acari Ditch Bridge:** This resource represents a multiple episode historical-period roadside refuse scatter. The refuse consists of numerous historical glass bottle fragments (20+ bottles, 50+ beverage cans, and 2 single-serving sanitary food cans). In addition, miscellaneous fragmented and crushed cans were observed. Diagnostic artifacts and overall cultural material analysis suggest a wide range of dates between 1935 to the 1970s with most of the refuse consisting of food and beverage containers dating to the 1950s and 1960s.
- **Sutro Ditch Bridge:** The historical-period refuse scatter consists of numerous glass bottle fragments (20+ bottles) and miscellaneous fragmented and crushed cans (30+ beverage cans and 20+ single-serving sanitary food cans). Diagnostic artifacts and overall cultural

material analysis suggest a wide range of dates between 1935 to the 1980s with most of the refuse consisting of food and beverage containers dating to the 1940s and 1960s.

- **Sutro Ditch Bridge:** The historical-period refuse scatter consists primarily of 40+ beverage cans. However, 7 single-serving sanitary food cans (key-wind opened) and some historical glass bottle fragments (3 bottles) were also observed. Diagnostic artifacts and overall cultural material analysis suggest a wide range of dates from the 1920s to 1970s.

All refuse scatters are most likely a result of highway travelers, off-road vehicles use, roadside dumping, and use of the area as a rest stop. None of the artifacts observed appear to be related to the WWII Desert Training Center activity or early Dust Bowl camps. Because the refuse scatters are limited to surface deposits, subsurface excavations were not warranted.

Significance Evaluation for inclusion in NRHP and CRHR:

A historic resource is determined eligible for the National Register and California Register based on the integrity of the resource and its association to American history, architecture, and culture. To be listed in the National or California Register, the historic resource must not only be shown to be significant under the National or California Register criteria, but it also must have integrity. Within the concept of integrity, there are seven aspects or qualities that, in various combinations, define integrity. These are location, design, setting, materials, workmanship, feeling, and association. To retain historic integrity a property will always possess several, and usually most, of the aspects.

DTC/C-AMA

The DTC/C-AMA was considered eligible for inclusion in the NRHP and CRHR for the purposes of this Project only in accordance with Section 106 PA Stipulation VIII.C.4 and surveys that meet State Office of Historic Preservation standards respectively.

U.S. Highway 60/70

U.S. Highway 60/70 is significant under Criterion A/1 as an important transcontinental automobile highway that represents important trends in early twentieth-century highway planning in California and across the country. As one of the three “all-weather” transcontinental highways into Southern California, U.S. Highway 60/70 is also significant culturally as a highly utilized travel and migration route and recognized tourist highway across the Colorado Desert. Finally, U.S. Highway 60/70 is significant as a symbol of commerce. The highway became the most favored commercial trucking route of the three transcontinental highways, a distinction it held until the mid-century. I-10 replaced much of this highway in California by the end of the 1960s which is evidence that it remained a good, direct route with minimal geographic barriers. The period of significance for this resource is from 1932, when signed, to 1967, when the completion of I-10 through the Colorado Desert corridor left 16 orphan segments between Blythe and Beaumont.

Although U.S. Highway 60/70 is significant under Criterion A/1, when assessing its integrity as a whole, it does not retain sufficient historic integrity to convey significance under NRHP/CRHR Criterion A/1. The approximately 150-mile Colorado Desert corridor of U.S. Highway 60/70, 90 miles (60 percent) of the former transcontinental highway alignment was either eliminated by the construction of I-10 or does not retain sufficient historic integrity to convey significance under NRHP/CRHR Criterion A/1. The longest intact segment of the former highway is the 16.75-mile Chuckwalla Valley Road segment. The next longest are the approximately 11.1-mile-long Blythe

segment and the approximately 9.8-mile-long Varner Road segment east of Cathedral City. However, there are long stretches of the corridor that have no surviving segments or a combination of no surviving segments and segments with insufficient historic integrity to convey significance. These include approximately 12 miles of the corridor east of Beaumont, approximately 21 miles of the corridor east of Indio, 17 miles of the corridor at Chiriaco Summit to the east, and 15 miles of the corridor west of Blythe. By way of comparison, the NRHP-listed U.S. Highway 80 Historic District in California consists of abandoned and realigned transcontinental highway segments that date to the property's 1926–1964 period of significance, and that stretch contiguously across the 180-mile length of that corridor from San Diego to the state border at the Colorado River west of Yuma, Arizona. U.S. Highway 60/70 has significance under Criterion A as Southern California's third and most frequently traveled transcontinental highway for business and pleasure. However, in weighing that significance against the length of the highway corridor in which the resource remains extant and potentially retains sufficient integrity to convey significance, the resource as a whole does not retain sufficient historic integrity to convey significance under Criterion A/1. Therefore U.S. Highway 60/70 is not eligible for listing in the NRHP or the CRHR.

Chuckwalla Valley Road

The California Division of Highway recognized the particular road engineering problems posed by the effort to construct segments of modern highways across the desert, especially the valley areas on alluvial plains between mountain ranges such as Chuckwalla Valley where the soil is sandy, and roads are prone to stormwater damage. In response, engineers developed the “ditch and dike” system to guide rushing water and silt under the highway at specifically installed bridges or culverts. The character-defining features of a roadway with the ditch and dike system, such as Chuckwalla Valley Road, consist of wide, deep channels and dikes that divert water into a lead channel carrying it under a specific bridge. As of 1933, the ditch and dike system had been installed along U.S. Highway 60/70 between Black Butte and Desert Center. However, a historic-level storm in 1939 did cause severe damage to the system but, interim repairs and improvements were made to the highway after the storm, and the ditch/dike and bridge system continued in use. Between 1944–1952, highway funding was used to re-deck, and reconstruct and widen bridges along the roadway to improve the system. The Division of Highways ditch and dike, and bridge/culvert technology did, and still does, carry out the purpose for which it was designed—it protects Chuckwalla Valley Road, now an orphaned segment of former U.S. Highway 60/70, from the ravages of desert storms.

The Division of Highways responded to the particular highway engineering problem of desert storm-related road washouts by developing ditch and dike, and bridge/culvert technology and integrating this technology, where needed, into highway construction between Indio and Blythe. Although the first construction of the system along U.S. Highway 60/70 in the Chuckwalla Valley was damaged in 1939, the significant engineering technology was sound, and improvements were taken up in the decades that followed that strengthened the system. After Chuckwalla Valley Road was severed from U.S. Highway 60/70, due to the construction of I-10 by 1967, the engineering system remained along Chuckwalla Valley Road, and was maintained as part of road protection strategies against desert flooding. Today, Chuckwalla Valley Road, with the ditch/dike and bridge system, is still extant.

Additionally, the ditch and dike system is far more extensive and better preserved than along other former orphaned segments of U.S. Highway 60/70 between Blythe and Indio. No comparatively extensive ditch and dike, and bridge/culvert system exists along other pre-interstate highways (or

mid-twentieth century highways) in Southern California's interior deserts. There are two smaller ditch and dike systems along Interstate 40 (I-40) in the Mojave Desert between Goffs Road and Essex Road (5 sets of diversion dikes), and just west of Kelbaker Road (3 sets of diversion dikes). This section of I-40 was constructed with concrete bridges in the late 1960s to early 1970s, which evidences that the ditch and dike and bridge/culvert system was still effective and relevant. There is no similar engineering system on Interstate 15 (I-15), along what was the former Arrowhead Trail nor along Old Highway 80 in the Imperial Valley. Therefore, Chuckwalla Valley Road is not only the most well preserved but appears to be the largest such ditch and dike system that remains extant in Southern California.

Chuckwalla Valley Road is eligible for listing in the NRHP under Criterion C/3 at the state and local level as a representation of a significant desert road engineering achievement and in the CRHR under the Office of Historic Preservation status code 3S. The period of significance for this resource is from 1931, when construction on Chuckwalla Valley Road began, to 1961, when the upgrades to the original ditch and dike, and bridge/culvert engineering technology had been completed. The SHPO concurred with this determination on October 26, 2021.

Timber Bridges

For this Project, Chuckwalla Valley Road was found eligible for listing in the NRHP or CRHR under Criterion C/3 at the state and local level as a representation of a significant desert road engineering achievement. A series of timber bridges, including the four subject bridges, were constructed as features of the significant ditch and dike engineering system to protect the highway from washouts during desert flash flooding episodes. In 1944, the bridge was improved, widened, and the deck was replaced to improve the system after a once-in-a-lifetime storm in 1939 damaged the roadbed, bridges/culverts, and the ditches and dikes in Chuckwalla Valley. As such, the four subject bridges are significant as a character-defining feature of Chuckwalla Valley Road under Criterion C/3 at the state and local level as a representation of a significant desert road engineering achievement.

The four subject bridges are in their original location and alignment on Chuckwalla Valley Road and therefore, have a high level of integrity of location. The timber-stringer bridges retain their original timber stringer design, timber and concrete materials, and workmanship from the period of significance. Generally, the four subject bridges are surrounded by the desert landscape of the Chuckwalla Valley including palo verde trees, ironwood trees, creosote vegetation and wide-open space. Modern transmission lines and I-10 are visible from the bridges from a distance giving the bridges a medium level of integrity of setting. The bridges' integrity of association and feeling along Chuckwalla Valley Road is high due to its original location, alignment, and setting. Thus, the four subject bridges retain sufficient integrity to convey their significance as character-defining features of Chuckwalla Valley Road.

Historical-Period Roadside Refuse Scatters

The three historical-period roadside refuse scatters were not found to be significant under NRHP and CRHR Criteria for the following reasons:

- To be significant under Criterion A/1, the refuse scatters must represent a broad pattern of historical settlement, mining, or transportation activities, or be associated with the DTC/C-AMA, or Desert Strike events. The concentration of refuse scatters consists primarily of single-serving food and beverage containers with production and usage dates spanning from approximately 1920s to the 1980s. This date range suggests a possible association

with early settlement of the valley, transportation activities, or the DTC/C-AMA. Based on archival research, no associated homestead is present in the general vicinity. The lack of military-related artifacts generally precludes an association with DTC/C-AMA activities. However, Chuckwalla Valley Road is an orphaned segment of the former transcontinental U.S. Highway 60/70 which was constructed through this area and cosigned from 1932 through 1967 when the construction of I-10 replaced this cosigned route. After this date, Chuckwalla Valley Road has primarily served as a local, rural road that provides access for localized utility repairs and construction, and local travel through the valley. Chuckwalla Valley Road also connects I-10 across this section of the valley between the Corn Springs and Ford Dry Lake exits and is an alternative bypass route when freeway traffic has to be detoured due to construction or traffic incidents. Road usage by travelers, road maintenance activities, off-road vehicle activity, and wind and desert flooding events over the long history of this road has likely impacted the artifact deposits. This activity may explain the highly mixed nature of the artifacts from a temporally broad spectrum, which makes it difficult to determine direct thematic associations. While the site does represent typical roadside refuse, it lacks focus and does not represent a specific time period, event, or trend in local, regional, or national history.

- The refuse scatters are not known to be associated with significant person(s) associated with local, state, or national history.
- The refuse scatters do not embody the distinctive characteristics of a type, period, or method of construction, or represent the work of a master, or possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction.
- The historical-period refuse scatters are most likely a result of highway traveler activities over the life of the road, including off-road vehicles using the natural desert pavement, use of the area for roadside dumping, and as a rest area. None of the artifacts observed appear to be related to the World War II Desert Training Center activity, or early Dust Bowl camps. While the refuse scatters can be attributed primarily to roadside dumping, this activity cannot be clearly associated with a specific person, group, or important event. The site lacks focus, has no clear association, and therefore very limited data potential other than the documentation and analysis reported herein.

Because the refuse scatters do not qualify as a significant resource under any of the four NRHP/CRHR criteria, assessment of integrity is not required. However, current integrity of the site is poor due to impacts from ongoing transportation and recreation activities, such as off-road vehicle usage. Additionally, the integrity of the site will continue to deteriorate because it is on active alluvium steadily being eroded by wind and water. Due to a lack of significance and integrity, the refuse scatter sites are recommended ineligible for inclusion in the NRHP/CRHR.

Impact Analysis:

a) – c) Potentially Significant Impact. Based on the existing conditions, it is not anticipated for the project to have a significant impact on all subsections under Cultural Resources. However, the proposed Project would demolish four character-defining features of Chuckwalla Valley Road which may result in a significant and possibly cumulative impact on historic cultural resources.

Therefore, this potentially significant impact on Chuckwalla Valley Road and all subsections under Section 4.5, Cultural Resources, will be further analyzed and addressed in the EIR.

Avoidance, Minimization and/or Mitigation Measure(s):

Measures to mitigate potentially significant impacts on cultural resources will be evaluated and addressed in the EIR.

4.6 Energy

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

Source(s): Information in this section is based on California AB 32 (2006), California Air Resources Board (CARB) and County of Riverside Climate Action Plan (CAP) Update (November 2019).

Regulatory Setting:

State CEQA Guidelines Section 15126.2(b) requires consideration of a project’s use of energy. If a project results in wasteful, inefficient, or unnecessary consumption of energy or energy resources, the project may result in a significant environmental effect. Appendix F of the State CEQA Guidelines, provides guidance on what could be included in such an analysis. Wise and efficient use of energy may include decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources.

Assembly Bill 32

AB 32, the California Global Warming Solutions Act of 2006, required CARB to adopt a statewide GHG emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020.

Senate Bill 32

SB 32 was adopted as a follow up to AB 32, which required California to reduce its GHG emissions to 1990 levels by 2020. The State reached that goal by 2016. SB 32 increases and extends the mandate requiring the CARB to ensure California’s GHG emissions are reduced to 40 percent below the 1990 levels by 2030.

County of Riverside Climate Action Plan Update

According to the CAP Update (2019), the County of Riverside is committed to planning sustainably for the future while ensuring a livable, equitable, and economically vibrant community. The County acknowledges that planning sustainably includes using energy more efficiently,

harnessing renewable energy to power buildings, recycling waste, and enhancing access to sustainable transportation modes. In turn, planning sustainably will help to reinvest in the local economy and improve the community's health, safety, and welfare.

One of the purposes of the CAP Update is to identify how the County will effectively implement the CAP Update to comply with federal, state and local GHG emission reduction regulations and policies. The CAP Update identifies numerous regulations and policies that will contribute to reduced GHG emissions in Riverside County. Some of these policies include updated building codes for energy efficiency, the low carbon fuel standard, vehicle emissions standards, and the Renewable Portfolio Standards for utility companies. By supporting the State in the implementation of these measures, Riverside County will experience substantial GHG emissions reductions. In order to reach the reduction target, set forth in the CAP Update, the County would also need to implement the additional local reduction measures described in the CAP Update. These measures encourage energy efficiency and renewable energy, development and penetration of zero-emission vehicles, water conservation, and increased waste diversion. In addition to local government, efforts at the local business and community level would be required to achieve these targets. Public education and outreach would play a crucial role in educating stakeholders about the importance of implementing these measures.

Environmental Setting:

There are generally two types of energy consumption direct and indirect. Direct energy is the energy consumed by vehicles using the Project. Indirect energy is the one-time energy consumption for construction and the energy needed to maintain the facility.

Chuckwalla Valley Road is classified as a local rural road with limited vehicle use and has no streetlights or illuminated signage. Primary sources of energy consumption include vehicles using the road for local access and for maintenance activities.

Impact Analysis:

a) Less than Significant Impact. The proposed Project consists of replacing four existing bridge structures. During the 18-month construction period, the Project would use a variety of construction equipment including excavators, trucks, pile drivers, compactor, and bulldozers. Construction activities would primarily use diesel and gasoline for the use of equipment associated with demolition, debris hauling, materials delivery, and construction equipment. Energy consumption would also include gasoline used by construction workers driving to and from the Project area. Construction activities would result in a one-time energy expenditure.

Regarding long-term energy consumption, no new permanent source of energy demand would result from Project implementation. Once implemented, the Project would maintain the existing rural roadway conditions and would not result in a change in direct energy use (i.e., no additional vehicles would use the new facility). On-going maintenance energy requirements are expected to decrease since the bridges would be brand new. No additional energy consumption for street or traffic lighting and fuel for maintenance activities would be required. Accordingly, the Project will not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts would be less than significant.

b) No Impact. As described in Section 4.8, Greenhouse Gas Emissions, the County adopted its CAP Update in November 2019. The CAP Update is designed to reinforce the County's

commitment to planning a sustainable community by establishing a framework to reduce the County’s GHG emissions. Many of the regulations and incentive programs identified in the CAP Update promote energy efficiency and renewable energy and are generally related to future development. Replacing the four subject bridges would ultimately decrease the energy usage required to maintain and repair the structurally deficient bridges. Furthermore, the Project would not increase vehicle capacity or introduce new street lighting which typically results in additional energy use. Therefore, the proposed Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and no impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.7 Geology and Soils

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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 waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section is based on the *Preliminary Foundations Report* (January 2020), *Paleontological Technical Memorandum* (March 2020), and the California Department of Conservation, California Geological Survey Map.

Regulatory Setting:

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Act prohibits the location of most types of structures intended for human occupancy across the traces of active faults and strictly regulates construction in the corridors along active faults (referred to as earthquake fault zones). It defines criteria for identifying active faults, giving legal weight to terms such as active, and establishes a process for reviewing building proposals in and adjacent to earthquake fault zones. It also regulates seismic retrofits of some types of structures.

Seismic Hazards Mapping Act of 1990

The Seismic Hazards Mapping Act of 1990 is intended to avoid or reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong ground shaking, liquefaction, and seismically induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act: the state is charged with identifying and mapping areas at risk of strong ground shaking, liquefaction, landslides, and other corollary hazards; and cities and counties are required to regulate development within mapped seismic hazard zones.

Environmental Setting:

The Project area is not within an Alquist-Priolo Earthquake Fault Zone nor is it on or near surface traces of active faults. The California Department of Conservation, California Geological Survey Maps do not identify the Project location in a fault zone, landslide, or liquefaction zone. The nearest fault zone is located approximately 30 miles away from the Project area while the nearest landslide and liquefaction zone is located approximately 115 miles away.

The Chuckwalla Valley consists of a series of mountain ranges surrounded by alluvial fans that slope toward Ford Dry Lakebed and Palen Dry Lakebed. The bridges to be replaced rest in a relatively flat area from the alluvial fan of the Chuckwalla Mountain ranges. The region has previously undergone a complex arrangement of geologic transformations and has experienced volcanic activity, folding, uplift and erosion, and sedimentation.

The soils within the Project area have not yet been recorded or digitally mapped by USGS and therefore, no soils data is available. Associated point data indicates that the Project area generally consists of sand, sandy loam, and silty loam.

Impact Analysis:

a) No Impact. The Project area is not within an Alquist-Priolo Earthquake Fault Zone nor is it on or near surface traces of active faults. In the event of an earthquake, seismic shaking would not induce slope instability since there are no major natural slopes at the site and existing fill slopes are less than 10 feet in height. Existing dike or roadway fill slopes may experience minor sloughing in a design level earthquake (a theoretical earthquake event used by engineers to check the resilience of a new structure); however, shallow sloughing is not expected to affect the pile supported bridge structure.

For liquefaction to occur, three conditions must simultaneously exist: loose to medium dense granular soils, saturation of the soils by groundwater (typically upper 50 feet), and strong

earthquake ground motion. The soils within the Project area are generally dense to very dense below proposed bottom of footing and static groundwater is deep; therefore, liquefaction risk is low. No impact would result.

b) Less than Significant Impact. The Project would involve grading and excavating during construction, thereby disturbing soils and leaving surface soils susceptible to erosion. Eroded soils can runoff into surface water causing water pollution. The County would implement **WQ-1** which outlines the specific requirements of the California National Pollutant Discharge Elimination System (NPDES) Construction General Permit including the project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will implement practices and control measures, including erosion control, onsite during construction activities. In addition, the Project does not plan to alter any erosion patterns post-construction, as post-construction conditions are expected to equal pre-construction conditions. With the implementation of **WQ-1**, no long-term impacts to soil erosion are anticipated, and the proposed Project's impacts would be less than significant.

c), d), and e) No impact. The California Department of Conservation, California Geological Survey Maps do not identify the Project location in a fault zone, landslide, or liquefaction zone. The nearest fault zone is located approximately 30 miles away from the Project area while the nearest landslide and liquefaction zone is located approximately 115 miles away. In addition, the Preliminary Foundation Report conducted for the Project, which included a field investigation and laboratory testing, identified no major geologic hazards, such as landslides, collapsible soils, expansive soils, naturally occurring hazardous minerals, or fault ruptures as potentially occurring within the Project area. No impact would occur.

f) Less than Significant Impact. Geologic maps, paleontological literature, and records search results were reviewed to determine the paleontological sensitivity of the Project area. Based on the results of the desktop review the Project area was identified as having a 'High Potential' for paleontological resources. This finding contrasts with the County's (2015) paleontological sensitivity map, which roughly delineates portions of the Project area covered by unit Qc (Undetermined Potential) and Qal (Low Potential). The difference between the desktop findings and the County's map suggests the Project area may require additional investigation, such as a pre-construction survey, to confirm the accuracy of the desktop results. In addition, because the Project is partially funded with Federal Highway Administration monies through the Bridge Preventative Maintenance Program, implementation of **PAL-1** would be required, which states that in the event fossils are encountered during construction, all work within a 60-foot radius of the discovery must cease and the construction resident engineer must be notified. In addition, **PAL-2** and **PAL-3** would be incorporated into the Project to further avoid potential impacts to paleontological resources. Therefore, direct, or indirect impacts to potentially unique paleontological resources or sites would be less than significant.

Avoidance, Minimization and/or Mitigation Measure(s):

With implementation of the avoidance measures identified below, the Project would have a less than significant impact on geology and soils. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

WQ-1: Stormwater Pollution Prevention Plan (SWPPP). Per Caltrans Construction Stormwater Management Program Requirements and Standard Specifications Section 13

Water Pollution Control, a SWPPP is required to be prepared prior to construction and implemented by the construction contractor to control water pollution during Project construction. The SWPPP shall be prepared prior to construction by a Qualified SWPPP Developer.

PAL-1: Discovery of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered onsite, all work within a 60-foot radius of the discovery must cease and the construction resident engineer must be notified. Work cannot continue near the discovery until authorized.

PAL-2: Preparation of a PRIMP. Prior to any ground disturbing activities, the preparation of a paleontological resource impact mitigation program (PRIMP) shall be prepared by a qualified professional paleontologist (Project Paleontologist) who meets the Society of Vertebrate Paleontology's standards (2010). The purpose of the PRIMP is to establish procedures and discovery protocols based on industrywide best practices (Murphey et al., 2019) for the treatment of any paleontological resources encountered during project related earth-disturbing activities related to project construction. The PRIMP shall include a Worker Environmental Awareness Program (WEAP) training, which would be implemented prior to the start of project-related ground disturbance. WEAP training should be presented in-person to all field personnel to describe the types of fossils that may be found and the procedures to follow if any fossils are encountered. The PRIMP will also indicate where construction monitoring will be required for the Project and the frequency of required monitoring (i.e., full-time, spot-checks, etc.).

PAL-3: Pre-Construction Paleontology Survey. A pre-construction survey shall be conducted to ground truth the results of the records search conclusion of high sensitivity prior to grading to avoid potential permanent impacts. The pre-construction survey will collect and process sediment samples to determine the small-fossil potential of the APE. Any fossils uncovered during construction activities shall be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

4.8 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section is based on the Project GHG Emissions Analysis completed for the Project (2021) and the County’s CAP (2019 update).

Regulatory Setting:

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 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 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 the impacts of climate change are addressed: “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).

California and the County of Riverside are innovative and proactive in addressing GHG emissions and climate change by adopting legislation, policies, and programs including, but not limited to, the following:

Clean Air Act

In 2007, through Massachusetts v. Environmental Protection Agency (Docket No. 05–1120), the United States Supreme Court held that the United States Environmental Protection Agency (USEPA) has authority to regulate GHGs. As such, the United States Supreme Court ruled that the USEPA should be required to regulate CO2 and other GHGs as pollutants under Section 202(a)(1) of the federal Clean Air Act.

California Air Resources Board Standards and Programs

The California Air Resources Board (CARB), a part of the California Environmental Protection Agency (CalEPA) is responsible for the coordination and administration of both federal and State air pollution control and climate change programs within California. In this capacity, CARB conducts research, sets California ambient air quality standards (CAAQS), compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment.

Executive Order S-3-05

On June 1, 2005, California Governor Arnold Schwarzenegger announced through Executive Order (EO) S-3-05, the following GHG emissions targets:

- By 2010, California shall reduce GHG emissions to 2000 levels.
- By 2020, California shall reduce GHG emissions to 1990 levels.
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 also laid out responsibilities among the State agencies for implementation and for reporting on progress toward the targets.

Executive Order B-30-15

On April 29, 2015, California Governor Jerry Brown announced through EO B-30-15 the following GHG emissions target:

- By 2030, California shall reduce GHG emissions to 40 percent below 1990 levels.

The emissions reduction target of 40 percent below 1990 levels by 2030 is an interim-year goal to make it possible to reach the ultimate goal of reducing emissions 80 percent under 1990 levels by 2050. The order directs CARB to provide a plan with specific regulations to reduce State-wide sources of GHG emissions. EO B-30-15 does not include a specific guideline for local governments.

Assembly Bill 32

AB 32, the California Global Warming Solutions Act of 2006, required CARB to adopt a statewide GHG emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990 to be achieved by 2020. The State reached this goal by 2016.

Senate Bill 32

SB 32 increases and extends AB 32, requiring the CARB to ensure State's GHG emissions are reduced to 40 percent below the 1990 levels by 2030.

Senate Bill 375-Redesigning Communities to Reduce Greenhouse Gases

SB 375 requires the ARB to develop regional GHG emission reduction targets for passenger vehicles. The ARB is to establish targets for 2020 and 2035 for each region covered by one of the State's 18 metropolitan planning organizations.

County of Riverside Climate Action Plan Update

According to the CAP Update (2019), the County of Riverside is committed to planning sustainably for the future while ensuring a livable, equitable, and economically vibrant community. The County acknowledges that planning sustainably includes using energy more efficiently,

harnessing renewable energy to power buildings, recycling waste, and enhancing access to sustainable transportation modes. In turn, planning sustainably will help to reinvest in the local economy and improve the community's health, safety, and welfare.

One of the purposes of the CAP Update is to identify how the County will effectively implement the CAP Update to comply with federal, state and local GHG emission reduction regulations and policies. The CAP Update identifies numerous regulations and policies that will contribute to reduced GHG emissions in Riverside County. Some of these policies include updated building codes for energy efficiency, the low carbon fuel standard, vehicle emissions standards, and the Renewable Portfolio Standards for utility companies. By supporting the State in the implementation of these measures, Riverside County will experience substantial GHG emissions reductions. In order to reach the reduction target, set forth in the CAP Update, the County would also need to implement the additional local reduction measures described in the CAP Update. These measures encourage energy efficiency and renewable energy, development and penetration of zero-emission vehicles, water conservation, and increased waste diversion. In addition to local government, efforts at the local business and community level would be required to achieve these targets. Public education and outreach would play a crucial role in educating stakeholders about the importance of implementing these measures.

Environmental Setting:

The Sacramento Metropolitan Air Quality Management District's Road Construction Emissions Model, Version 8.1.0 was used to estimate construction emissions for the Project. Inputs to the model were provided by the Project's construction engineers. The project is in the Salton Sea Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As such, the construction phase regional emissions were compared to the SCAQMD "significance" thresholds, which are as follows:

- 100 pounds per day of No_x
- 75 pounds per day of volatile organic compounds (VOC)
- 150 pounds per day of PM₁₀
- 55 pounds per day of PM_{2.5}
- 150 pounds per day of So_x
- 550 pounds per day of CO
- 10,000 metric tons/year of carbon dioxide equivalent (CO_{2e}) for industrial facilities

Projects with construction-related emissions that exceed any of these emission thresholds are considered significant. **Table 5** below, summarizes emissions of criteria pollutants per phase and the maximum emissions in pounds/day; emissions include both vehicle exhaust and fugitive dust.

Table 5. Estimated Construction Emissions of Criteria Pollutants (lbs./day)

Project Phase	Nox	VOC	Total PM₁₀	Total PM_{2.5}	Sox	CO
Grubbing/Land Clearing	0	0	0	0	0	0
Grading/Excavation	74.0	7.6	9.1	4.1	0.2	69.4

Drainage/Utilities/Sub-Grade	50.5	5.3	8.0	3.2	0.1	50.8
Paving	7.7	0.8	0.4	0.3	0.1	12.7
Maximum (pounds/day)	74.0	7.6	9.1	4.1	0.2	69.4
SCAQMD Threshold	100	75	150	55	150	550
Exceeds Threshold?	No	No	No	No	No	No

The total estimated GHG emissions for the Project construction period are shown in **Table 6** below.

Table 6. Estimated Construction GHG Emissions (metric tons/phase)

Project Phase	CO₂	CH₄	N₂O	CO₂e
Grubbing/Land Clearing	0	0	0	0
Grading/Excavation	1,169	0.31	0.01	1,071
Drainage/Utilities/Sub-Grade	231	0.06	0.00	212
Paving	389	0.10	0.00	356
Maximum (metric tons/phase)	1,169	0.31	0.01	1,071
Total (metric tons/construction project)	1,789	0.46	0.02	1,639

Impact Analysis:

a) Less than Significant Impact. The Project would generate GHG emissions during construction. Construction activities would primarily include diesel and gasoline equipment including excavators, trucks, pile drivers, compactors, and bulldozers. The equipment would be used for clearing and grubbing, bridge demolition and construction, debris hauling, materials delivery, and construction crew transport.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions would be produced at different levels throughout the construction phase. The total estimated GHG emissions for Project construction is 1,639 metric tons of CO₂e. Since none of the estimated emissions exceed SCAQMD significance thresholds, construction emission impacts are not considered to be potentially significant. To further reduce the Project's construction GHG emissions, measures **AQ-1** through **AQ-3** would be implemented.

Operational Emissions

The purpose of the proposed Project is to upgrade the bridges to current design standards and does not include improvements that would increase the vehicle capacity of the roadway. Bridge replacement projects generally cause minimal or no increase in operational GHG emissions.

Because the Project would not increase the number of travel lanes on Chuckwalla Valley Road, no increase in vehicle miles traveled (VMT) would occur as result of project implementation.

While some GHG emissions during the construction period would be unavoidable, no increase in operational GHG emissions is expected. Therefore, impacts would be less than significant.

b) Less than Significant Impact. The County of Riverside CAP Update (November 2019) is a policy document that identifies ways the County can reduce energy consumption and GHG emissions by establishing a framework of federal, state, and local strategies. As discussed above, the Project would not generate a substantial amount of construction emissions or result in operational emissions. The proposed Project is consistent with all policies and strategies identified in the CAP Update, including the 2007 Clean Air Act, California Air Resources Board Standards and Programs, as well as Executive Orders S-3-05 and B-30-15.

In addition to policies found in the County's CAP Update, the Riverside County General Plan Air Quality Element identifies policies to help reduce emissions. The Project would implement, comply, and remain consistent with the following policies. Therefore, a less than significant impact would occur.

- **AQ-4.7:** To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, USEPA, and CARB.
- **AQ 4.8:** Expand, as appropriate, measures contained in the County's Fugitive Dust Reduction Program for the Coachella Valley to the entire County.
- **AQ 4.9:** Require compliance with SCAQMD Rules 403 and 403.1 and support appropriate future measures to reduce fugitive dust emanating from construction sites.

Avoidance, Minimization and/or Mitigation Measure(s):

With implementation of the minimization measures identified below, the Project will have a less than significant impact on greenhouse gas emissions. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

AQ-1: During clearing, grading, earthmoving, or excavation operations, excessive fugitive dust emissions shall be controlled by regular watering, or other dust preventive measures using the following procedures as specified in the South Coast Air Quality Management District Rules and Regulations:

- Onsite vehicle speed shall be limited to 25 miles per hour;
- All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering should occur at least twice daily with complete coverage preferable in the late morning and after work is done for the day;
- All material transported onsite or offsite shall be either sufficiently watered or securely covered to prevent excessive amounts of dust;
- The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive dust;

- Visible dust beyond the property line emanating from the Project shall be prevented to the maximum extent feasible.

AQ-2: Ozone precursor emissions from construction vehicles shall be controlled by maintaining equipment engines in good condition and properly tuned per manufacturer’s specifications, to the satisfaction of the resident engineer.

AQ-3: All trucks that are to haul excavated or graded material onsite shall comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b), I(2) and I(4) as amended, regarding the prevention of such material spilling onto public streets and roads.

4.9 Hazards and Hazardous Materials

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the *Initial Site Assessment* (September 2019), *Riverside County General Plan Safety Element Update* (September 2021), and the *Riverside County Airport Land Use Compatibility Plan*.

Regulatory Setting:

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage and disposal of hazardous materials, substances, and waste, and the investigation and mitigation of waste releases, air and water quality, human health, and land use.

California Department of Toxic Substances Control (DTSC)

The DTSC is a sub-department under the California Environmental Protection Agency and manages the federal hazardous waste program within the State. The DTSC protects Californians and their environment from exposure to hazardous wastes by enforcing hazardous waste laws and regulations. The department takes enforcement action against violators; oversees cleanup of hazardous wastes on contaminated properties; makes decisions on permit applications from companies that want to store, treat, or dispose of hazardous waste; and protects consumers against toxic ingredients in everyday products.

California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires clean-up of wastes that are below hazardous waste concentrations but could affect ground and surface water quality. California regulations that address waste management and contamination prevention and clean up include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

Environmental Setting:

An Initial Site Assessment was prepared for the Project to review, evaluate, and document present and past land uses and practices. It provides preliminary identification of potentially hazardous waste that may be encountered during construction, and visually examine site conditions to identify Recognized Environmental Conditions (RECs). A REC is defined as the presence or likely presence of any hazardous substances or petroleum hydrocarbons on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum hydrocarbons into structures or into the ground, groundwater, or surface water of the subject property.

On April 30, 2019, a site reconnaissance was conducted of the Project area. The site reconnaissance consisted of observing and documenting the existing site conditions of the Project area. Each bridge was observed by foot, including the eastern and western proposed roadway improvements and staging areas. During the site reconnaissance, the following notable observations were made:

- **Aztec Ditch Bridge:** Several abandoned tires were observed immediately north of the bridge next to proposed roadway improvements.
- **Sutro Ditch Bridge:** Several rusted metal pieces were observed scattered near the southeastern side of the bridge.
- **Acari Ditch Bridge:** Several abandoned tires were observed on the southern boundary of the bridge next to the proposed roadway improvements.
- **Chuckwalla Valley Road:** The centerline striping paint along the road appears discolored and the paint is no longer present.

No evidence of storage tanks, drums, hazardous substances or petroleum products, unidentified substance containers, odors, pools of liquid, or any other potential environmental concerns were observed within the Project limits or adjacent to the Project limits. No RECs were observed during the site visit.

Impact Analysis:

a) and b) Less than Significant Impact. Although the assessment revealed no evidence of RECs within or adjacent to the Project limits, there are several potential impacts relating to hazardous building materials which may be encountered during demolition and construction. The potential impacts may warrant further investigation and/or implementation of special provisions prior to or during Project Construction:

- The four subject bridges have the potential to contain hazardous building materials, including asbestos-containing materials (ACM) and lead-based paint (LBP). ACMs and LBPs are commonly encountered on bridges. Asbestos was used in many building materials prior to 1978 but may have been used into the early 1980s. ACMs include fireproofing, acoustic ceiling material, transite pipe, roofing materials, thermal insulation, gaskets, sealants, and other building materials. It is of primary concern when it is friable (that is, material that can be easily crumbled). During demolition, if not properly identified and mitigated, asbestos fibers could become airborne. To avoid impacts from hazards and hazardous materials, measure **HAZ-1** would be implemented, which states a hazardous building materials survey would be conducted on the bridges during final design and prior to the start of construction. Should such materials be encountered, Caltrans' Standard Specification 14-11 Hazardous Waste and Contamination and Caltrans' BMP WM-6 Hazardous Waste Management for the handling, transport, and disposal of such materials would be implemented by the construction contractor.
- The Project bridges consist of creosote-treated wood. Treated wood is typically treated with preserving chemicals that protect the wood from insect attack and fungal decay during its use. During highway construction projects, treated wood waste (TWW) may be generated when posts along metal beam guard railing, three-beam barrier, piles, utility poles, or roadside signs are removed. To avoid impacts from TWW, measure **HAZ-2** would be implemented which states, upon removal, the construction contractor would manage the transport, use, and disposal of TWW in accordance with the DTSC requirements. The DTSC requires that TWW either be disposed of as a hazardous waste or, if not tested, be permitted for disposal at specific non-hazardous waste landfills per CCR, Title 22, Division 4.5, Chapter 34.

c) No Impact. The nearest school is Eagle Mountain Elementary School, which is approximately 20 miles away from the Project area. Therefore, it is not anticipated that the Project would have an impact on schools related to the use or transport of hazardous materials. No impact would result.

d) No Impact. The Project is not located on a site included in the Cortese List (Government Code Section 65962.5). No impact would result.

e) No Impact. Review of the County of Riverside Airport Land Use Compatibility Plan confirmed the Project is not located within an airport land use plan. The nearest airport is the Desert Training Center Airport which is approximately 22 miles from the Project limits. Therefore, the Project

would not result in a safety hazard or generate excessive noise for people residing or working in the area. No impact would result.

f) Less than Significant Impact. During construction, Chuckwalla Valley Road would be closed to through traffic, except for emergency and utility vehicles, between Aztec Ditch Bridge and Acari Ditch Bridge. During the closure, emergency and utility personnel would be able to utilize an unpaved access road that exists along the adjacent transmission line corridor to pass through the Project area. Measure **TRA-1** identified below would be implemented as part of the Project and includes developing a Traffic Management Plan (TMP) to address detours, signage, and noticing. The TMP will include strategies and measures for informing emergency response and utility providers of planned construction activities to reduce potential impacts on emergency response times or utility services. The TMP will also include a public awareness campaign. Once construction is completed the roadway will be open to through traffic and will continue to serve as a bypass frontage road for detoured traffic from I-10 with improved load carrying capacity that meets current standards. Therefore, impacts would be less than significant.

g) No Impact. According to the Riverside County General Plan Safety Element Update (2021) and CAL FIRE's Fire Hazard Severity Zones map, the Project area is not within a high or very high fire hazard severity zone. Nevertheless, construction activities may increase the risk of fire due to the presence and use of flammable materials such as cleaning solvents and gas-powered construction equipment. The Project would include BMPs as part of measure **WQ-7** that would reduce wildfire risks and protect workers. Additionally, firefighting equipment (i.e., extinguishers, shovels, fire retardants) would be on-site for emergencies.

Once construction activities are complete, the Project is not anticipated to increase the risk of wildland fires because the replacement bridges would be constructed of fire-resistant materials (concrete). Additionally, the Project is not anticipated to increase the risk of loss, injury or death resulting from wildland fires. Therefore, no impacts would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

With implementation of the avoidance and minimization measures identified below, the Project will have a less than significant impact on hazards and hazardous materials. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

Avoidance measures:

HAZ-1: Asbestos-Containing Materials (ACM) and Lead-Based Paint (LBP) Surveys: A hazardous building materials survey will be conducted on the bridges before the start of construction. Should such materials be encountered, Caltrans Standard Specification 14-11 Hazardous Waste and Contamination and Best Management Practice WM-6 Hazardous Waste Management for the handling, transport, and disposal of hazardous building materials will be implemented by the construction contractor.

Minimization measures:

HAZ-2: Treated Wood Waste: Upon removal, the bridges will be managed as treated wood waste (TWW) in accordance with the Department of Toxic Substances Control (DTSC) Alternative Management Standards for TWW. The nearest Class III landfill site accepting TWW is the Lamb Canyon Landfill in Beaumont, California which is approximately 112

miles from the Project area. The construction contractor, in coordination with the County, will be required to submit all applicable permits for disposing of the TWW.

WQ-7: Best Management Practices. The following BMPs will be included at a minimum to reduce impacts on biological and aquatic resources.

- Dust control measures will be implemented to minimize airborne dust impacts on adjacent vegetation.
- Activities that may produce sparks, including welding or grinding, will use protective gear to reduce fire risks, such as shields and protective mats. Fire suppression capabilities, including extinguishers, shovels, and water tankers, will be available on site whenever construction occurs during the fire season (as determined by the Riverside County Fire Department).
- Trash will be stored in closed containers so that it is not readily accessible to wildlife and will be removed from the construction sites daily to avoid attracting predators to the Project area.
- Exotic plant species removed during construction will be properly handled to prevent sprouting or regrowth. Trucks carrying vegetation that will be removed from the Project sites will be covered and vegetation disposed of in accordance with applicable laws and regulations.
- Plans for water pollution and erosion control will be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. Plans will be reviewed and approved by Caltrans prior to construction. The water pollution and erosion control plan will include the following at a minimum:
 - No fluids or sediment from construction will enter into ephemeral washes.
 - Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
 - No erodible materials will be deposited into watercourses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
 - Equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur only in designated areas within the proposed grading limits of the Project sites. These designated areas will be clearly marked and located in such a manner as to contain runoff into watercourses.
 - Storage of equipment, fueling, and staging areas will be located on non-sensitive upland sites with minimal risks of direct drainage into watercourses. These designated areas will be located to prevent runoff from entering sensitive habitat, including watercourses. Necessary precautions will be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials will be reported to appropriate entities including, but not limited to, the applicable jurisdictional County, USFWS, CDFW, and RWQCB, and will be cleaned up immediately and contaminated soils removed to approved disposal areas.

TRA-1: Traffic Management Plan (TMP): TMP shall be prepared for the Project prior to construction. The plan shall include strategies and measures to avoid and minimize disruption to local access and roadways during construction. Detour routes would be identified, coordinated, and approved by the County and affected local agencies prior to the closure. Emergency providers and the California Highway Patrol shall be notified in advance about all planned closures and detour routes. Upon construction completion, detour signage and traffic signal timings shall be restored to preconstruction conditions.

4.10 Hydrology and Water Quality

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(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	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the *Water Quality Assessment Report* (September 2019), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, and Water Quality Control Plan for the Colorado River Basin Region (January 2019).

Regulatory Setting:

Federal Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to waters of the United States (WoUS) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit program.

Porter-Cologne Water Quality Control Act

California adopted the Porter-Cologne Act in 1969, providing the legal basis for water quality regulation within California. This act requires a “Report of Waste Discharge” for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of “waste” as defined, and this definition is broader than the CWA definition of “pollutant.” Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements and may be required even when the discharge is already permitted or exempt under the CWA.

California Construction General Permit

The State Water Resources Control Board’s Construction General Permit (CGP) regulates storm water discharges from construction sites that result in a Disturbed Soil Area of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the CGP. Construction activity that results in soil disturbances of less than one acre is subject to this CGP if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures or BMPs; and to obtain coverage under the CGP.

Environmental Setting:

The Chuckwalla Valley is bounded by the Chuckwalla, Palen, McCoy, Eagle, and Cox Comb mountains. The Project study area is located within the Chuckwalla Valley Groundwater Basin and the Orocopia Groundwater basin where the basin is recharged by subsurface flow from the Pinto Valley and Cadiz Valley. The nearest bodies of waters are the Colorado River and Salton Sea with the Colorado River approximately 42 miles east and the Salton Sea approximately 42 miles southwest. There are no perennial streams in the Chuckwalla Valley, and it is free from surface flows most of the year. The groundwater has a beneficial use, as identified in the Basin Plan, as Municipal Supply and Industrial Supply. According to the Chuckwalla Valley Groundwater Basin California Groundwater Bulletin 118 the Chuckwalla Valley Groundwater Basin is impaired for sulfate, chloride, fluoride, total dissolved solids, boron and sodium.

The four bridges are situated over washes that experience an average annual rainfall of three inches per year. The only time the washes experience water is during infrequent storms. Almost all moisture from rain is lost through evaporation, evapotranspiration, and/or infiltration. Any additional stormwater runoff from these channels flow to the dry lake beds of Palen Dry Lake and Ford Dry Lake. Since the four drainage ditches associated with the four timber bridge replacements are dry most of the year, there are no aquatic species that regularly live in the part of the drainage ditches near the bridge replacements, and no presence of specialized vegetation.

Impact Analysis:

a) Less than Significant Impact. Project related construction activities that have the potential to affect water quality may include vegetation clearing, demolition, grading, and generation of general debris. In addition, raw materials used during construction, such as concrete, asphalt, mortar, and slurry, may contain potential pollutants, which, if uncontrolled, could lead to water quality issues, including sediment runoff, non-stormwater discharges, and potentially degradation of downstream receiving waters, groundwater, and/or ecosystems. Construction related impacts to water quality would be addressed by measures **WQ-1** and **WQ-7**, which include implementing a SWPPP developed in accordance with the requirements of the California NPDES CGP and associated BMPs. The SWPPP will include, but is not limited to, BMPs, waste management, hazardous waste management, non-stormwater discharge management, spill prevention and clean up procedures, training, inspections, and monitoring during construction.

If a temporary earthen access ramp is used to access the channel bottoms, the construction contractor will implement erosion and sediment control BMPs around the earthen ramp during dry weather low flows and predicted rain event flows. If a heavy rain event is forecast, the construction contractor will divert the flows around the earthen ramp using run-on control BMPs, such as CASQA BMP NS-5 Clear Water Diversion, and erosion control BMPs on disturbed slope areas within the ditches. These BMPs will be outlined in the Project SWPPP and would reduce or eliminate erosion from the earthen ramp from potentially causing adverse water quality impacts.

The use of heavy construction equipment may cause soil compaction and reduce the infiltration capacity of soils, which increases the potential for runoff and erosion. To avoid or minimize storm water runoff impacts caused by compaction of soils and redevelopment of the site, site design (SD) and source control (SC) BMPs would be implemented. Non-structural SC BMPs, such as employee training and litter control (**WQ-2** and **WQ-3**), would be incorporated and maintained throughout the operational life of the Project using a regular maintenance program implemented by the County. Structural SC BMPs are any structural facility designed and constructed to mitigate impacts of storm water runoff pollution (i.e., slope and channel protection) (**WQ-4**). SD BMPs are used to directly reduce and control post-development runoff which is often accomplished by minimizing impervious areas to reduce the transport mechanism for moving pollutants off site (**WQ-5**). Additional SD and SC BMPs may include administrative actions, prohibition of practices, maintenance procedures, design of a structural facility, usage of alternative materials, and operation, maintenance, inspections, and compliance of an area. Therefore, impacts would be less than significant.

b) No Impact. During construction, the project may use limited amounts of water to control dust and transfer of soils offsite. During operation, the project would not require the use of water. Therefore, the Project would not result in a substantial decrease in groundwater supplies. During

construction the project has the potential to cause soil compaction where the use of heavy equipment is required for construction activities. Soil compaction increases stormwater runoff and reduces groundwater recharge. Project implementation would increase impervious surfaces resulting in a slight increase in stormwater runoff and reduced groundwater recharge. Post-construction, minimization measure **WQ-6** would be implemented to ensure all temporary construction areas would be returned to preconstruction conditions, including soil decompaction. Minimization measure **WQ-5** would be incorporated into final design to ensure impervious areas are minimized to the greatest extent possible. Therefore, the Project would not substantially interfere with groundwater recharge. No impact would occur.

c i) Less than Significant Impact. The proposed Project has the potential to increase siltation in the ditches during construction. However, BMPs and the SWPPP (measures **WQ-1** and **WQ-7**) would be implemented and regularly maintained during each phase of construction to prevent soil erosion, waste discharge, and streambank erosion, and to control sediment from disturbed areas and the earthen access ramp from reaching flowing portions of the ditches. Once construction is completed, the bridge replacements are not expected to increase or contribute erosion or siltation to the ditches. Therefore, impacts would be less than significant.

c ii and iii) Less than Significant Impact. The Project proposes a minimal increase in impervious surface area of each bridge, totaling 0.12 for all four bridges. After construction, the stormwater flow rates within the channels would observe a nominal increase due to the increased impervious surface area. During storm events, the increase in impervious surface area would slightly displace more water and therefore, increase the 2-, 10-, and 100-year flows by a nominal factor. However, the increase in stormwater runoff would not alter the existing drainage patterns in the Project area or change the upstream and downstream hydrology. The channel beds would still be able to handle the 2-, 10-, and 100-year flows. Additionally, measure **WQ-5** would be incorporated in final design to ensure impervious areas are minimized to the greatest extent possible. Therefore, impacts would be less than significant.

c iv) No Impact. During construction, the stream course would be diverted around the current phase of bridge construction to prevent potential stormwater or ephemeral flows from coming into contact with the construction activities and storage areas. Once construction is complete, the existing drainage pattern would be retained. Flows would be managed in a manner similar to the existing conditions upstream and downstream of the current flow crossing. No impact would occur.

d) No Impact. The Project area is not in a tsunami, or seiche zone. A review of the FEMA Flood Insurance Rate Map Number 06065C2475G shows that the Project is not located in a regulatory floodway and is not within a base floodplain elevation of a watercourse or lake. The Project area has been designated as Zone “D”, which is defined as areas that have possible, but undetermined flood hazard zoning, although no flood hazard analysis has been conducted. No impact would occur.

To avoid the potential for pollutant release due to project inundation, BMPs (see measure **WQ-1** and **WQ-7**) would be implemented for the proper management, storage, and removal of construction materials, solid wastes, and hazardous substances. Staging areas would be at least 50 feet from any drainage ditch and the maintenance or refueling of equipment would not take place within the drainage ditches. Additionally, preventative practices would be used for the maintenance of construction equipment and vehicles, and personnel properly trained in spill prevention and clean up procedures would be onsite throughout the duration of construction.

Jointly these controls would be used to prevent the introduction of construction pollutants into the ditches during a flood event. The new concrete bridge structures would be designed to withstand flood events. Therefore, no impact would occur.

e) No Impact. The Project is located within the Water Quality Control Plan (Basin Plan) for the Colorado River Basin Region (January 2019). The goal of the Basin Plan is to preserve and enhance water quality in the Colorado River Basin Region and to protect the beneficial uses of all regional waters for the benefit of present and future generations. The Project would be consistent with the Basin Plan objectives because the Project, in accordance with requirements of the California NPDES CGP (**WQ-1**), would develop and implement a SWPPP to manage and control potential contaminants from entering stormwater flows during construction. To further ensure consistency with the Basin Plan, measures **WQ-2** through **WQ-7** would be implemented to protect the quality of surface water, receiving water, and ground water from the completed Project through its operational life. Therefore, no impacts would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

The following avoidance and minimization measures will be implemented to further reduce the impact of the Project. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

Avoidance measures:

WQ-1: Stormwater Pollution Prevention Plan (SWPPP): Per Caltrans Construction Stormwater Management Program Requirements and Standard Specifications Section 13 Water Pollution Control, a SWPPP is required to be prepared prior to construction and implemented by the construction contractor to control water pollution during Project construction. The SWPPP shall be prepared prior to construction by a Qualified SWPPP Developer.

WQ-2: Employee Training. Employee Training BMP shall be in accordance with CASQA Municipal BMP SC-70 Road and Street Maintenance and County of Riverside Maintenance Requirements and Frequencies.

WQ-3: Litter Control. Litter Control BMP shall be in accordance with CASQA Municipal BMP SC-70 Road and Street Maintenance and County of Riverside Maintenance Requirements and Frequencies.

WQ-4: Slope and Channel Protection. Slope and Channel Protection BMP shall be in accordance with CASQA New Development and Re-development BMP SD-10 Site Design and Landscape Planning or the equivalent County of Riverside Standard.

WQ-7: Best Management Practices. The following BMPs will be included at a minimum to reduce impacts on biological and aquatic resources.

- Dust control measures will be implemented to minimize airborne dust impacts on adjacent vegetation.
- Activities that may produce sparks, including welding or grinding, will use protective gear to reduce fire risks, such as shields and protective mats. Fire suppression capabilities, including extinguishers, shovels, and water tankers, will be available on

site whenever construction occurs during the fire season (as determined by the Riverside County Fire Department).

- Trash will be stored in closed containers so that it is not readily accessible to wildlife and will be removed from the construction sites daily to avoid attracting predators to the Project area.
- Exotic plant species removed during construction will be properly handled to prevent sprouting or regrowth. Trucks carrying vegetation that will be removed from the Project sites will be covered and vegetation disposed of in accordance with applicable laws and regulations.
- Plans for water pollution and erosion control will be developed and implemented in accordance with Regional Water Quality Control Board (RWQCB) requirements. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. Plans will be reviewed and approved by Caltrans prior to construction. The water pollution and erosion control plan will include the following at a minimum:
 - No fluids or sediment from construction will enter into ephemeral washes.
 - Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
 - No erodible materials will be deposited into watercourses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
 - Equipment maintenance, staging, and dispensing of fuel, oil, coolant, or any other toxic substances will occur only in designated areas within the proposed grading limits of the Project sites. These designated areas will be clearly marked and located in such a manner as to contain runoff into watercourses.
 - Storage of equipment, fueling, and staging areas will be located on non-sensitive upland sites with minimal risks of direct drainage into watercourses. These designated areas will be located to prevent runoff from entering sensitive habitat, including watercourses. Necessary precautions will be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials will be reported to appropriate entities including, but not limited to, the applicable jurisdictional County, USFWS, CDFW, and RWQCB, and will be cleaned up immediately and contaminated soils removed to approved disposal areas.

Minimization measures:

WQ-5: Minimization of Impervious Areas. Minimization of Impervious Areas BMP shall be in accordance with CASQA New Development and Redevelopment BMP SD-10 Site Design and Landscape Planning or the equivalent County of Riverside Standard.

WQ-6: Temporary Construction Areas. Post-construction, all temporary construction areas within waters and uplands will be returned to preconstruction contours, decompacted, and hydroseeded with a native seed mix. Ephemeral washes and their banks will be recontoured with native sandy soils. No riprap or other obstructive material will be placed under the new bridges other than what is proposed for the Project.

4.11 Land Use Planning

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Riverside County General Plan, Riverside County General Plan Land Use Element, Riverside County Desert Center Area Plan.

Regulatory Setting:

California Government Code sections 65000-66037

The California Government Code delegates most of the State’s local land use and development decisions to cities and counties. Additionally, it establishes specific requirements pertaining to the regulation of land uses by local governments, including general plan requirements, specific plans, subdivisions, and zoning.

Pursuant to the State CEQA Guidelines, a project’s impact related to land use planning is evaluated in terms of compatibility with existing land uses and consistency with local plans and other local land use controls (i.e., general plans, zoning codes, specific plans, etc.).

Environmental Setting:

The Project is located within the County of Riverside General Plan and the Desert Center Area Plan (DCAP). The County of Riverside General Plan Land Use Element identifies the Project area as Open Space Rural. The closest community to the Project area is Desert Center which is approximately 9 miles away. There are no commercial, residential, or industrial land uses within the immediate vicinity of the Project.

Impact Analysis:

a) No Impact. The proposed Project would replace the existing structurally deficient bridges with modern bridges to maintain the roadway as a frontage road. The road currently does not divide an established community and would not divide any community post-construction. No impact would occur.

b) No Impact. The proposed Project is within the County of Riverside General Plan and the DCAP. The Project is consistent with the goals of both the General Plan and the DCAP to maintain areas of natural open space, sustain the permanent viability of the environment’s landforms and ecosystems, and preserve the unique features found in the Desert Center area. The proposed Project would maintain the existing roadway as a frontage road supporting local traffic and occasionally diverted freeway traffic. The proposed Project would not change the rural, open space setting by

replacing the existing bridge structures with new, structurally sound concrete bridges. No impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.12 Mineral Resources

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Riverside County General Plan Multipurpose Open Space Element.

Regulatory Setting:

The California Surface Mining and Reclamation Act of 1975 was enacted by the California Legislature to address the need for a continuing supply of mineral resources, and to prevent or minimize the negative impacts of surface mining to public health, property, and the environment.

Environmental Setting:

The Riverside County General Plan’s Multipurpose Open Space Element identifies mineral resources and establishes Mineral Resources Zones to designate lands that contain mineral deposits. According to the Mineral Resource Zones map found in the referenced document, the Project area is designated as an area where the presence and significance of mineral deposits are undetermined.

Impact Analysis:

a) and b) No Impact. Based on the Mineral Resources Zones map, the presence and significance of mineral deposits is undetermined, and the potential to encounter mineral resources at or near the Project location exists. However, the proposed Project would replace existing bridges at the same locations resulting in the same or similar condition that currently exists; therefore, the Project would not result in a loss of or impact accessibility to a locally important resource recovery site. Any potential resources located outside of the roadway ROW or other disturbed area would still be available. No impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.13 Noise

Would the project result in:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive ground borne vibration or ground borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 study area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the Federal Highway Administration’s *Construction Noise Handbook* (August 2006), Caltrans’ *Transportation and Construction Vibration Guidance Manual* (April 2020), Riverside County Ordinance No. 847, and the Riverside County General Plan Noise Element.

Regulatory Setting:

The State of California requires each county and city adopt a General Plan that includes a Noise Element, which is to be prepared per guidelines adopted by the Governor’s Office of Planning and Research. The purpose of the Noise Element is to limit the exposure of the community to excessive noise levels. CEQA requires baseline versus build analysis to assess whether a proposed project will have a noise impact.

Environmental Setting:

Noise sensitive receptors are areas where occupants are more susceptible to the adverse effects of noise pollution. Sensitive noise receptors include schools, residences, libraries, hospitals, and other care facilities. Noise levels decrease as the distance from the noise source to the receiver increases.

There are three primary types of receivers that can be impacted by ground vibration: people, structures, and equipment. Ground vibration can be annoying to people and can vary depending on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is running on a treadmill. Vibration generated by construction activity has the potential to damage structures. This damage could be structural damage, such as cracking of floor slabs, foundations, columns, beams, or wells, or cosmetic architectural damage, such as cracked plaster, stucco, or tile. Ground vibration also has

the potential to disrupt the operation of vibration-sensitive research and advanced technology equipment. This equipment can include optical microscopes, cell probing devices, and magnetic resonance imaging (MRI) machines.

The closest built environment to the Project area is the Desert Training Center Trailer Park and U.S. Postal Service, which is approximately 12 miles from the Project area. Therefore, there are no sensitive noise receptors or vibration receivers near the Project area.

Impact Analysis:

a) Less than Significant Impact. During construction, the Project would require the use of pickup trucks, bulldozers, dump trucks, and pile drivers. As identified in the Federal Highway Administration's *Construction Noise Handbook* (August 2006), construction equipment noise levels at their peak may range from 75 (pickup truck) to 101 (pile driver) dBA Lmax (maximum sound level) at 50 feet from the noise source. Beyond 50 feet the sound level decreases at a rate of about 6 decibels for every doubling of distance. Because there are no noise sensitive receptors within 50 feet of the proposed Project, no noise impacts are expected to occur during construction. Additionally, noise generated during construction would be temporary and intermittent and upon Project completion would cease.

The Project does not propose to increase the capacity of Chuckwalla Valley Road and therefore, the Project would not permanently increase ambient noise levels beyond the Riverside County General Plan Noise Element standards for Rural Open Space land uses (45 dBA). In addition, per the County's Ordinance No.847, capital improvement projects of a governmental agency are exempt from noise regulation. Therefore, impacts would be less than significant.

b) No Impact. Construction of the new bridges would require the use of pile drivers as well as heavy earthmoving equipment. However, no sensitive noise receptors or vibration receivers exist within proximity to the Project area; therefore, there would be no adverse effects during construction. Additionally, any ground borne vibration and ground borne noise levels resulting from construction activities would be temporary, intermittent, and short in duration. Once construction is complete, ground borne vibration and noise would cease. Therefore, no impact would occur.

c) No Impact. The nearest airport is the Desert Training Center Airport which is approximately 22 miles from the Project area. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels. No impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.14 Population and Housing

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the Riverside County Land Use Element.

Regulatory Setting:

CEQA requires the analysis of a project’s potential to induce growth. The State CEQA guidelines (Section 15126.2[e]) require that environmental documents “...discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment...”

Environmental Setting:

Population growth projections developed for the Southern California Association of Government’s (SCAG’s) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) indicate that the population of Riverside County is expected to increase from 2,316,000 to 3,183,000 between 2015 and 2040, which is a 37.4-percent increase (SCAG 2016). From 2006 to 2016, Riverside County had the largest share of population growth among the six counties in the SCAG region. The County added an additional 360,000 new residents (nearly 40 percent of the region’s increase in population).

The County of Riverside Land Use Plan identifies the land use type as open space rural. There are no commercial, residential, or industrial land uses within the immediate vicinity of the Project. The closest community to the Project area is Desert Center which is approximately 9 miles away.

Impact Analysis:

a) No Impact. The proposed bridge replacements would allow the existing roadway to be used as a temporary bypass road for freeway traffic during emergency or maintenance closures. Chuckwalla Valley Road is currently load restricted and therefore, is not capable of handling all bypassed freeway traffic. By replacing the existing structurally deficient timber bridges with new modern bridges the roadway would meet current design standards and vehicle loads. Furthermore, the Project does not propose to increase the capacity of Chuckwalla Valley Road to accommodate additional vehicle volumes particularly as the demand does not warrant the additional capacity. The proposed Project is limited to the bridge replacement and as such would not induce population growth. No impact would occur.

b) No Impact. The County of Riverside Land Use Plan identifies the Project study area’s land use type as open space rural. In addition, there are no existing residential developments in the Project

study area or surrounding vicinity. The proposed Project consists of replacing four existing bridge structures with new modern bridge structures which would not require right of way acquisition. Therefore, the Project would not displace people, any existing housing or necessitate the construction of replacement housing anywhere. No impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.15 Public Services

	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the Riverside General Plan Circulation Element.

Regulatory Setting:

State CEQA guidelines (Section 15126.2[e]) require that environmental documents “...discuss the ways in which the proposed project could foster economic or population growth, or... tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects...”

Environmental Setting:

Fire protection and emergency services are provided by the Riverside County Fire Department. The nearest fire station is Riverside County Fire Department 49, approximately 12 miles away from the Project site. Riverside County Fire Department 43 is the second closest at approximately 23 miles from the Project location. Police protection services in the Project area are provided by the Riverside County Sheriff’s Department. The nearest Riverside County Sheriff’s Department is approximately 23 miles from the Project. The Blythe Police Department is located next to the

Riverside County Sheriff's Department, approximately 23.5 miles from the Project's location. In addition to the police protection and emergency services within the Project area, the Chuckwalla Valley State Prison is approximately 9 miles from the Project site.

Impact Analysis:

a) Less than Significant Impact. The Project proposes to replace existing structurally deficient bridge structures with new modern bridges to allow the continued use of the roadway as a local access road and periodic bypass for highway traffic during emergency or maintenance closures.

During construction, the roadway would be temporarily closed between Acari Ditch Bridge and Aztec Ditch Bridge. The temporary closure would be managed through the development of a TMP (see measure **TRA-1**), which would include strategies and measures for keeping emergency providers informed of construction activities that might affect response times. In addition, emergency personnel would be able to utilize an unpaved access road along the adjacent transmission line corridor to pass through the Project area.

Given that the Project does not directly or indirectly induce population growth, there would be no impact to schools, parks, or other public facilities. Additionally, implementation of the Project would not result in an increased demand for police or fire protection services. Once completed, the Project would improve emergency and public access along Railroad Avenue by providing continued safe use of the roadway. Therefore, impacts would be less than significant.

Avoidance, Minimization and/or Mitigation Measure(s):

To address potential impacts to emergency service response times as a result of temporary roadway detours or closures, the following minimization measure would be implemented as part of the Project. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

TRA-1: Traffic Management Plan (TMP): A TMP shall be prepared for the Project prior to construction. The plan shall include strategies and measures to avoid and minimize disruption to local access and roadways during construction. Detour routes would be identified, coordinated, and approved by the County and affected local agencies prior to the closure. Emergency providers and the California Highway Patrol shall be notified in advance about all planned closures and detour routes. Upon construction completion, detour signage and traffic signal timings shall be restored to preconstruction conditions.

4.16 Recreation

	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on the Riverside County General Plan.

Regulatory Setting:

There are no State regulations related to recreational resources that are applicable to the proposed Project.

Environmental Setting:

The proposed Project is located along an approximately 16-mile stretch of Chuckwalla Valley Road. Chuckwalla Valley Road is a frontage road that runs west to east and is situated south of I-10. The closest cities are Desert Center, located 10 miles to the east, and Blythe, located 24 miles to the west. There are no major developed areas within the vicinity and the closest recreational facility is the Chuckwalla Valley Raceway located approximately 17 miles northwest of the Project area.

Impact Analysis:

a) and b) No Impact. There are no neighborhood or regional recreational facilities in or near the Project area. Additionally, the proposed bridge replacements would not generate a use of these resources, but instead is intended to resolve the existing deficiencies of the bridges by improving their load bearing capacity so the road would no longer be restricted in its use. No impact would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

No impacts have been identified; therefore, no measures are required. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

4.17 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section is based on the *Traffic Technical Memorandum* (April 2019), the Riverside County Transportation Analysis Guidelines for Level of Service Vehicle Miles Traveled, and the Riverside County General Plan Circulation Element.

Regulatory Setting:

Senate Bill 743

SB 743 (Steinberg, 2013) updates the way transportation impacts are measured in California for new development projects, making sure they are built in a way that allows Californians more options to drive less.

State CEQA Guidelines Section 15064.3

On December 28, 2018, the State CEQA Guidelines were updated, and Section 15064.3 was added and codified. The new updates went into effect that same year. Section 15064.3 specifically provides considerations for evaluating project-related transportation impacts and notes that ‘vehicle miles traveled’ (VMT) is the most appropriate measure of transportation impacts. VMT refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2), a project’s effect on automobile delay shall not constitute a significant environmental impact.

Section 15064.3 (b)(2) provides criteria for analyzing transportation project impacts. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

Environmental Setting:

Chuckwalla Valley Road is an approximately 16-mile stretch of frontage road that runs parallel to I-10. It connects Corn Springs Road and I-10 at the west end and Ford Dry Lake Road and I-10 at the east end. The existing timber bridges carry two lanes (one lane in each direction) of traffic over the Aztec, Tarantula, Sutro, and Acari ditches. Although the road mostly serves vehicles accessing local utilities, off-road recreation and only carries an average daily traffic (ADT) volume of approximately 40 vehicles, the road occasionally experiences a heavier volume when traffic is detoured from I-10 during temporary closures for construction or emergency incidents.

All construction activities would be conducted within the existing roadway right of way with construction staging and material laydown areas on the roadway itself. Chuckwalla Valley Road between the Corn Springs Road intersection to 6.3 miles east of the intersection would be closed during construction. The construction duration will take approximately 18 months. It is envisioned that all four bridges will be either constructed at the same time or staged in sequence depending on available access to adjacent utilities and properties.

Impact Analysis:

a) No Impact. The proposed bridge replacements would allow for the continued use of Chuckwalla Valley Road as a local frontage road, as well as an alternative route for I-10 traffic during temporary maintenance or emergency closures of the freeway. This is consistent with the Riverside County General Plan Circulation Element, which identifies Chuckwalla Valley Road as a local frontage road. As a local frontage road, Chuckwalla Valley Road does not include facilities or capacity for alternative transportation modes, such as bicycle or pedestrian use; however, this does not preclude other programs, plans, ordinances, or policies from addressing these alternative modes along identified priority roadways. No impact would occur.

b) No Impact. According to the December 2020, Riverside County Transportation Analysis Guidelines, the proposed Project can be categorized as a Non-Significant Transportation Impact project under the rehabilitation, maintenance, replacement, safety, and repair example. This example is derived directly from the 2018 Office of Planning and Research Guidance. State CEQA Guidelines Section 15064.3(b) states that transportation projects that reduce or have no impact on VMT can be presumed to have a less than significant transportation impact. The proposed Project would replace four structurally deficient wooden bridge structures with modern bridge structures that would be designed to meet current design standards. The existing bridge structures have exceeded their 50-year life span and are now load restricted due to deterioration and scour of the timber bridge members. Replacement of the bridges would allow for improvements to meet current vehicle loads and safety standards. The Project would not result in additional vehicle miles traveled because the Project does not increase vehicle capacity. Therefore, the proposed Project would not conflict with State CEQA Guidelines Section 15064.3 Subdivision (b). No impact would occur.

c) No Impact. The Project proposes to replace the existing bridges with concrete bridges of the same or similar length and width consistent with current Caltrans design standards. No changes in horizontal or vertical roadway geometry are proposed. No impact would occur.

d) Less Than Significant Impact. During construction, Chuckwalla Valley Road would be temporarily closed to traffic between Acari Ditch Bridge and Aztec Ditch Bridge. Emergency personnel would be able to utilize an unpaved access road along the adjacent transmission line

corridor to pass through the Project area. All closures and detours would be coordinated with law enforcement, fire protection, and emergency medical service providers per the Project’s TMP (see measure **TRA-1**). Once construction is completed, the road would be open to all traffic and would meet current design standards for access, including for emergency vehicles. Therefore, less than significant impacts would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

To address potential transportation impacts, the following minimization measure will be implemented. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

TRA-1: Traffic Management Plan (TMP): A TMP shall be prepared for the Project prior to construction. The plan shall include strategies and measures to avoid and minimize disruption to local access and roadways during construction. Detour routes would be identified, coordinated, and approved by the County and affected local agencies prior to the closure. Emergency providers and the California Highway Patrol shall be notified in advance about all planned closures and detour routes. Upon construction completion, detour signage and traffic signal timings shall be restored to preconstruction conditions.

4.18 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:

	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section is based on tribal consultation conducted for the Project as required under Assembly Bill (AB) 52, the September 2021 *Historic Property Survey Report*, *Historical Resources Evaluation Report* and *Archaeological Survey Report* prepared for the Project.

Regulatory Setting:

Effective July 1, 2015, the State CEQA Guidelines was revised to include early consultation with California Native American tribes and consideration of tribal cultural resources (TCRs). These changes were enacted through Assembly Bill (AB) 52. The intent of AB 52 is to ensure information

on TCRs is available early in the planning process to identify and address potential adverse impacts. CEQA now establishes that a “project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment” (PRC § 21084.2).

The term “tribal cultural resource” refers to sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California PRC Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

To help determine whether a project may have such a substantial adverse change in the significance of a TCR, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification of proposed projects within their traditionally and culturally affiliated area. AB 52 stipulates that the NAHC shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the project area. If a tribe wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe’s request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect on a TCR, if a significant effect exists, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2).

Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the California Public Records Act. TCRs are also exempt from disclosure.

Environmental Setting:

The Native American Heritage Commission (NAHC) was contacted on February 5, 2019, to review its Sacred Lands Files (SLF), to determine if any known cultural resource information available in the SLF. In a reply dated February 8, 2019, the NAHC stated that the SLF search for the Project was completed with negative results; however, the absence of specific site information in the SLF does not necessarily indicate the absence of cultural resources in the APE.

On September 23, 2019, based on a list of Native American contacts within the region that was provided by the County, initial AB 52 consultation letters were sent to the following ten Native American tribal representatives:

- Agua Caliente Band of Cahuilla Indians; Director/Tribal Historic Preservation Office, Patricia Garcia-Plotkin
- Cabazon Band of Mission Indians; Director/Tribal Historic Preservation Office, Chairperson, Doug Welmas
- Cahuilla Band of Indians; Chairperson, Daniel Salgado
- Colorado River Indian Tribes; Chairperson, Dennis Patch
- Fort Yuma Quechan Indian Tribe; President, Jordan D. Joaquin
- Morongo Band of Mission Indians; Tribal Historic Preservation Officer, Ann Brierty (March 2020-present) and Travis Armstrong (Sept 2019-March 2020)
- Ramona Band of Cahuilla; Chairperson, Joseph Hamilton
- Soboba Band of Luiseño Indians; Tribal Historic Preservation Officer, Joseph Ontiveros
- Torres-Martinez Desert Cahuilla Indians; Chairperson, Thomas Tortez
- Twenty-Nine Palms Band of Mission Indians; Tribal Historic Preservation Officer, Anthony Madrigal

The letters provided a summary of the Project and requested information regarding comments or concerns the Native American contacts might have about the Project and whether any traditional cultural properties or other resources of significance would be affected by implementation of the Project. The letters also stated that if the tribes would like to consult under AB 52, they would have to respond within 30 days, pursuant to PRC 21080.3.1(d). Below is the status of all tribal responses and consultation efforts:

Agua Caliente Band of Cahuilla Indians; Director/Tribal Historic Preservation Office, Patricia Garcia-Plotkin. A response was received from Lacy Padilla, Archaeologist for the Agua Caliente Band of Cahuilla Indians dated October 22, 2019, in which she stated that the Project is within the boundaries of the tribe's Traditional Use Area. For this reason, the Agua Caliente Band of Cahuilla Indians requested the following: (1) formal consultation under AB 52; (2) cultural resource inventory of the Project area by a qualified archaeologist; (3) copy of the cultural resource record search; (4) copy of any cultural resource documentation connected to the Project; (5) presence of an approved Cultural Resource Monitor during any ground-disturbing activities associated with the Project; and (6) shapefile of the Project area of potential effects (APE). A copy of the cultural resource records search for information and the shapefile of the Project was transmitted to Ms. Padilla via email. The County met with Ms. Padilla and Ms. Patricia Garcia-Plotkin (Director/Tribal Historic Preservation Office [THPO]) on January 9, 2020, for a formal AB 52 consultation meeting. Ms. Garcia-Plotkin noted the Project was in a traditional use area of the Tribe; however, needed additional Project information to provide formal comment. Ms. Garcia-Plotkin requested exhibits showing the bridge limits with contours and elevations of the bottom of the bridge footings. The County provided the Agua Caliente Band of Cahuilla Indians the requested exhibits. Ms. Garcia-Plotkin emailed the County on July 16, 2020, requesting that an approved Agua Caliente Native American Cultural Resource Monitor observe construction work during any ground disturbing activities associated with the Project. The Tribe also noted their concerns for the Project were addressed and closed out their AB 52 consultation efforts. The

County emailed a follow-up letter on October 8, 2020, requesting additional information from Agua Caliente Band of Cahuilla Indians related to their traditional use area and its association with the Project area. The Agua Caliente Band of Cahuilla Indians provided additional information regarding the tribe's Traditional Use Area and on December 9, 2020, the County requested Agua Caliente Band of Cahuilla Indians to identify tribal cultural resources within the Project APE to support their request for monitoring. Ms. Garcia-Plotkin responded on January 5, 2021, stating there are no known resources in the APE and the THPO makes recommendations to monitor projects based on a variety of datasets. Ms. Garcia-Plotkin noted it was up to the County, as lead agency, to accept or decline ACBCI's monitoring request. The County transmitted a copy of the ASR on July 13, 2021, via email to Ms. Garcia-Plotkin for a 30-day review period and there has been no response to date from the Agua Caliente Band of Cahuilla Indians. The County sent a monitoring denial letter to Ms. Garcia-Plotkin on July 28, 2021 and closed out AB 52 consultation with the Tribe.

Soboba Band of Luiseño Indians; Tribal Historic Preservation Officer, Joseph Ontiveros. A response was received from Joseph Ontiveros, THPO for Soboba Band of Luiseño Indians dated October 22, 2019. On November 14, 2019, Mr. Ontiveros met with the County of Riverside for AB 52 consultation. Mr. Ontiveros noted the Project area is immediately adjacent to the I-10 Corridor and the Coco Maricopa Trail and falls within a traditional cultural landscape that is sensitive to the Tribe. Mr. Ontiveros stated that the Tribe has oral histories of the area which are described in their Cahuilla bird songs. He noted that the Tribe understands the Project is replacing existing bridges along an existing road; however, the Tribe doesn't lose connection with the area/landscape as a result of it being developed. Mr. Ontiveros requested his comments and concerns regarding the Project be included in the HPSR for the Project. In addition, he requested a copy of the cultural resource records search information for the Project. A copy of the cultural resource records search information and the shapefile of the Project was transmitted to Mr. Ontiveros via email on November 18, 2019. Mr. Ontiveros' comments and concerns regarding the Project were included in the ASR and Attachment D of the HPSR. A copy of the ASR was transmitted to Mr. Ontiveros on July 28, 2021, for a 30-day review period. No response from Mr. Ontiveros or the Tribe has been received to date. The County emailed Mr. Ontiveros on November 16, 2021, to formally close out AB 52 consultation with the Tribe.

Morongo Band of Mission Indians; Tribal Historic Preservation Officer, Ann Brierty (March 2020-present) and Travis Armstrong (Sept 2019-March 2020). Travis Armstrong, THPO for the Morongo Band of Mission Indians, responded to the AB 52 letter on October 10, 2019. He noted the Project is within the ancestral territory and traditional use area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. The Tribe requested formal consultation with the lead agency, as well as a copy of the cultural resource records search conducted for the Project, Tribal participation in the survey and testing, and a copy of any cultural assessment for the Project. A copy of the cultural resource records search information was transmitted to Mr. Armstrong via email. On November 21, 2019, the County met with Mr. Armstrong for a formal AB-52 consultation meeting. Mr. Armstrong noted the Tribe was not interested in monitoring for the Project independently; however, if another tribe requested monitoring, the Tribe would like to participate. In addition, Mr. Armstrong indicated the Tribe would like to be consulted if any cultural resources are discovered during Project construction.

In March 2020, Ann Brierty became the THPO for the Tribe. On October 8, 2020, The County emailed Ms. Brierty a follow-up AB 52 letter denying the Tribe's request for Native American

monitoring for the Project. The County also requested a response within 30 days of the date of the letter. If no response is received, the County will consider AB 52 consultation with the Tribe to be complete. Ms. Brierty emailed County requesting cultural resource reports, DPR forms and a location map. She also provided her availability for a meeting. A link was emailed to Ms. Brierty to download the records search results for the project and location maps. Ms. Brierty was notified the cultural reports were still in review and once the reports are approved, a copy will be provided to her. The County met virtually with Ms. Brierty on November 23, 2020, to further discuss the Project. Ms. Brierty requested standard mitigation measures, for inadvertent discoveries and identification of human remains, be included in the environmental document. In addition, the Tribe would like to receive copies of the final cultural reports. A copy of the ASR was transmitted via email to Ms. Brierty for a 30-day review period. No response to date. On November 21, 2020, the County emailed Ms. Brierty a letter indicating the standard mitigation measures the Tribe requested have been included in the environmental document and to formally close out AB 52 consultation with the Tribe.

Cabazon Band of Mission Indians; Director/Tribal Historic Preservation Office, Chairperson, Doug Welmas. A response was received from Nancy Markwardt, Recording Administrator/Office Manager for the Cabazon Band of Mission Indians dated September 25, 2019, in which she noted the Tribe has no record of Native American cultural resources that may be impacted by the Project.

Cahuilla Band of Indians; Chairperson, Daniel Salgado. No response to the initial letter was received. Therefore, the County assumes the Tribe does not wish to consult on the Project and consultation with the Tribe is concluded.

Colorado River Indian Tribes; Chairperson, Dennis Patch. No response to the initial letter was received. Therefore, the County assumes the Tribe does not wish to consult on the Project and consultation with the Tribe is concluded.

Fort Yuma Quechan Indian Tribe; President, Jordan D. Joaquin. No response to the initial letter was received. Therefore, the County assumes the Tribe does not wish to consult on the Project and consultation with the Tribe is concluded.

Ramona Band of Cahuilla; Chairperson, Joseph Hamilton. No response to the initial letter was received. Therefore, the County assumes the Tribe does not wish to consult on the Project and consultation with the Tribe is concluded.

Torres-Martinez Desert Cahuilla Indians; Chairperson, Thomas Torte. No response to the initial letter was received. Therefore, the County assumes the Tribe does not wish to consult on the Project and consultation with the Tribe is concluded.

Twenty-Nine Palms Band of Mission Indians; Tribal Historic Preservation Officer, Anthony Madrigal. No response to the initial letter was received. Therefore, the County assumes the Tribe does not wish to consult on the Project and consultation with the Tribe is concluded.

Impact Analysis:

a) – b) Potentially Significant Impact. Through the records search and AB 52 tribal consultation process, no listed or eligible for listing tribal cultural resources were identified within the APE. However, the potential exists for undiscovered tribal cultural materials or tribal remains to be

discovered during earth-moving activities as part of construction. Impacts to undiscovered Tribal Cultural Resources will be evaluated and addressed in the EIR.

Avoidance, Minimization and/or Mitigation Measure(s):

Measures to mitigate potentially significant impacts on tribal cultural resources will be evaluated and addressed in the EIR.

4.19 Utilities and Service Systems

Would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source(s): Information in this section was collected from the preliminary right of way and utility research completed for the proposed Project.

Regulatory Setting:

Water Conservation Act of 2009 (Senate Bill X7-7)

The Water Conservation Act of 2009 (SB X7-7) requires all water suppliers to increase water use efficiency. The urban water use goal within the state is to achieve a 20 percent reduction in per capita water use by December 31, 2020.

California Integrated Waste Management Act (AB 939)

AB 939 established the California Integrated Waste Management Board under CalRecycle, which required all counties within California to prepare integrated waste management plans. Additionally, it changed the focus of solid waste management from landfill to diversion strategies (e.g., source reduction, recycling, and composting), and required all municipalities to divert 25

percent of their solid waste from landfill disposal by January 1, 1995, and 50 percent by 2000. Later legislation mandates the 50 percent diversion requirement be achieved every year.

Environmental Setting:

The existing bridges do not carry any utilities and the proposed bridge construction is not expected to include new utilities. A single existing utility line (telephone) runs along the north side of the Project area; however, it is outside the limits of the proposed bridge and road improvements.

Impact Analysis:

a) Less than Significant Impact. The construction contractor, in coordination with the County, would coordinate with the utility provider during final design to ensure protection in place (see measure **UTIL-1**). The proposed bridge replacements would not require or result in utility relocations or construction of new utilities or service systems. Therefore, impacts would be less than significant.

b) and c) No Impact. The proposed bridge replacements would not include development that requires new or expanded water supply. The intent of the Project is to ensure the roadway remains viable as a local access road and occasional bypass for I-10 traffic during periodic closures due to maintenance or emergencies. No impacts would result.

d) and e) Less than Significant. The existing bridge structures consist of creosote-treated wood. Upon removal, the timber debris from the bridges would be managed as TWW in accordance with the DTSC Alternative Management Standards for TWW. TWW may be disposed of at a Class III landfill that has obtained a Department of Toxic Substances Control Variance as long as the generator and transporter have also obtained variances. The nearest Class III landfill site accepting TWW is Lamb Canyon in Beaumont, California which is located approximately 112 miles from the Project area. The expected amount of contaminated timber debris to be disposed of is estimated to be about 155,000 board feet. The construction contractor, in coordination with the County, would be required to submit all applicable permits for disposing of the TWW (see measure **HAZ-2**).

It is anticipated that the disposal of this Project's generated debris would not exceed the capacity of area landfills. The Project would implement Caltrans' Standard Specification 14-10 Solid Waste and Recycling to manage the disposal of or recycling of solid waste from the job site and comply with the Caltrans Environmental Rules and Requirements Section 7-1 of the Caltrans Construction Manual (November 2019) which specifies requirements for solid waste as regulated under CalRecycle. Therefore, impacts would be less than significant.

Avoidance, Minimization and/or Mitigation Measure(s):

With implementation of the following avoidance measures, the Project would have a less than significant impact on utilities. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

HAZ-2: Upon removal, the bridges will be managed as treated wood waste (TWW) in accordance with the Department of Toxic Substances Control (DTSC) Alternative Management Standards for TWW. The nearest Class III landfill site accepting TWW is the Lamb

Canyon Landfill in Beaumont, California which is approximately 112 miles from the Project area. The construction contractor, in coordination with the County, will be required to submit all applicable permits for disposing of the TWW.

UTIL-1: The construction contractor, in coordination with the County, will coordinate with the utility provider during final design to ensure protection in place.

4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source(s): Information in this section is based on CAL FIRE’s Fire Hazard Severity Zones map and Riverside County General Plan Safety Element Update.

Regulatory Setting:

The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for the stewardship and fire protection of over 31 million acres of California’s privately owned wildlands. CAL FIRE classifies and maps wildfire hazards within State Responsibility Areas (SRAs) and Local Responsibility Areas (LRAs). LRAs are lands on which neither state nor federal government have any legal responsibility for providing fire protection. SRAs are lands in which the State of California holds financial responsibility for providing fire protection. SRAs are defined based on land ownership, population density and land use. For example, CAL FIRE does not have responsibility for densely populated areas, incorporated cities, agricultural lands, or lands administered by the federal government. Per California Public Resource Code 4201-4204, SRAs are mapped based on relevant factors such as fuels, terrain, and weather, and their potential for causing ignition to buildings.

Per California Government Code 51175-89, CAL FIRE is required to identify very high fire hazard severity zones. Fire hazards can be in SRAs or LRAs and mapping of the very high fire hazard severity zones is based on data and models of potential fuels over a 30–50-year time horizon and

their associated expected fire behavior and expected burn probabilities which quantifies the likelihood and nature of vegetation fire exposure (including firebrands) to buildings.

Senate Bill 1241 requires the Office of Planning and Research, in coordination with CAL FIRE to prepare, develop, and transmit to the Secretary of the Natural Resources Agency proposed changes or amendments to the initial study checklist for the inclusion of questions related to fire hazard impacts for projects in state responsibility areas and very high fire hazard severity zones.

Environmental Setting:

According to Figure 6 of the Riverside County General Plan Safety Element Update (2021) and CAL FIRE’s Fire Hazard Severity Zones map, the Project area is classified as a local responsibility area (LRA) and Federal Responsibility Area (FRA). Additionally, the Project area is located in “LRA Moderate” and “Other Moderate” zone.

Impact Analysis:

a) through d) No Impact. As mentioned above, the Project is not in or near a state responsibility area or classified as being in a very high fire hazard severity zone. Nevertheless, construction equipment and machinery increase the likelihood of fire risks due to the use of gasoline and diesel. However, the construction contractor would be required to implement measure **WQ-7** to prevent risk of wildfire. Additionally, firefighting equipment (extinguishers, shovels, fire retardants, etc.) will be on site for emergencies.

During construction, Chuckwalla Valley Road would be closed to through traffic between Aztec Ditch Bridge and Acari Ditch Bridge; however, emergency personnel would be able to pass through the Project area using an unpaved access road located along the existing transmission line corridor. Additionally, a TMP (see measure **TRA-1**) would be prepared and implemented during construction to inform emergency response providers of planned construction activities and detour routes. Upon Project completion, Chuckwalla Valley Road would meet current design standards for vehicle loads and would be open to all vehicle traffic including emergency vehicles.

Replacement of the current timber bridge structures with new concrete structures would reduce the potential risk of fires by removing inherently flammable timber materials. Replacement of the bridges would not result in increased wildfire risks or pollutant concentrations beyond existing conditions and would enhance overall safety conditions in the area. The proposed Project would not install any infrastructure, such as new power lines or other utilities that could exacerbate wildfire risks. The bridge replacement Project would not expose people or structures to a significant wildfire risk. Therefore, no impacts would occur.

Avoidance, Minimization and/or Mitigation Measure(s):

With implementation of the avoidance and minimization measures identified below, the Project would have no impact due to wildfire. This topic will not be analyzed further in the EIR unless new information is presented during the scoping process that indicates a potentially significant impact could occur.

Avoidance measure:

WQ-7: Best Management Practices. The following BMPs will be implemented to reduce impacts on biological and aquatic resources.

- Dust control measures will be implemented to minimize impacts on adjacent vegetation.
- Activities that may produce sparks, including welding or grinding, will use protective gear to reduce fire risks, such as the use of shields and protective mats. Fire suppression capabilities, including extinguishers, shovels, and water tankers, will be available onsite whenever construction occurs during the fire season (as determined by the Riverside County Fire Department).
- Trash will be stored in closed containers so that it is not readily accessible to wildlife and will be removed from the construction site daily to avoid attracting wildlife to the Project area.
- Project construction will be limited to daylight hours as feasible and will minimize the use of lighting to only what is required for directional and safety purposes.
- Exotic plant species removed during construction will be properly handled to prevent sprouting or regrowth. No plant species listed in CVMSHCP Volume I, Section 4.5.5 will be used.
- Trucks carrying vegetation that will be removed from the Project area will be covered and disposed of in accordance with applicable laws and regulations.
- Plans for water pollution and erosion control will be developed and implemented in accordance with RWQCB requirements. The plans will describe sediment and hazardous materials control, dewatering or diversion structures, fueling and equipment management practices, and use of plant material for erosion control. Plans will be reviewed and approved by Caltrans prior to construction. The water pollution and erosion control plan will include the following at a minimum:
 - Ensure no fluids or sediment from construction will enter ephemeral washes.
 - Sediment and erosion control measures will be implemented until such time soils are determined to be successfully stabilized.
 - No erodible materials will be deposited into watercourses. Brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks.
 - Equipment maintenance, staging, storage, and dispensing of fuel, oil, coolant, or any other toxic substances will be located on non-sensitive upland sites with minimal risks of direct drainage into watercourses. These designated areas will be clearly marked and located in such a manner as to contain runoff from entering sensitive habitat, including watercourses and ephemeral washes.
 - Necessary precautions will be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials will be reported to appropriate entities, including, but not limited to, the applicable jurisdictional County, USFWS, CDFW, or RWQCB, and will be cleaned up immediately and contaminants removed to approved disposal areas.

Minimization measure:

TRA-1: Traffic Management Plan (TMP): A TMP will be prepared for the Project prior to construction. The plan will include strategies and measures to avoid and minimize disruption to local access and roadways during construction. Detour routes will be identified, coordinated, and approved by the County and affected local agencies prior to the closure. Emergency providers and the California Highway Patrol will be notified in advance about all planned closures and detour routes. Upon construction completion, detour signage and traffic signal timings will be restored to preconstruction conditions.

4.21 Mandatory Findings of Significance

	<i>Significant and Unavoidable Impact</i>	<i>Less Than Significant with Mitigation Incorporated</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Impact Analysis:

a) – b) Potentially Significant Impact. As described in Sections 4.4, 4.5, and 4.18 of this Initial Study, the Project was determined to have a potentially significant impact on biological resources, cultural resources, and tribal cultural resources. Potential impacts to these resources will be evaluated in an EIR which will address all potential direct, indirect, and cumulative impacts.

Based on the analysis conducted as part of this Initial Study, the Project was determined to have no impact or a less than significant impact on all other environmental topic areas. The Project would include Standard Measures, Best Management Practices, and Project Features which would further reduce the effects of project construction and operation on these topic areas. As a result, the Project would not have individual impacts that could contribute to a cumulative effect. Because the Project would not result in cumulative impacts under all other environmental topic areas, those environmental topics will not be further analyzed or discussed in the EIR.

c) Less Than Significant Impact. The proposed Project consists of replacing four structurally deficient bridge structures. Generally, impacts to humans are associated with air quality, hazards

and hazardous materials, noise impacts, and wildfire. As detailed in the respective topic sections of this document, avoidance and minimization measures **AQ-1** through **AQ-3**, and **HAZ-1** and **HAZ-2**, would be implemented to reduce the effects of construction. With implementation of the identified measures, the proposed Project would not cause significant adverse impacts to humans and impacts would be less than significant.

5 Conclusion

Based on the analysis conducted for the Project and documented in this Initial Study, the County of Riverside plans to prepare a focused Environmental Impact Report (EIR) to address the potentially significant environmental impacts on biological, cultural, and tribal cultural resources. The County of Riverside plans to issue a Notice of Preparation to notify responsible agencies, trustee agencies, and involved federal agencies that an EIR with significant impacts will be prepared for the Project and to solicit their input on the scope and content of the information to be addressed in the EIR. Once prepared, the EIR will be circulated for public review and comment prior to the County of Riverside deciding to move forward with the Project.

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8 List of Technical Studies (Bound Under Separate Cover)

Technical studies are available via the Project webpage with exception of the cultural reports, which contain confidential resource information.

- Biological Resources Technical Report
 - Natural Environmental Study (Minimal Impacts) (includes as appendix Jurisdictional Delineation Report).
 - Biological Assessment
- HPSR/ASR/HRER (Confidential- Not for Public Distribution)
- Initial Site Assessment
- Location Hydraulic Study and Summary Floodplain Encroachment Report
- Paleontological Technical Memorandum
- Traffic Technical Memorandum
- Visual Impact Assessment Memorandum
- Water Quality Assessment Report