

County Road 66B over Colusa Drain Bridge Replacement Project

Draft Initial Study / Proposed Mitigated Negative Declaration

BRLO-5911(063)

Lead Agency:

Glenn County Agency of Public Works
P.O. Box 1070 / 777 N. Colusa Street
Willows, CA 95988

September 2021

Prepared By:

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List of Acronyms

AASHTO	American Association of State Highway Transportation Officials
GCAPCD or Air District	Glenn County Air Pollution Control District
BMPs	Best Management Practices
BSA	Biological Survey Area
CAP	Climate Action Plan
Caltrans	California Department of Transportation
Cal Water	California Water Service Company
CBC	California Building Code
CC	Community Commercial
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFGF	California Fish and Game Commission
CFR	Code of Federal Regulations
County	Glenn County
CNDDDB	California Natural Diversity Database
CRHR	California Register of Historical Resources
CRWQCB	California Regional Water Quality Control Board
CVFPB	Central Valley Flood Protection Board
CWHR	California Wildlife Habitat Relationships
dBA	decibel
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
ft	Feet
GHG	Greenhouse gas
ISA	Initial Site Assessment
LID	Low Impact Development
LRA	Local Responsibility Area
LSA	Limited Soils Assessment
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MMRP	Mitigation Monitoring and Reporting Program
NAHC	Native American Heritage Commission
NEIC	Northeast Information Center
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollution Discharge Elimination Permit
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NOx	Oxides of Nitrogen
OWOUS	Other Waters of the United States
PGA	Peak Ground Acceleration
Phase I ESA	Phase I Environmental Site Assessment
PM	Parcel Map
PM _{2.5}	Fine Particulate Matter
PM ₁₀	Respirable Particulate Matter
RC	Resource Constraint
REC	Recognized Environmental Condition
ROG	Reactive Organic Gases
RPW	Relatively Permanent Water
R3	Medium High Density Residential
SDC	Caltrans Seismic Design Criteria
SLIC	Spills, leaks, investigations and cleanup

SMP	Soils Management Plan
SNC	Sensitive Natural Community
sq ft	Square feet
SWPPP	Stormwater Pollution Prevention Plan
SRA	State Responsibility Area
TNW	Traditional Navigable Waters
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank
VMT	Vehicle-miles-traveled

Draft Initial Study / Proposed Mitigated Negative Declaration Environmental Coordination and Review

I. PROJECT DESCRIPTION

- A. Project Title:** County Road 66B over Colusa Drain Bridge Replacement Project - Bridge No. 11C0068 - BRLO-5911(063)
- B. Project Sponsor/Lead Agency:** Glenn County Public Works Agency
777 N Colusa Street
Willows, CA 95988
- Property Owners:** Glenn County Public Works Agency
777 N Colusa Street
Willows, CA 95988
- C. County Contact:** Talia Richardson PE, Interim Director
Glenn County Public Works Agency
777 N Colusa Street
Willows, CA 95988
(530) 934-6530
- D. Project Location:** The Project is located on County Road (CR) 66B at its crossing over the Colusa Drain in Glenn County, California, Latitude 39.428501, Longitude -122.05000. (**Figure 1 – Project Location Map**).
- E. Assessor's Parcel Number (APN):** The project will be located within the existing public right-of-way and narrow portions of APNs 013-250-021, 013-250-037, and 013-210-034, which will result in minimal right-of-way acquisitions.
- F. Project Size:** The project is approximately 1,400 feet in length totaling approximately 4.6 acres in size.
- G. General Plan Designation:** Public Right-of-Way (ROW), and Intensive Agriculture
- H. Zoning:** Public ROW, FS-80 (Farmland Security Zone – minimum 80 acres), AP-80 (Agricultural Preserve Zone – minimum 80 acres), AE-40 (Exclusive Agricultural Zone – minimum 40 acres)
- I. Environmental Setting:** The project site is located on CR66B in the southeastern area of Glenn County, California, within the United States Geological Survey (USGS) Princeton USGS Quadrangle, within the Larkin Child Land Grant in the vicinity of Section 11, Township 18N, Range 2W.

The Project is located along an existing roadway within the County of Glenn's right-of-way. The survey area is characterized as asphalt roadway, gravel road shoulder, a narrow strip of disturbed annual grassland dominated by ruderal vegetation, and private land used for agricultural purposes. The adjacent agricultural land is traditionally used for rice production. Also, the Colusa Drain flows north to south through the survey area. The vegetation within the survey area is frequently managed either mechanically (as in the Colusa Drain and the rice fields) or via herbicides.

The average annual precipitation is 17.95 inches and the average annual temperature is 61.5° F (WRCC 2018) in the region where the survey area is located. The Project site sits at approximately 74 feet above mean sea level and is sloped between 0-1 percent. Soils within the survey area are silty clays or clay loams with a deep restrictive layer located more than 80 inches in depth.

J. Project Description:

The Glenn County Public Works Agency, in cooperation with the Federal Highway Administration (FHWA) and the California Department of Transportation (Caltrans), is proposing to replace

Bridge No. 11C-0068 on County Road 66B over Colusa Drain. The primary objective of this project is to replace the existing structurally deficient bridge with a new wider structure. The project is funded through the Federal Aid Highway Bridge Program (HBP) and Federal Toll Credits. The bridge was last inspected in February 2016 and found to be structurally deficient with a sufficiency rating of 55.7, which qualifies it for rehabilitation under the HBP program. However, bridge replacement can be considered an appropriate “rehabilitation” option if it proves to be the most effective solution, which is the case for this project. FHWA does not typically authorize rehabilitation projects for structurally deficient timber bridges.

The project site is located approximately 2 miles west of State Route 45 in the south eastern portion of Glenn County near the town of Princeton, Colusa County. Traffic is primarily local and supports the agricultural operations in the general vicinity. County Road 66B is bordered by rice fields and crosses the Colusa Drain at the project location. Reclamation District 2047 constructed the Colusa Drain in 1919 originally to serve as a bypass. In addition to agricultural water, the drain now conveys both summer and winter flows to the Knights Landing outfall gates on the Sacramento River in Yolo County.

The existing bridge was originally constructed in 1940 and is approximately 54’ long and 20’ wide with a 19’ clear width. It is a three span timber structure supported by reinforced concrete abutments and piers founded on driven cast-in-steel-shell (CISS) piles. The outside spans are 16’ long and the middle span is 18’ long. In 1974, the bridge was rehabilitated with a new timber deck. There are no railings on the existing bridge, only a 6x6 timber curb.

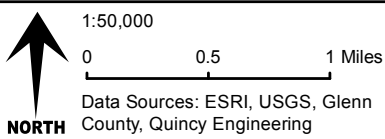
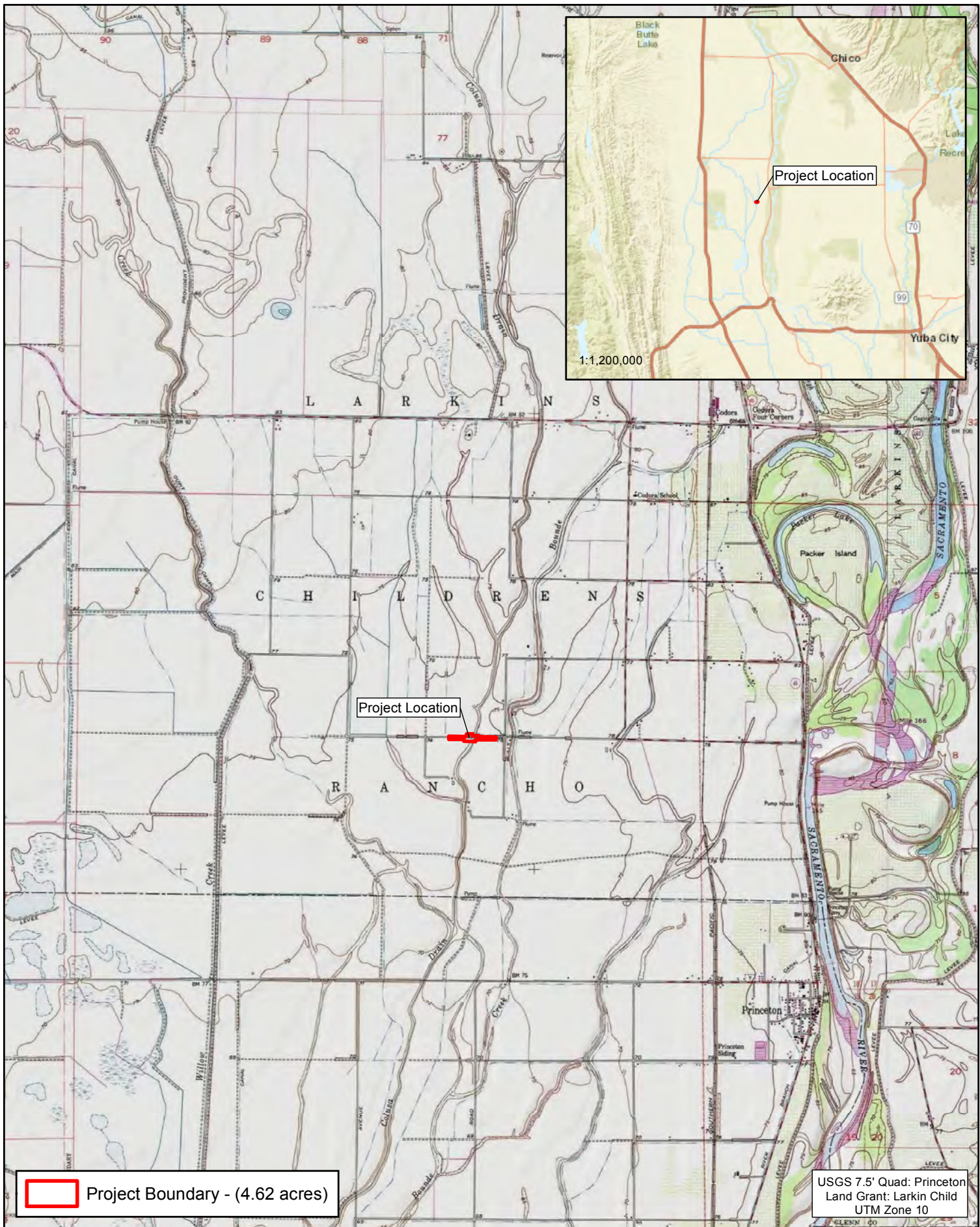
The new roadway for County Road 66B will be designed in accordance with the site constraints, Glenn County design standards, and AASHTO’s Policy on Geometric Design of Highways and Streets. Utilizing Glenn County Standards, the roadway width for rural and agricultural developments is two-12’ lanes with two-4’ unpaved shoulders for a total width of 32’. This width is preferred by the County for traffic safety due to oversized agricultural equipment that frequently uses the road and bridge with the added consideration for the anticipated width increase of modern farm equipment.

There are currently property access points at three of the four corners of the existing bridge that are used by residents and heavy agricultural equipment. These access openings accommodate ingress and egress of a loaded double semi- truck trailers and will remain open during the harvest season. The access road alignments proposed accommodate truck turns for a double semi-truck trailer, but only in a direction away from the bridge. Providing adequate truck turns toward the bridge would require the access roads to be shifted further into the adjacent properties, therefore requiring the take of productive farmland. The proposed access road alignment limits both environmental and R/W impacts.

County Road 66B at the project site will be closed during construction. This will result in an approximate 7-mile detour, but will greatly decrease overall impacts, reduce the R/W need, and will decrease the total construction time. Closing the road will also limit environmental impacts due to the ability to limit construction staging to the existing roadway area.

Glenn County currently has a 60’ R/W along centerline of County Road 66B, extending 40’ to the north and 20’ to the south of centerline (**Figure 2 – Site Plan**). The area surrounding the bridge is privately owned parcels. It is anticipated that additional R/W will be required for temporary construction easements and R/W acquisitions. Based on preliminary R/W mapping, the following parcels will be affected by the project. In addition to the private properties, it is anticipated that coordination with Provident Irrigation District will be required when dealing with the canal. There are no known utilities or utility easements in the vicinity of the bridge site. Utility coordination or relocation is not anticipated for this project.

Equipment anticipated to be used in construction of the replacement bridge includes dozers, cranes, dump trucks, concrete trucks, concrete pumps, and pile driving equipment. Removal of the existing bridge will require excavators, hoe rams, cranes, and dump trucks. Construction is anticipated to be completed in one construction season.



County of Glenn CR 66B Bridge 11C-0068
Project Vicinity Map
Figure 1

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K. Public Agency Approvals:

1. California Regional Water Quality Control Board – NPDES and §401 Water Quality Certification
2. California Department of Fish and Wildlife – Streambed Alteration Agreement §1602 and an Incidental Take Permit, as appropriate to satisfy California Endangered Species Act requirements
3. Central Valley Flood Protection Board Encroachment Permit
4. U.S. Army Corps of Engineers – Clean Water Act §404 Permit
5. U.S. Fish and Wildlife §7 Endangered Species Act Consultation

L. Regulatory Guidance

This document is an Initial Study, prepared pursuant to the California Environmental Quality Act (CEQA), for the proposed County Road 66B over Colusa Drain Bridge Replacement Project. This Initial Study has been prepared in accordance with CEQA, Public Resources Code Sections 21000 et seq. and the CEQA Guidelines found in Chapter 14 of the California Code of Regulations (CCR).

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment. In accordance with CEQA Guidelines Section 15064(a)(1), an environmental impact report (EIR) must be prepared if there is substantial evidence in light of the whole record that the proposed project under review may have a significant effect on the environment. A negative declaration may be prepared if the lead agency finds that there is no substantial evidence, in light of the whole record, that the project may have a significant effect on the environment. A negative declaration is a written statement describing the reasons why a proposed project will not have a significant effect on the environment and, therefore, why the proposed project will not require the preparation of an EIR (CEQA Guidelines Section 15371). Furthermore, CEQA Section 15070 indicates that a public agency shall prepare a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when the initial study has identified significant effects, but:

(1) Revisions in the project plans or proposals in accordance with the CEQA Guidelines Section 15070(b) made by or agreed to by the applicant before the proposed mitigated negative declaration and initial study is released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and

(2) There is no substantial evidence, in light of the whole record before the agency, that the proposed project as revised may have a significant effect on the environment.

M. Native American Tribal Consultation: 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, has consultation begun?

☒ Yes ☐ No

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II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below could be potentially affected by this project, but, due to the inclusion of specific mitigation measures, will result in impacts that are a "Less Than Significant with Mitigation Incorporated," as indicated by the environmental checklist on the following pages.

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

III. DIRECTOR DETERMINATION

On the basis of this initial evaluation:

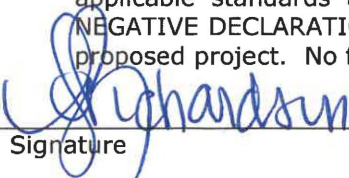
- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

- ☒ 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 have a potentially significant impact unless mitigated, but at least one effect has been adequately analyzed in an earlier document pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT (EIR) 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, there WILL NOT be a significant effect in this case because all potentially significant effects have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and 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. No further study is required.


Signature

09/08/21
Date

Talia Richardson, PE, Interim Director Glenn County Public Works Agency

Printed Name

IV. EVALUATION OF ENVIRONMENTAL IMPACTS

- Responses to the following questions and related discussion indicate if the proposed project will have or potentially have a significant adverse impact on the environment.
- A brief explanation is required for all answers except “No Impact” answers that are adequately supported by referenced information sources. 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 or general standards.
- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- Once it has been 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 is at least one “Potentially Significant Impact” entry when the determination is made an EIR is required.
- Negative Declaration: “Less than Significant with Mitigation Incorporated” applies when the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less than Significant Impact.” The initial study will describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 4, “Earlier Analysis,” may be cross-referenced).
- Earlier analyses may be used where, pursuant to tiering, a program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 15063(c)(3)(D)].
- Initial studies may incorporate references to information sources for potential impacts (e.g. the general plan or zoning ordinances, etc.). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list attached, and other sources used or individuals contacted are cited in the discussion.
- The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

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

DISCUSSION:

A.1. Less than Significant. The proposed project involves the construction of a new bridge and the demolition of the existing bridge across Colusa Drain along County Road 66B. The proposed project will not change regulations or policies (or their implementation) relative to aesthetic/visual resources. Project construction will not change the established visual character and planned future use of the surrounding area as similar components (i.e. bridge) already exist at the location. Placement of the new bridge will not interfere with the views of scenic vistas from the adjacent residence and public right-of-way. Although the rural setting and unique geography of Glenn County and its surrounding area have created a number of scenic vistas and corridors, the proposed project only includes bridge replacement, roadway, and approach rehabilitation along the existing roadway alignments for improved safety and will not have a substantial adverse effect on a scenic vista.

A.2. No Impact. There are no designated resources within a state scenic highway in the project area. Furthermore, there are no officially recognized scenic roadways in Glenn County. The proposed project would not result in a significant change to the appearance of the existing roadway, nor would it eliminate access to scenic views or alter the landscapes surrounding the project site.

A.3. No Impact. The proposed project will not substantially degrade the existing visual character or quality of the site and its surroundings. The project would not create structures with a substantial vertical presence. Temporary visual impacts may occur during construction activities, when heavy equipment and construction materials will be present within the project area. Neither the function nor the general appearance of the surrounding area would be substantially modified by the proposed project.

A.4. No Impact. The improvements associated with this project do not include the installation of lighting or reflective surfaces that could contribute to substantial sources of light or glare. Additionally, construction will not occur during the evening or nighttime hours.

MITIGATION: None required.

B. Agriculture and Forest Resources:

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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?			X	
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
3. 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))?				X
4. Result in the loss of forest land or conversion of forest land to non-forest use?				X
5. 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?		X		

DISCUSSION:

The project is located in an agricultural area of County jurisdiction. There is farmland designated as Prime farmland in the project area as defined by the Farmland Mapping and Monitoring Program (FMMP). There are also parcels within the project area that have Williamson Act contracts. See Appendix A Farmlands Study for the County Road 66B Bridge Replacement Project.

It is anticipated that no Williamson Act contracts will be terminated, although parcels currently under contract may require minor revisions, due to the revisions to access for adjacent property owners, temporary construction easement and minor modifications to farmland resulting from minor right of way acquisitions. The remaining acreage from each parcel will continue to meet Glenn County's criteria for eligibility as Williamson Act contract parcels. Government Code §51295 states that when a project acquires or modifies only a portion of a parcel of land subject to a Williamson Act contract, the contract is deemed null and void only as to that portion of the contracted farmland taken. The remaining land continues to be subject to the contract unless it is adversely affected with property

acquired by eminent domain or in lieu of eminent domain. Section 15206 of the California Environmental Act Guidelines identifies the cancellation of 100 acres or more of a Williamson Act contract by a project as a significant impact under the California Environmental Quality Act. Although the project bisects land that is in Williamson Act contracts, the project only affects 0.19 acres of Williamson Act contract land (0.14 acres temporary and 0.04 acre permanent). As stated above, it is anticipated that no Williamson Act contracts will be terminated, although parcels currently under contract will require minor revisions due to the new right of way acquisitions resulting from fill slope intrusions onto adjoining properties.

When farmland is affected on State funded projects, Caltrans consults with the U.S. Department of Agriculture's Natural Resources Conservation Service. Caltrans uses the U.S. Department of Agriculture's Farmland Conversion Impact Rating Form NRCS-CPA-1006 to determine impacts to farmland. The evaluation form is submitted to the U.S. Department of Agriculture's Natural Resources Conservation Service, which assigns a score for a site's relative value. The Natural Resources Conservation Service returns the evaluation form, and Caltrans completes a site assessment with the score assigned from the Natural Resources Conservation Service. A combined score under 160 indicates no further consideration for protection. Government Code Section 658.4 c (3) of the Farmland Protection Policy Act states that "sites receiving scores totaling 160 or more be given increasingly higher levels of consideration for protection." In compliance with Title 7 Code of Federal Regulation 658.4 (4) (ii), the County will implement Caltrans avoidance measures to minimize farmland impacts. The proposed project will permanently impact 0.04 acres of prime farmland. A Farmland Conversion Impact Rating Form was submitted to Caltrans to utilize and consult with the Natural Resource Conservation Service. Based on the minimal amount of impacts to farmlands, it is expected that the U.S. Department of Agriculture's Farmland Conversion Impact Rating will be well below the 160 point threshold.

B.1. Less Than Significant. The proposed project will have both permanent and temporary impacts on farmland identified as Prime by the FMMP. The proposed project will permanently convert 0.04 acres and temporarily impact 0.14 acres of farmland of prime farmland. The total amount of farmland designated in the County, as of 2016, of Important Farmland (Prime, Farmland of Statewide Importance, Unique and Farmland of Local Importance) is 293,310 acres, therefore the impacts and permanent conversion to Prime Farmland is 0.000014 percent. Upon completion of the project, the land designated as prime that is affected by the temporary construction activities will be reverted to its original condition and use. Due to the minor amount of farmland conversion, this impact is considered to be less than significant.

B.2. Less Than Significant. The proposed project will have both permanent and temporary impacts on parcels that have Williamson Act contracts. Permanent (0.04 acres) and temporary (0.14 acres) easements will affect 0.18 acres of land with Williamson Act contracts. According to Glenn County as of 2019, the total amount of land with Williamson Act contracts (including lands entered into the Farmland Security Act) in the County is approximately 331,330 acres; therefore, the permanent impacts and temporary conversion affecting Williamson Act contract land are 0.000012 percent and 0.000042 percent, respectively.

Cancellation of Williamson Act contracts is regulated under Government Code Sections 51290-51295. Under Section 51290, the Department of Conservation is authorized to tentatively cancel a contract to accommodate a public facility. Government Code Section 51292 outlines the specific requirements for partial cancellation of a Land Conservation Act (LCA) contract under two "consistency" findings that must be made by the Department of Conservation. The two consistency findings are:

1. The location is not based primarily on a consideration of the lower cost of acquiring land in an agricultural preserve.
2. If the land is agricultural land covered under a contract pursuant to this chapter for any public improvement, that there is no other land within or outside the preserve on which it is reasonably feasible to locate the public improvement.

The federal Farmland Protection Policy Act of 1981 applies to all federally funded projects that take right-of-way in farmland. Caltrans necessitates the analysis of impacts to farmlands through the assessment tool "NRCS-CPA-1006 - Farmland Conversion Impact Rating for Corridor Type Projects". A Farmland Conversion Impact Rating Form was submitted to Caltrans to utilize and consult with the Natural Resource Conservation Service. Typical outcomes of this evaluation process include a range of actions including documentation that no further action is required or Caltrans completing a Corridor

Assessment Criteria Evaluation and based on the points compare the relative valuation of the various project alternatives and make a final corridor selection that may allow for the minimization of conversion of agricultural lands to no agricultural lands. Due to the minor amount of Williamson Act land conversion this impact is considered to be less than significant.

B.3. No Impact. The proposed project would not conflict with existing zoning for, or cause the rezoning of forestland (as defined in Public Resources Code §1220(g)), timberland (as defined in Public Resources Code §4526), or Timberland Production (as defined in Government Code §51104(g)), because the project site and the surrounding area does not contain forest land. The proposed project is located in the northern portion of California's Central Valley, a non-forested region.

B.4. No Impact. The proposed project would not cause the rezoning or loss of forestland or timberland to non-forest use due to its location within Glenn County. The project is located within the valley of the northern portion of California's Central Valley, and, as such does not contain forest land.

B.5 Less Than Significant With Mitigation: The construction activities have the potential to temporarily disrupt access to the adjacent properties. There is also the potential that temporary staging and access areas on lands identified as statewide importance, unique by the FMMP or with Williamson Act contracts, could modify the soil conditions at those locations. With the implementation of Mitigation Measure B.1 there will be a less than significant impact with mitigation incorporated.

MITIGATION:

Mitigation Measure B.1: Preservation of Agricultural Access and Land

The following are recommended avoidance and mitigation measures that shall be implemented prior to the start of construction and continue throughout project activities.

1. The advance notification and coordination with local property owners/growers will be conducted to minimize short-term impacts related to construction activities. Before any work that could interfere with agricultural activities, the work will be coordinated with appropriate property owners/growers.
2. The extent of work within temporary construction easements on private land will be minimized to the extents necessary to provide access and construct infrastructure such as driveways and bridges on private land.

Timing & Implementation: The County shall provide advance notification and coordination with property owners/growers and confirm that soils amendments meet specifications prior to and post construction.

C. Air Quality

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

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Conflict with or obstruct implementation of the applicable air quality plan?			X	
2. 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?		X		
3. Expose sensitive receptors to substantial pollutant concentrations?			X	
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

DISCUSSION:

The proposed project is in the Northern Sacramento Valley Planning Area (NSVPA), which includes the following counties: Butte, Colusa, Glenn, Shasta, Sutter, Tehama, and Yuba. The NSVPA is bounded on the north and west by the Coastal mountain range and on the east by the southern portion of the Cascade mountain range and the northern portion of the Sierra Nevada Mountains. High temperatures and low humidity, with prevailing winds from the south, characterize summer conditions. Occasional rainstorms, interspersed with stagnant and sometimes foggy weather, characterize winter conditions. Southern winds continue to predominate during the winter. Two types of inversions occur in the NSVPA: 1) during the summer, sinking air forms a lid over the region and distributes photochemical smog and 2) air cools next to the ground while air aloft remains warm causing poor dispersion of ground level pollutant emissions.

The California Air Resources Board (CARB) prepares and submits to the EPA a State Implementation Plan (SIP) explaining how the state will attain compliance with Federal clean air standards. The NSVPA is subject to federal, state, and local regulations. The NSVPA adopted an updated 2012 Triennial Air Quality Attainment Plan as its component of the SIP in compliance with the Federal and California Clean Air Acts.

The Glenn County Air Pollution Control District (GCAPCD) is responsible for attainment of the National and California Air Quality Standards in Glenn County. The GCAPCD's primary role when reviewing projects is to evaluate their consistency with ambient air quality standards and the provisions of SIP and Attainment Plan. The following table identifies criteria pollutants and the applicable state and federal attainment status:

Table 1: Glenn County Ambient Air Quality Attainment Status

Pollutant	State Designation	Federal Designation
ozone	Attainment	--
8-hour ozone	--	Unclassified/Attainment
Carbon monoxide	Unclassified	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
PM10	Nonattainment	Unclassified
PM2.5	Attainment	Unclassified/Attainment

(California Air Resources Board, 2019)

C.1. Less Than Significant Impact With Mitigation Incorporated. The proposed project is the replacement of a structurally deficient bridge. It does not involve the construction of new expanded facilities. The proposed project will be required to comply with all applicable rules, regulations, and control measures including permitting, prohibitions, and limits to emissions that work to reduce air pollution throughout California. Therefore, it will not conflict with or obstruct implementation of any air quality plans in Glenn County. The proposed project would not create a source of new vehicle traffic, such as a new housing development or commercial uses, and thus there would be no added vehicle trips to the existing roadway network, and no long-term air quality impacts. The proposed project is located within the Northern Sacramento Valley Air Basin (NSVAB) and the jurisdiction of GCAPCD. Construction activities may result in ground disturbance due to vegetation removal and placement of bridge components. To comply with Caltrans Standard Specifications, the County shall comply with all Best Available Mitigation Measures (BAMMs), as described in Mitigation Measure C.1, for the control of construction related particulate emissions

C.2. Less Than Significant With Mitigation Incorporated. Bridges and roadways are conduits that enable vehicular traffic to move from one point to another. The project involves replacement of an existing bridge, and does not generate new traffic, thereby generating more emissions, as would new development (i.e., residential or commercial land uses).

Implementation of the proposed project would result in the generation of short-term construction-related air pollutant emissions. Diesel fumes may be noticeable near the site; however, diesel fumes will be a short-term effect. All equipment must comply with California emissions standards and Caltrans Standard Specifications. Exhaust emissions from construction equipment would contain reactive organic gases (ROG), nitrogen oxides (NOx), carbon monoxide (CO) and particulate matter less than 10 microns in diameter (PM10). Particulate matter less than 10 microns emissions would also result from windblown dust (fugitive dust) generated during construction activities. As shown in Table 1, per the California Ambient Air Quality Standards (CAAQS) the project area is designated as a non-attainment area for PM10.

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. Each of the above impacts are temporary, local, and construction related.

Because the project is receiving funding from the Highway Bridge Program, the project must comply with Caltrans Standard Specifications (Section 7-1.01F, Air Pollution Control and Section 10.1, Dust Control), therefore, the contractor is required to comply with other local jurisdiction rules, regulations, ordinances, and statutes.

The incorporation of Mitigation Measure C.1 would reduce impacts associated with PM10 to a less than significant level. Air quality mitigation measures are consistent with the requirements of Glenn County General Plan and the GCAPCD and Caltrans Standard Specifications for pollution and dust control.

C.3. Less Than Significant Impact There are two residences in the vicinity to the project area. Both residential dwellings exists over 1,000 ft. from the project site. Project activities consist of removal of the current structure and replacement with a new bridge structure as well as roadway approach work. There are no schools, hospitals, or other sensitive receptors in the area and no substantial pollutant concentrations are anticipated to occur. Temporary construction activities would result in particulate emissions in an area designated as non-attainment. However, implementation of BAMB's and the incorporation of Mitigation Measure C.1 would minimize fugitive dust to the maximum extent possible.

C.4. Less Than Significant Impact Other than construction activities (diesel odors may be noticeable near the construction site), no long-term odor producing activities would result from the project. Therefore, the proposed project would not result in less than significant objectionable odor impacts.

MITIGATION:

Mitigation Measure C.1: (Air Quality)

To comply with the Glenn County Air Pollution Control District's (GAPCD) regulations (section 76 visible emissions), the County shall comply with all Best Available Mitigation Measures (BAMMs) for the control of construction related particulate emissions. The contractor shall submit an Air Quality Attainment Plan to the County for approval. The approved plan shall include all applicable BAMMs as specified by GCAPCD's Standard Construction Phase Mitigation Measures, including but not limited to the following:

1. Haul trucks must be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
2. Construction equipment exhaust emissions shall not exceed GCAPCD Section 76 Visible Emissions (40 percent opacity or Ringelmann 2.0). Operators of vehicles and equipment found to exceed opacity limits shall act to repair the equipment within 72 hours or remove the equipment from service.
3. The area disturbed by demolition, clearing, grading, earth moving, or excavation operations shall be minimized at all times.
4. Suspend grading or earth moving activities when wind speeds exceed 20 mph
5. Minimize unnecessary idling time to 5 minutes.
6. Water shall be applied as needed to prevent fugitive dust impacts offsite.
7. All onsite vehicles should be limited to a speed of 15mph on unpaved roads.

MITIGATION MONITORING C.1.: Public Works staff shall ensure the construction documents incorporate Best Available Mitigation Measures and the development of an Air Quality Attainment Plan as appropriate by the contractor. Public Works staff will ensure that construction, grading, and erosion control operations are conducted in accordance with GCAPCD standards.

D. Biological Resources Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species as listed and mapped in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		X		
2. 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?		X		
3. 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?		X		
4. 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?			X	
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

DISCUSSION:

A Natural Environment Study (NES) was prepared by Gallaway Enterprises in September 2020 (Appendix B). The purpose of the NES is to document the current endangered, threatened, sensitive and rare species, and their critical habitats that occur in the biological survey area (BSA) of the project. The BSA includes the project site as well as a 250-foot buffer of the projects site so that indirect effects on special status species could be identified. Primary references consulted include species lists and information gathered using the United States Fish and Wildlife Service (USFWS) Information, Planning, and Conservation System (IPaC), California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDDB), the California Native Plant Society's (CNPS) list of rare and endangered plants, and literature review. A Draft Delineation of Jurisdictional Waters of the United States was also prepared for the project in June 2018 by Gallaway Enterprises (Appendix C). The surveys involved an examination of botanical resources, soils, hydrological features, and determination of wetland characteristics based on the United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (Environmental Laboratory 1987) and other current regulations, manuals and interpretations of jurisdiction currently in effect.

The project site contains the habitat types of riverine, rice, barren, and annual grassland. The riverine habitat is associated with Colusa Drain which traverses the project site. Rice and annual grassland is found on the agricultural fields of the four corners of the project site. Barren habitats are comprised of the existing roadway, gravel road shoulders and sidewalks.

There is no National Marine Fisheries Service (NMFS) or United States Fish and Wildlife designated Critical Habitat in or near the project site.

D.1. Less Than Significant with Mitigation Incorporated. The special-status species with a potential to occur within the project area are western pond turtle (*Emys marmorata*), tri-colored blackbird (*Agelaius tricolor*), Giant garter snake (*Thamnophis gigas*) and various bird species protected under the Migratory Bird Treaty Act (MBTA). The potential of occurrence for the aforementioned species is considered to be moderate to high due to suitable habitat and favorable conditions.

Giant Garter Snake

Giant garter snakes are listed as threatened under the ESA and CESA. According to the USFWS Recovery Plan for the Giant Garter Snake, the project site is within the Colusa Basin Recovery Unit (USFWS 2017). Giant garter snakes are the largest species of garter snake. Dull yellow striping and a wide head commonly distinguishes GGS from other common species of garter snake. Giant garter snakes are found in the wetlands of the Sacramento and San Joaquin Valleys from Chico, Butte County to Mendota Wildlife Area, Fresno County. Suitable habitat includes marshes, sloughs, back waters of rivers, irrigation canals, drainage canals, agricultural wetlands, flooded rice fields, and occasionally streams with low gradient and slow to stagnant waters. Giant garter snakes breed from March to April and females give birth to live young from July to early September. Giant garter snakes stay active as long as temperatures are warm, and start to move underground into small mammal burrows or crevices around October 1 to avoid potentially lethal autumn and winter temperatures (USFWS 2017). Giant garter snakes overwinter in upland hibernacula. Current threats facing the GGS are habitat loss and fragmentation as a result of urbanization and conversion of wetlands, changes in water availability, levee and canal maintenance, water management and water deliveries that do not account for the giant garter snake, small populations, and invasive aquatic species (USFWS 2017).

Survey Results

Suitable habitat components or primary constituent elements (PCE) for GGS consist of (1) a freshwater aquatic component with protective emergent vegetative cover that will allow foraging, (2) an upland component near the aquatic habitat that can be used for thermoregulation and for summer shelter in burrows, and (3) an upland refugia component that will serve as winter hibernacula (USFWS 2017). There is suitable aquatic and upland habitat that contains the PCEs for GGS within and surrounding the BSA. In addition, there are two (2) GGS CNDDDB occurrences within 5 miles of the BSA.

Aquatic Habitat

Suitable aquatic habitat for GGS consists of marshes, ponds, small lakes, low gradient streams, irrigation ditches, drainage canals, and agricultural wetlands (e.g. rice fields) (USFWS 2017). The BSA contains suitable aquatic habitat for GGS in the form of Colusa Drain, the unnamed drainage ditch, and surrounding rice paddies. Water is present in these areas during the GGS's active season (Gallaway Enterprises personal observation) and vegetation was observed along the edges and banks of the Colusa Drain for foraging and refuging GGS.

Upland Habitat

Suitable upland habitat for GGS consists of land that is not typically inundated during the active season and is adjacent to suitable aquatic habitat. Suitable upland habitat often contains bankside vegetative cover and small mammal burrows or other forms of refuge (USFWS 2017). The BSA contains suitable upland habitat for GGS. There is vegetative cover on the banks of Colusa Drain, and there are many small mammal burrows are present within the unpaved access roads and annual grassland areas directly adjacent to aquatic habitat.

Project Impacts

Construction activities will result in temporary and permanent impacts to GGS aquatic and upland habitat. In order to reduce potential impacts to giant garter snake to a less than significant level Mitigation Measure D.1 is included.

Western Pond Turtle

The western pond turtle is a SSC in California. Western pond turtles are drab, darkish colored turtles with a yellowish to cream colored head. They range from the Washington Puget Sound to the California Sacramento Valley. Suitable aquatic habitats include slow moving to stagnant water, such as back waters and ponded areas of rivers and creeks, semi-permanent to permanent ponds and irrigation ditches. Preferred habitats include features such as hydrophytic vegetation, for foraging and cover, and basking areas to regulate body temperature. In early spring through early summer, female turtles begin to move over land in search for nesting sites. Eggs are laid on the banks of slow moving streams. The female digs a hole approximately four inches deep and lays up to eleven eggs. Afterwards the eggs are covered with sediment and are left to incubate under the warm soils. Eggs are typically laid between March and August (Zeiner et al. 1990). Current threats facing the western pond turtle include loss of suitable aquatic habitats due to rapid changes in water regimes and removal of hydrophytic vegetation.

Survey Results

Suitable western pond turtle habitat occurs within Colusa Drain and the unnamed drainages present in the BSA, when water is present. Colusa Drain generally lacks emergent rocks and logs on which western pond turtles bask for thermoregulation; however, the ditches feature fresh emergent vegetation for foraging, cover, and open banks for basking. Western pond turtles are frequently found within irrigation canals and drainages throughout their range in the Central Valley.

Project Impacts

Construction activities have the potential to impact western pond turtle. In order to reduce potential impacts to western pond turtle to a less than significant level Mitigation Measure D.2 is included.

Tricolored Blackbird

Tricolored blackbirds are listed as threatened under the CESA. They range from southern Oregon through the Central Valley, and coastal regions of California into the northern part of Mexico. Tricolored blackbirds are medium-size birds with black plumage and distinctive red marginal coverts, bordered by whitish feathers. Tricolored blackbirds nest in large colonies within agricultural fields, marshes with thick herbaceous vegetation, or in clusters of large blackberry bushes near a source of water and suitable foraging habitat. They are nomadic migrators, so documenting occurrence at any location does not mean that they will necessarily return to that area. Current threats facing tricolored blackbirds include colonial breeding in regards to small population size, habitat loss, overexploitation, predation, contaminants, extreme weather events, drought, water availability, and climate change (CDFW 2018).

Survey Results

There is suitable nesting habitat for tricolored blackbirds within the BSA where dense patches of blackberry brambles occur, and the surrounding rice fields provide suitable foraging habitat. Further, there are ten (10) tricolored blackbird CNDDDB occurrences within 5 miles of the BSA (CNDDDB 2018). Tricolored blackbirds were observed within 500 feet of the BSA during the biological habitat assessment performed by Gallaway Enterprises.

Project Impacts

Construction activities will be initiated outside of the avian nesting season, on October 1, and will be continuous until the project is completed in late April. In the event that construction activities cannot be initiated outside of the avian nesting season, Mitigation Measure D.3. is proposed. With the implementation of Mitigation Measure D.3. there will be less than significant impact to tricolored blackbird.

Migratory Birds and Raptors

Nesting birds are protected under the MBTA (16 USC 703) and the CFGC (3503). The MBTA (16 USC §703) prohibits the killing of migratory birds or the destruction of their occupied nests and eggs except in accordance with regulations prescribed by the USFWS. The bird species covered by the MBTA includes nearly all of those that breed in North America, excluding introduced (i.e. exotic) species (50 Code of Federal Regulations §10.13). Activities that involve the removal of vegetation including trees, shrubs, grasses, and forbs or ground disturbance has the potential to affect bird species protected by the MBTA.

The CFGC (§3503.5) states that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (all owls except barn owls) 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”. Take includes the disturbance of an active nest resulting in the abandonment or loss of young. The CFGC (§3503) also states that “it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto”.

Survey Results

The habitats present within the BSA provide nesting habitat for a variety of migratory bird and raptor species. During the field survey, no old bird nests were found under the bridge; however, it is possible for cliff swallows, barn swallows, and black phoebes, which commonly nest on the sides or pillars of bridges, to occupy the area.

Project Impacts

Construction activities will be initiated outside of the avian nesting season. In the event that construction activities cannot be initiated outside of the avian nesting season, Mitigation Measure D.4. is proposed. With the implementation of Mitigation Measure D.4. there will be a less than significant impact to migratory birds or raptors.

Project Impacts

With the implementation of avoidance and minimization measures specified above there will be no direct or indirect impacts to avian threatened species (i.e. tricolored blackbird) or avian species protected under the MBTA and CFGC.

Compensatory Mitigation

There will be no compensatory mitigation necessary for project activities in regards to avian threatened species (i.e. tricolored blackbird) or avian species protected under the MBTA and CFGC.

To avoid impacts to bird and raptor species, including tri-colored blackbird, protected under the MBTA and the California Fish and Game Commission (CFGC), Mitigation Measure D.4 has been included.

D.2. Less Than Significant with Mitigation Incorporated. No Sensitive Natural Communities (SNC) as identified by the California Department of Fish and Wildlife or riparian habitat has been mapped within the BSA. Additionally there is no Critical Habitat as designated by the U.S. Fish and Wildlife Service, within or adjacent to the project site. The project’s impact would be less than significant.

D.3. Less Than Significant with Mitigation Incorporated. The types of aquatic resources identified within the BSA are distinguished as non-relatively permanent water, relatively permanent water, and irrigated wetland. The survey area contains 2.04 acres of Waters of the U.S.

The proposed project includes the replacement of the bridge over Colusa Drain with a new wider structure which will directly fill portions of the aquatic resources within the project site. The estimated amount of permanent impacts is 0.063 acres and the estimated amount of temporary impacts is 0.092 acres. These impacts will be a result of bridge replacement, and associated infrastructure improvements. This is considered a potentially significant impact. Mitigation Measure D.5 will reduce these impacts to a less than significant level.

Mitigation Measure D.5 requires the County to obtain final permits from the USACE, CVRWQCB, CVFPB and CDFW prior to the construction of the project. With this mitigation measure, potential impacts to biological resources at the site will be less than significant with mitigation incorporated.

D.4.- D.6. Less Than Significant Impact. The proposed project consists of the widening and replacement of existing transportation facilities. The extents and scope of the improvements to the roadway, bridge, and associated infrastructure will not be significantly different than what currently exists. The project will not result in the fragmentation of an existing wildlife habitat nor conflict with any local policies or ordinances protecting biological resources. The project’s impact would be less than significant.

MITIGATION:

MITIGATION D.1. (Giant Garter Snake):

Initial construction and the installation of exclusion fencing will be initiated during the active period of GGS; therefore, GGS individuals are expected to avoid harm's way during initial vegetation removal and ground-disturbing activities. Construction activities will continue as temperatures decrease and GGS enter their dormant season. With the installation of exclusion fencing during the GGS active season and the continuation of construction activities throughout the GGS inactive season, GGS individuals will not be expected to move into the project area. Avoidance and minimization measures will also be implemented to minimize the potential for take. To ensure no direct take of GGS occur due to the proposed project, the following avoidance and minimization measures will be implemented.

Avoidance and Minimization Efforts

The following recommendations, when implemented, will avoid and minimize impacts to this species:

- The applicant is proposing to work outside of the snake's active season. Construction and ground disturbing activities will be initiated during the active season, continue through the inactive season, and is anticipated to be completed before the inactive season is over.
- Twenty-four hours prior to the commencement of construction activities, the project area shall be surveyed for giant garter snakes by a qualified biologist. The biologist will provide a written report that adequately documents the monitoring efforts within 24 hours of commencement of construction activities. The project area shall be re-inspected by the monitoring biologist whenever a lapse in construction activity of 2 weeks or greater has occurred.
- A Worker Environmental Awareness Training Program for construction personnel shall be conducted by a qualified biologist for all construction workers, including contractors, prior to the commencement of construction activities.
- During construction operations, stockpiling of construction materials, portable equipment, vehicles, and supplies will be restricted to the designated construction staging areas and all operations will be confined to the minimal area necessary.
- A qualified biologist shall be onsite to monitor for GGS during all vegetation removal and initial ground-disturbing activities. After the initial ground-disturbing activities have been completed, the qualified biologist will monitor the installation of exclusion fencing around the project boundary. The qualified biologist will monitor excavation of suitable GGS habitat and bridge removal.
- Project-related vehicles will observe a 20-mile-per-hour speed limit within construction areas, except on existing paved roads where they will adhere to the posted speed limits.
- High visibility fencing will be erected around the habitats of the snake to identify and protect these areas from encroachment of personnel and equipment. These areas will be avoided by all construction personnel. The fencing shall be inspected by the Contractor before the start of each work day and maintained by the Contractor until completion of the project. Fencing will be established in the uplands immediately adjacent to aquatic snake habitat and extending up to 200 feet from construction activities, where feasible. Snake exclusionary fencing will be buried at least 6 inches below the ground to prevent snakes from attempting to burrow or move under the fence.
- Best Management Practices (BMPs) will be implemented to minimize the potential for erosion and sedimentation into nearby waterbodies.
- After completion of construction activities, the applicant will remove any temporary fill and construction debris and, wherever feasible, restore disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions.
- A photo documentation report showing pre- and post-project area conditions will be submitted 1 month after the implementation of the restoration.

Compensatory Mitigation

The project will permanently and temporarily impact upland and aquatic GGS habitat. To mitigate permanent and temporary impacts to GGS habitat the following is recommended:

- Permanent loss of GGS habitat will be compensated by purchasing creation credits at the Colusa Basin Conservation Bank or at another USFWS and CDFW approved conservation bank with a service area that accommodates the project location. Credits shall be purchased prior to the start of construction. Table 3 shows the amount of credits that will need to be purchased.

- Temporary disturbance to snake habitat shall be restored to pre-project conditions within 1 year of completion of construction.
 - Restoration and monitoring shall follow the USFWS Guidelines for Restoration and/or Replacement of Giant Garter Snake Habitat (1997). If restoration is unsuccessful, as determined by the USFWS, consultation will be reinitiated.

MITIGATION MONITORING D.1.: Public Works staff shall ensure the incorporation of avoidance and minimization measures into the plans. Public Works staff shall document the final purchase of required mitigation credits, or other method of compensatory mitigation documenting relief thereof, prior to commencement of construction activities.

MITIGATION D.2. (Western Pond Turtle):

The following measures recommended in order to avoid and minimize potential impacts to western pond turtle:

- Immediately prior to conducting in-stream work, a qualified biologist shall conduct a survey to determine the presence or absence of western pond turtles. If western pond turtles are observed where they could be potentially impacted by project activities, as determined by the onsite biologist, then work shall not be conducted within 100 feet of the sighting until the turtle(s) have left the project site or a qualified biologist has relocated the turtle(s) immediately outside of the project site.
- If turtle eggs are uncovered during construction activities, then all work shall stop within a 25 foot radius of the nest and the onsite biologist should be notified immediately. The 25 foot buffer should be marked with identifiable markers that do not consist of fencing or materials that may block the migration of young turtles to the water or attract predators to the nest site. No work will be allowed within the 25 foot buffer until CDFW has been consulted
- All portions of the project site that could result in inadvertently trapping turtles, such as open pits, trenches, and de-watered areas will be covered and/or exclusion fencing will be installed to prevent turtles from entering these areas.

MITIGATION MONITORING D.2.: Public Works staff will require final copies of the pre-construction surveys for western pond turtle, prior to the commencement of construction. Should the species occur on the project site, a qualified biologist shall be retained on-site during ground-disturbance.

MITIGATION D.3. (Tri-Colored Blackbird):

There is suitable tri-colored blackbird nesting habitat present within the BSA in the form of blackberry thickets. The following are avoidance and minimization measures for tricolored blackbird:

- Project activities, including site grubbing and vegetation removal, within the BSA shall be initiated outside of the bird nesting season (February 1 – August 31).
- If project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of more than 7 days during the bird nesting season, then the following will occur:
 - A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work.
 - If an active tricolored blackbird nest (i.e. with egg(s) or young) is observed within 250 feet of the project boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW.
- Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored once per week by a qualified biologist and a report submitted to the County weekly.

MITIGATION MONITORING D.3.: Public Works staff will confirm project initiation timing and/or require final copies of the pre-construction surveys for tri-colored blackbird, prior to the commencement of construction. Should the species occur on the project site, a qualified biologist shall be retained on-site during vegetation or ground disturbance.

MITIGATION D.4. (Migratory and Nesting Birds):

To avoid impacts to avian threatened species (i.e. tricolored blackbird) or avian species protected under the MBTA and the CFGC, the following avoidance and minimization measures are recommended.

- Any vegetation removal and/or ground disturbance activities should take place during the avian non-breeding season (September 1 – January 31).
- If project activities cannot be initiated outside of the avian nesting season, or if there is a lapse in construction of more than 7 days during the avian nesting season, then a migratory bird and raptor survey shall be conducted within the BSA by a qualified biologist. The qualified biologist shall:
 - Conduct a survey for all birds protected by the MBTA and CFGC within 7 days prior to construction activities, and map all nests located within 200 feet of construction areas;
 - Develop buffer zones around active nests as recommended by a qualified biologist. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored at least once per week by a qualified biologist and a report submitted to the County monthly.
- All staging and construction activity will be limited to designated areas within the BSA and designated routes for construction equipment shall be established in order to limit disturbance to the surrounding area.

The following are recommended exclusion and monitoring activities to avoid and minimize impacts to avian species protected under the MBTA and CFGC that have the potential to nest on the existing bridge:

- The removal of the current bridge will be conducted during the avian non-breeding season (September 1 – January 31) so as to avoid impacts to avian species that may potentially nest on the bridge.
- If the current bridge cannot be removed outside of the avian breeding season (February 1 – August 31) then the following exclusion and monitoring activities shall take place.

Exclusion

- All avian nests should be removed from the bridge prior to February 1 so as to deter avian species from nesting on the bridge.
- Any exclusionary devices that are deemed necessary in order to prevent avian species from nesting on the existing bridge should be established by a qualified biologist prior to February 1. Exclusionary devices shall be maintained by the County or a qualified biologist until the current bridge is removed or the end of the avian breeding season.

Monitoring

- Weekly, or as necessary, monitoring or additional exclusion activities will be conducted by a qualified biologist on the current bridge after February 1 until the current bridge is removed or the end of the avian breeding season (August 31).

MITIGATION MONITORING D.4.: Public Works staff will confirm project initiation timing and/or require final copies of the pre-construction surveys for migratory and nesting birds, prior to the commencement of construction. Should the species occur on the project site, a qualified biologist shall be retained on-site during vegetation or ground disturbance.

MITIGATION D.5. (Regulatory Permits):

Prior to commencing construction, the County shall have available the final copies of the permits and authorizations required by the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Regional Water Quality Control Board, California Department of Fish and Wildlife, and the Central Valley Flood Protection Board or copies of relevant correspondence documenting that no permit is required, as applicable.

MITIGATION MONITORING D.5.: Public Works staff will require final copies of the required permits or letters documenting relief thereof, prior to the commencement of construction.

E. Cultural Resources Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?		X		
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?			X	
3. Disturb any human remains, including those interred outside of dedicated cemeteries?		X		

DISCUSSION:

E.1. – E.3. Less Than Significant with Mitigation Incorporated. Based on the recommendations of Caltrans Professionally Qualified Staff an Archaeological Survey Report (ASR), Historic Property Survey Report (HPSR) and a Finding of No Adverse Effect without Standard Conditions of the project site was conducted by Genesis Society and JRP Historical Consulting (Appendix D). The investigation consisted of an on-site records search and document review at the NEIC. Maps and records on file at this facility were consulted, along with the National Register of Historic Places Listed Properties and Determined Eligible Properties, the California Register of Historical Places, the California Points of Historical Interest, the California Inventory of Historical Resources, the California Landmarks Registry, and the Directory of Properties in the Historic Property Data File. Based upon the records search, local topography, and regional history, the project site is in an area considered to be low to moderate sensitive for prehistoric, protohistoric, and historic cultural resources. The records search resulted in no previously recorded cultural resources within the APE Field survey. The results of a search of the NAHC's Sacred Lands File for the Project Area indicated that the NAHC has no record of any sacred sites in or within the immediate vicinity of the Project Area. However, there is always a possibility of unearthing an archaeological site or cultural resources during ground-disturbing activities, therefore in the event that resources are inadvertently discovered, implementation of Mitigation Measures E.1, and R.1. (see Section R. Tribal Cultural Resources) will mitigate potential impacts to a less than significant impact.

Letters were sent to the Tribes identified by the NAHC regarding the project and inviting consultation; however, no Tribes requested consultation on the project.

On June 5, 2018, Mr. Sean Jensen of Genesis Society conducted an archaeological survey of the APE. The survey consisted of a pedestrian inspection of the APE. As a result of the pedestrian survey, no archaeological resources, historic or prehistoric, were identified in the Project Area.

Historic resources were evaluated by JRP Historical Consulting in November 2020. During consultation efforts with Caltrans, the Colusa Drain was identified as being potentially eligible for listing on the National Register of Historic Properties. The draft Finding of No Adverse Effect without Standard Conditions document evaluated the Colusa Drain Canal resource within the project site and determined the proposed project will not have an adverse effect on historic properties including the canal.

MITIGATION:

MITIGATION E.1. (Unidentified Cultural Resources): A note shall be placed on all grading and construction plans which informs the construction contractor that if any bones, pottery fragments or other potential cultural resources are encountered during construction, all work shall cease within the area of the find equivalent to a 25 foot radius around the materials (100 feet for human remains) pending an examination of the site and materials by a professional archaeologist. If during ground

disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the contractor shall cease all work within 25 feet of the materials and notify Glenn County Public Works staff at (530) 934-6530. A professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Glenn County, shall be retained to evaluate the significance of the find. Further, County Public Works staff shall notify the local tribe(s) on the consultation list maintained by the State of California Native American Heritage Commission to provide local tribes the opportunity to monitor evaluation of the site. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the Glenn County Public Works Agency, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by Glenn County to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and plans to ensure contractor knowledge and responsibility for proper implementation.

MITIGATION MONITORING E.1: Public Works staff will verify that the wording is included on construction plans. Should cultural resources be encountered, the contractor shall be responsible for reporting any such findings to Public Works staff, and contacting a professional archaeologist, in consultation with Public Works staff, to evaluate the find.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
F. Energy Would the project:				
1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?				X
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?				X

DISCUSSION:

F.1. No Impact. The proposed project will not result in any potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Construction energy consumption would largely occur from fuel consumption by heavy equipment during bridge construction and subsequent demolition of the existing bridge, transportation of materials to and from the site, and construction worker trips to and from the project site. Energy consumption during construction related activities would vary substantially depending on the level of activities, length of construction period, construction operations, type of equipment used, and number of personnel present. Despite this variability, the overall scope of construction is moderate and would be completed within one construction season. The proposed project is the installation of a new safer bridge with improved roadway approaches, as such, it will not use any energy resources during operation.

F.2. No Impact. Many of the state and federal regulations regarding energy efficiency focus on increasing building efficiency and renewable energy generation, as well as reducing water consumption and vehicle miles traveled. The proposed project includes conservation measures to meet or exceed the regulatory requirements including limiting idling time of heavy equipment during construction activities. The project will comply with Glenn County and Caltrans standards regarding engine efficiency and limiting idling time during project construction.

MITIGATION: None Required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
G. Geology/Soils Would the project:				
1. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
a. 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.				X
b. Strong seismic ground shaking?			X	
c. Seismic-related ground failure, including liquefaction?			X	
d. Landslides?			X	
2. Result in substantial soil erosion or the loss of topsoil?			X	
3. 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?				X
4. 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?			X	
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

DISCUSSION:

G.1(a)-(d). Less Than Significant Impact. The site is not within an Alquist-Priolo Earthquake fault zone and is not within an aftershock epicenter region. There are no known active faults in Glenn County. The closest active fault is the Cleveland Hill fault zone, located approximately 35 miles east of the project site near Lake Oroville. Like most of Central California, the site can be expected to be subjected to seismic ground shaking at some future time. However, active faults are quite distant from the project site and ground shaking due to a seismic event is expected to have a lower intensity at the project site. As the project appears to be located such that the probability of significant ground shaking is low, and because the project does not propose the addition of significant structures that would be at risk to seismic activity, potential geologic impacts would be less than significant.

Liquefaction is a phenomenon where loose saturated, granular soils lose their inherent shear strength due to excess water pressure that builds up during repeated movement from seismic activity. Factors that contribute to the potential for liquefaction include a low relative density of granular materials, a shallow groundwater table, and a long duration and high acceleration of seismic shaking. Liquefaction usually results in horizontal and vertical movements from lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. Liquefaction potential is greatest where the groundwater level is shallow, and submerged loose, fine sands occur within a depth of approximately 50 feet or less. According to Section 3.3.1 of Environmental Setting Technical Paper, Glenn County General Plan, Volume III, Glenn County is in a relatively inactive seismic area. During the past 100 years, the County has experienced only minor earthquakes within its boundaries and secondary impacts from earthquakes centered out of the area. The United States Geologic Survey (USGS) and California Geologic Survey (CGS) produced a Seismic Shaking Hazards in California map (revised April 2003), which depicts the peak ground acceleration (pga) percentage that has a ten percent potential of occurring in the next fifty years. The project site is rated as 10%–20% on a scale of 0%–100%, quite low. Additionally, no earthquake greater than a magnitude 5.5 have occurred in Glenn County in over 200 years (CGS Map 49, California Earthquakes, 1800-2000). These two facts, and the relatively flat slope of the project site, create a less than significant impact regarding risk of damage from earthquakes. Under existing regulations, all future structures will incorporate AASHTO, SDC, and MTD standards into the design and construction that are designed to minimize potential impacts associated with strong ground-shaking during an earthquake.

The potential for landslides on the project site is considered remote due to the lack of significant topography on the project site and on the surrounding parcels. Therefore, the project would result in a Less Than Significant Impact.

G.2. Less Than Significant Impact. The project is the replacement of a structurally deficient bridge within Glenn County. Project activities at Bridge 11C0068 include vegetation removal, removal of existing bridge structure, the installation/construction of the new single-span, precast bridge structure, and construction of roadway approaches on both side of the new structure. During construction the project would be required to prepare a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the Construction General Permit. Specific erosion control and surface water protection methods would be implemented within the project site, such as straw wattles and silt fencing, covering materials and dumpsters, storing fuel and other potentially hazardous materials away from the canal, and the use of erosion control seeding. These control measures are standard in the construction industry and are commonly utilized to minimize soil erosion and water quality degradation. The project will have a less than significant impact on loss of top soil.

G.3. No Impact. No major earthquakes have been recorded within Glenn County. The project will not expose people or structures to potential substantial adverse effects due to rupture or a known earthquake fault, seismic ground shaking, seismic-related ground failure including liquefaction. The project will not result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. The project site would not be subject to landslide free zone due to its relative flat topography and gently sloping hills

G.4. Less than Significant. The soil present within the project site consists primarily of alluvial deposits which consists of silt and clay. The site is not located on expansive soil and would not create substantial risks to life or property. Bridge design and all construction will comply with AASHTO, SDC, and MTD requirements.

G.5. No Impact. No septic tanks, sewer or alternative wastewater disposal systems are proposed for the subject property. The project will result in no impact relative to policies governing sewer service control.

G.6. Less Than Significant with Mitigation Incorporated. The project is not anticipated to cause a substantial adverse change in the significance, directly or indirectly destroy a unique paleontological resource or site, geological feature, or unique geological feature. Due to the developed character of the site, the potential to encounter surface-level paleontological resources is considered low. However, there is the potential for accidental discovery of paleontological resources. In the event that resources are inadvertently discovered, implementation of Mitigation Measure E.1. would reduce impacts to a

less-than-significant level. See Impact E.1. Cultural Resources for mitigation measure specifics. Therefore, impacts would be considered less than significant with mitigation incorporated.

MITIGATION: Mitigation Measure E.1. (Undocumented Cultural Resources)

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
H. Greenhouse Gas Emissions Would the project:				
1. Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?		X		
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

DISCUSSION:

H.1 Less than Significant With Mitigation Incorporated. It is anticipated that bridge replacement activities would generate short-term temporary GHG emissions associated with construction equipment. Examples of sources for construction related GHGs are equipment fossil fuel combustion, material transportation, and purchased electricity. This is considered a less than significant impact with mitigation incorporated. See the Mitigation Measure C.1 discussed in Section C, Air Quality, minimize and reduce temporary emissions associated with the construction activities.

H.2 Less than Significant Due to the temporary nature of impacts resulting from construction activities on a relatively small bridge replacement project, the project will not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This is considered a less than significant impact.

MITIGATION: Mitigation Measure C.1 (Air Quality)

I. Hazards and Hazardous Materials Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
2. 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?		X		
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
4. 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?			X	
5. 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?				X
6. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
7. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

DISCUSSION:

An Initial Site Assessment (ISA) was developed by Crawford & Associates, Inc. for the proposed project to identify recognized soil or groundwater contamination and hazardous material issues that may affect the planned project improvements. (Appendix E).

Based on the records reviewed and the site reconnaissance

- The project site was not identified in the database records reviewed.
- The database records search did not identify any facilities in the vicinity that have potentially impacted the project site.
- Site reconnaissance, historical topographic maps, and historical aerial photographs indicate historical land use adjacent to the project site has the potential to have impacted the project site with agricultural chemicals.

Based on the public records, historical aerial photographs and historical topographic maps reviewed for the ISA, the site reconnaissance performed on 24 May 2018, and a telephone conversation with UC Agricultural Extension, Crawford & Associates, Inc. makes the following recommendation:

- A recognized environmental condition (REC) was identified with respect to agricultural chemical use in the rice fields surrounding the project site. Crawford & Associates recommends that soil and surface water within the proposed construction limits be screened for the presence of agricultural chemicals at concentrations that present an exposure risk. If bridge demolition or construction activities are expected to encounter groundwater, the groundwater should also be screened.

I.1. Less Than Significant Impact. The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Hazardous materials will be used during construction activities (e.g., equipment maintenance, fuel, solvents, roadway resurfacing and re-striping materials). However, all hazardous material use would be required to comply with all applicable local, state, and federal standards associated with the handling and storage of hazardous materials. Use of hazardous materials in accordance with applicable standards ensures that any exposure of the public to hazard materials would result in a less than significant impact.

I.2. Less Than Significant With Mitigation Incorporated. The ISA developed by Crawford & Associates identified two Recognized Environmental Conditions (REC) within the project boundary. The rice fields surrounding the project site may contain agricultural chemicals at concentrations that present and exposure risk. The proposed project will have impacts on the adjacent agricultural soils, therefore Mitigation Measure I.1 is required. The second is surface water and groundwater in the area. If bridge demolition or construction activities are expected to expose workers to surface water or groundwater, the waters shall also be screened for contaminants. Groundwater depths in the area were identified in the ISA as being as high as 8.6 feet below ground surface. The expected depth of construction activities is 8 feet. Based on the expected construction depths and techniques, construction activities may encounter potentially contaminated water, therefore if surface water or groundwater is encountered during construction, screening is required. With the incorporation of Mitigation Measure I.1, there will be a less than significant impact in regards to the accidental release of hazardous materials into the environment. This is a less than significant impact with mitigation.

Additionally, the existing structures were assessed for Asbestos Containing Construction Material (ACCM) and Lead-Containing Materials (LCM). No asbestos or ACCM was identified in the bridge components inspected. Paint samples collected from the bridge contained <0.010% by weight of lead, below threshold levels. The painted materials on the bridge do not require special handling, abatement, or disposal.

I.3. Less Than Significant. The proposed project does not involve any emission or handling of any hazardous materials, substances, or waste within one-quarter mile of an existing school. No existing or proposed school facilities are located within one-quarter mile radius of the project site. As stated previously, the use and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws including CalOSHA requirements. This is considered a less than significant impact.

I.4. Less Than Significant. The project is not included on a list of sites containing hazardous materials, and would not result in a significant hazard to the public or to the environment. The project site is not included on the Cortese list compiled pursuant to Government Code Section 65962.5. The nearest sites containing hazardous materials are located approximately 22 miles northwest of the project area in Orland California. This topic is considered a less than significant impact.

I.5. No Impact. The project site is not located in the vicinity of a public or private airport; therefore, there will be no impact.

I.6. Less Than Significant. Development of the proposed project will result in the temporary closure of the bridge during construction. The closure is expected to last approximately 4 months and result in an approximately 7 mile detour. Available detours include Road V to Norman to SR 45 or Road V to CR 62 to SR 45. Emergency response or evacuation plans do not include CR 66B in Glenn County. The proposed project will neither hinder the implementation, nor physically interfere with, emergency response or evacuation plans. The proposed project is considered to have a less than significant impact.

I.7. No Impact. The Fire Severity Zone Maps adopted by Cal Fire in 2007 identifies the project site in a Local Responsibility Area - unincorporated. The project does not involve the construction of significant structures that would be considered residential in nature, and thus would not expose people or associated structures to risk of loss, injury or death involving wildland fires. The project is the replacement of a structurally deficient bridge. The new bridge would improve emergency access to the area. No structures are proposed as part of the proposed project, therefore there is no impact.

MITIGATION:

MITIGATION I.1 (Hazard Material Screening):

Prior to construction, the soil and water within the proposed construction limits shall be screened for the presence of agricultural chemicals at concentrations sufficient to be an exposure hazard. If excavation for the new bridge abutments encounters groundwater, this should also be screened for agricultural chemicals. Should any constituents of concern be found in excess concentrations, the applicant shall prepare a Soil Management Plan (SMP) or equivalent report for water resources, which shall be distributed to construction personnel. The SMP or equivalent report shall establish protocols for handling, sampling, storage, and disposal of any suspected contaminated soils or water generated during construction activities.

MITIGATION MONITORING I.1: Public works staff will require final copies of the required assessment/plan documenting relief thereof, prior to commencing construction at the site.

J. Hydrology/ Water Quality	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
1. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?		X		
2. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
3. 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:			X	
a. result in substantial erosion or siltation on- or off-site;			X	
b. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			X	
c. 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			X	
d. impede or redirect flood flows?		X		
4. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
5. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

DISCUSSION:

J.1. Less Than Significant Impact With Mitigation. As identified in Section D of this document (Mitigation Measure D.5), the project will obtain all appropriate regulatory permits including certification from a RWQCB per Section 401 Water Quality Certification of the Clean Water Act prior to construction activities. A Section 401 permit is contingent on sufficient evidence that a project would not pose a threat to water quality or quantity leaving the proposed project's site. Additionally, the project would be required to prepare a Storm Water Pollution Prevention Plan and implement all applicable erosion control BMPs, which include: the installation of straw wattles, and silt fencing to prevent silt/sediment from entering the waterways, and re-seeding of disturbed upland areas post construction. As described in the Air Quality Section C of this document, the project will be required to adhere BAMMs standard mitigation measures for fugitive dust control, Mitigation Measure C.1 (Air Quality).

Existing State permitting requirements by the RWQCB, will ensure that the project will not result in the violation of any water quality standards or waste discharge requirements. Due to the scope and nature of the proposed project it is not expected that the project would degrade ground water quality. With these standard permitting and water quality requirements in place, potential impacts to water quality from the project are considered to be less than significant with mitigation.

J.2. No Impact. The proposed project involves the replacement of an existing bridge and does not propose activities requiring increases in groundwater use. No new extraction wells or buildings with the potential to increase water usage are proposed.

J.3 (a). Less Than Significant Impact. The channel slopes are susceptible to erosion and bank protection will be necessary at the abutments. Rock slope protection will be placed at both abutments to protect against channel erosion. The limits of RSP at each abutment will extend from the top of bank down to the toe of slope and approximately 10' upstream and downstream of the proposed edge of deck. The embankment at the existing drainage outfall located at the northwest corner of the bridge will also be reinforced with rock slope protection to minimize erosion. The result of the proposed project will be a site that is less susceptible to erosion and siltation, therefore this is considered a less than significant impact.

J.3 (b). Less Than Significant Impact. No change in local drainage pattern is proposed. Water will continue to drain into roadside ditches along the toe of slope in fill sections. There is an existing drainage ditch located at the northwest corner of the bridge that runs parallel to County Road 66B. This ditch will need to be realigned to the north to accommodate the fill limits of the proposed roadway profile. The implementation of Stormwater Pollution Prevention Plan and BMPs during construction activities will minimize soil erosion and siltation. Additionally, the proposed project will not alter the existing drainage pattern of the site, including through the alteration of the course of Colusa Drain in a manner that will result in substantial erosion or siltation on- or off-site

J.3 (c). Less Than Significant Impact. The project would alter the existing drainage patterns at the site, however, it would not result in substantial erosion or siltation on- or off-site, or create excessive runoff because prior to construction the project would have to demonstrate compliance with County/State post-construction storm water management requirements including the General Construction Permit requirements of the NPDES, as well as, the preparation of a SWPPP that incorporates water quality control BMP's. The proposed project will not substantially alter the existing drainage pattern in a manner that would create environmental impacts, therefore this is considered a less than significant impact.

J.3 (d). Less Than Significant Impact with Mitigation. Crawford & Associates prepared a Bridge Design Hydraulic Study Report (BDHSR) (Appendix F) for the project which analyzed potential changes in hydrological conditions based on project activities at the bridge. The report also documents the scour potential and recommends scour countermeasures for the proposed condition. The BDHSR utilized the Hydraulic Engineering Center River Analysis System (HEC-RAS) and a survey provided by Quincy Engineering, Inc. to estimate the hydraulic conveyance capacity under project conditions. The BDHSR concluded that the proposed bridge replacement would have an insignificant impact on the water surface elevations at the project site and would improve channel hydraulics. As identified in Section D of this document (Mitigation Measure D.5), the project will obtain all appropriate regulatory permits including an Encroachment Permit from the Central Valley Flood Protection Board which will ensure that the proposed project will not impeded or redirect flood flows in a manner which would cause significant environmental impacts. With the implementation of Mitigation Measure D.5. there will be a **less than significant impact**.

J.4. Less Than Significant Impact. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map No. 06021C0850D, the project site is predominately in Zone X, A and AE (part of the Special Flood hazard Area). The project site is not located in an area that is prone to seiche or tsunami. Risks associated with inundation and the release of pollutants by flood, seiche or tsunami, would not occur beyond existing conditions. This is considered a less than significant impact.

J.5. Less than Significant Impact. The implementation is the proposed project is not expected to substantially degrade water quality with the implementation of the SWPPP and BMPs. The project will

not conflict or obstruct implementation of a water quality control plan or sustainable groundwater management plan. The impact to water quality will be less than significant.

MITIGATION: Mitigation Measure D.5. (Regulatory Permits)

K. Land Use and Planning Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Physically divide an established community?			X	
2. 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?				X

DISCUSSION:

K.1. Less Than Significant. The project will not physically divide an established community. There will be a temporary detour provided to provide circulation around the project site which will result in approximately a 7 mile detour. There are several options for detours in this rural environment. This disruption will be temporary during construction activities. Therefore, the project is anticipated to have a less than significant impact.

K.2. No Impact. The project implements General Plan goals and policies which strive to enhance community connectivity and improve public safety and access. The project is also identified in the Glenn County Regional Transportation Plan. There will be no conflicts with land use plans, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect. This is considered no impact.

MITIGATION: None Required.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
L. Mineral Resources Would the project:				
1. 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?				X
2. 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?				X

DISCUSSION:

L.1.-2. No Impact. There are no active mines and no known areas with mineral resource deposits within the vicinity of the project site. The majority of the closest mining operations are located to the northwest, between Artois and Willows. The project would not result in the loss of availability of a known mineral resource or mineral resource recovery site. Mineral resources are not associated with the project or located on the project site. Therefore, the project would have no impact on mineral resources.

MITIGATION: None Required.

M. Noise	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
1. 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?			X	
2. Generation of excessive groundborne vibration or groundborne noise levels?			X	
3. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

DISCUSSION:

The Glenn County General Plan identifies land use compatibility standards for exterior community noise for a variety of sensitive land uses. For residential designations, a maximum allowable noise exposure level of 60 Ldn/CNEL outdoors and 45 Ldn/CNEL indoors decibel level is generally identified as being an acceptable noise environment requiring no special noise insulation or noise abatement features. This standard is applicable to properties containing noise sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the use of the land.

The Glenn County Noise Control Ordinance provides the County with a means of assessing complaints of alleged noise violations and to address noise level violations. The ordinance sets forth exterior and interior noise level standards that are applicable to sensitive areas within Glenn County, including residential uses. Among the noise generating activities subject to the noise ordinance are noise sources associated with construction. If project operations occur between 7:00a.m. to 10:00p.m. the maximum decibel level is 70 dB. From 10:00p.m. to 7:00a.m. decibels must remain below 65dB.

M.1.-2. Less Than Significant Impact The proposed project will be required to comply with all applicable rules, regulations and control measures including permitting, prohibitions and limits to emissions that work to reduce air pollution throughout California. The nearest residents to the project site are approximately 1,000 feet away. While construction activities would generate noise, it is anticipated at this distance noise levels would not exceed established acceptable levels. The project would be expected to comply with the noise ordinance with regard to allowable construction times and noise limits.

M.3. No Impact. The project site is not located in an airport land use plan area or in the vicinity of a private airstrip. The project would not expose people residing to or working in the project area to excessive noise levels. There would be no impact.

MITIGATION: None required.

N. Population and Housing	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
1. 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)?				X
2. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

DISCUSSION:

N.1.-N.2. No Impact. The proposed project is a bridge replacement project located in a rural portion of Glenn County. The proposed project will not induce substantial population growth in the area, directly or indirectly, or displace a substantial number of people or existing housing. The project will not displace people or housing nor necessitate the construction of replacement housing elsewhere. Therefore, the project will not impact population or housing. The Project impacts to population/housing are therefore considered to have no impact.

MITIGATION: None Required.

O. Public Services

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:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

DISCUSSION:

O.1.-5. Less Than Significant Impact. The proposed project would not construct buildings, businesses or other facilities that would result in an increased population in the area. Temporary delays to traffic may occur during construction activities due to the planned detour. There would be no long- term demands on public services such as fire protection, police protection, schools, or parks generated by this project. No changes in fire protection or police protection are proposed as part of this project. Therefore, the proposed project is not anticipated to impact public services.

The proposed project would not cause any permanent closures to the roadway, nor block access to private property. Temporary average detours are not anticipated to exceed 15 minutes. The construction is expected to occur from October 1 – April 30 and take one construction season weather and conditions permitting. Temporary road delays and closures during construction may affect traffic patterns near the construction site and potentially affect fire and police response times for multiple apparatus events; however, any such impacts would be minor and not significantly affect long-term service ratios, response times, or other performance objectives for public services. Project proponents would notify local emergency service providers of construction activities and would ensure coordination with local providers to establish alternative routes and appropriate signage. No changes in fire protection or police protection services are proposed as part of this project. The proposed project would not add to the area's population or increase demands on police or fire services. The effects of the temporary road closure would not cause significant environmental impacts as it relates to police and fire service. Therefore, relative to the provision of police and fire service, the proposed project would generate less than significant impacts.

MITIGATION: None Required.

P. Recreation	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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?				X
2. 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?				X

DISCUSSION:

P.1.-2. No Impact. The project does not propose dwelling units, businesses or other structures that might increase the area's human population. The project site does not include existing recreational facilities. Similarly, the proposed project would not construct recreational facilities.

The proposed project would not generate additional demands on parks and recreational facilities. The proposed project does not include the development of recreational facilities or other structures that would necessitate the development or modification of any recreational facilities. Relative to recreation, the proposed project would result in no impact.

MITIGATION: None Required.

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

Q.1. No Impact. The proposed project is a bridge replacement that would result in the replacement of a single-lane bridge with a 32' clear width bridge, consisting of two-12' paved lanes and two-4' unpaved shoulders. The project will not conflict with an applicable plan, ordinance or policy regarding the effectiveness of the performance of the circulation system. The proposed project would not generate additional traffic, as it would not construct facilities or land uses that would generate additional vehicular traffic such as a retail center or residential subdivision. No impact is anticipated.

Q.2. No Impact. The project is not expected to result in additional vehicular trips, or to impact levels of service and trip distributions within the project area. The proposed project will not conflict with an applicable congestion management program and will not affect travel demand measures. Roadway safety conditions are expected to improve upon project completion, as the project will include a new wider bridge and provide safer, wider transitions to the bridge structure. No impact is anticipated.

Q.3. No Impact. The proposed project will not result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that will result in substantial safety risks. The project site is not located in the vicinity of a public airport. This project will not obstruct air traffic patterns. No impact is anticipated.

Q.4. Less than Significant. During the construction phase, emergency vehicle access to, and passage through, the project site would be ensured through adherence to applicable roadway and/or lane closures and detour standards. The project will be required to adhere to pertinent local and state construction site regulations. Thus, temporary traffic control activities during the construction phase of the proposed project would not prevent emergency vehicle movement throughout the area. In addition, the existing bridge would remain in operation during construction activities. The proposed improvements, which would bring the existing facilities in the project site up to current design standards, would provide safer passage for emergency vehicles. Therefore, relative to emergency access, impacts would be less than significant.

MITIGATION: None Required.

R. Tribal Cultural Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or		X		
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.		X		

DISCUSSION:

The project is not anticipated to cause a substantial adverse change in the significance of a tribal cultural resource. The project site is in an area considered to be low to moderate archaeological sensitivity. The project site was located within the traditional boundaries of the Wintun-Wailaki, Enterprise Rancheria, Paskenta Band of Nomlaki Indians and the Mechoopda Indian Tribe of Chico Rancheria. Letters, in compliance with Assembly Bill 52 (AB52) were sent to representatives of the aforementioned groups on November 5, 2020. None of the Tribes responded requesting consultation on the project.

R.1.a. – 1.b. Less Than Significant with Mitigation Incorporated. An ASR, HPSR and HRER were developed for the proposed project (Appendix D). The investigation consisted of an on-site records search and document review at the NEIC. Maps and records on file at this facility were consulted, along with the National Register of Historic Places Listed Properties and Determined Eligible Properties, the California Register of Historical Places, the California Points of Historical Interest, the California Inventory of Historical Resources, the California Landmarks Registry, and the Directory of Properties in the Historic Property Data File.

One historic resource, the Colusa Drain, was assumed to be eligible for the National Register of Historic Places (NRHP) and is listed in the California Register of Historical Resources (CRHR). The Colusa Drain Canal is assumed eligible as a contributor to the Sacramento River Flood Control Project and six irrigation districts that it serves. These properties have possible significance under NRHP Criterion A for contributions to regional history of northern California flood control and the development of agriculture in the region. The Colusa Drain may also have regional significance under Criterion C as a contributor to the design and engineering of the Sacramento River Flood Control Project. The assumed period of significance for the Colusa Drain Canal, for purposes of this undertaking, is 1921 to 1950. It is assumed eligible at the local level of significance.

A Sacred Lands File and Native American Contacts List Request to the Native American Heritage Commission (NAHC). NAHC responded to the request on May 31, 2018 indicating that NAHC files contain no listing for sacred lands in the vicinity of the proposed project site. On November 5th, 2020,

letters containing a Project description, a map location, and a request for information were sent to four Tribal contacts. None of the Tribes responded.

The extensive land modifications within the APE and surrounding areas makes the likelihood of intact cultural resources within the APE low. In the event that resources are inadvertently discovered, Implementation of Mitigation R.1 would reduce impacts to less than significant with mitigation incorporated.

MITIGATION:

MITIGATION R.1. (Tribal Cultural Resources): If during ground disturbing activities, any potentially paleontological, prehistoric, protohistoric, and/or historic cultural resources or tribal cultural resources are encountered, the supervising contractor shall cease all work within 25 feet of the find (100 feet for human remains) and notify the County. A professional archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and being familiar with the archaeological record of Glenn County, shall be retained to evaluate the significance of the find. County staff shall notify all local tribes on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. If human remains are uncovered, the project team shall notify the Glenn County Coroner pursuant to Section 7050.5 of California's Health and Safety Code. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the County, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the County to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and documents to ensure contractor knowledge and responsibility for the proper implementation.

MITIGATION MONITORING R.1: Public Works staff will verify that the above wording is included on construction plans. Should paleontological, prehistoric, protohistoric, and/or historic cultural resources or tribal cultural resources be encountered, the supervising contractor shall be responsible for reporting any such findings to Public Works staff, and contacting a professional archaeologist or paleontologist in consultation with Public Works staff, to evaluate the find.

S. Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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?		X		
2. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
3. 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?			X	
4. 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?			X	
5. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

DISCUSSION:

S.1. Less Than Significant With Mitigation. The proposed project would not require wastewater treatment, new electric power, natural gas or telecommunications facilities. The existing bridge allows drainage to fall directly into the channel underneath the small wood rail. The proposed profile has a crest vertical curve which will provide sufficient gradient for drainage of roadway and bridge surfaces near Colusa drain. The replacement bridge will be crowned at the centerline and utilize concrete barrier rail or curb to collect storm water and direct it off the bridge. Eventually, the bridge and roadway drainage will empty into Colusa Drain or roadway ditches. The project does require the rehabilitation of an existing drainage system, including surface and subsurface drainage infrastructure to capture and direct runoff from CR66B to Colusa Drain at the northwest corner of the bridge. Rock slope protection is proposed as part of this drainage infrastructure, and the placement of the RSP will likely be within the jurisdictional of the RWQCB, USACE, CDFW and CVFPB. Mitigation Measure D.5, as described in the Biological section of this document, requires the County to obtain final permits from the USACE, CVWQCB, CVFPB and CDFW prior to the construction of the project. With this mitigation measure, potential impacts to the environment as a result of the rehabilitation of drainage systems will be less than significant with mitigation incorporated.

S.2.-S.3. No Impact. The proposed project does not require the ongoing use of water as there are no landscaping components involved. The proposed project will not involve the need for wastewater treatment or the expansion of wastewater treatment facilities. No impact is anticipated.

S.4.-S.5. Less Than Significant Impact. The project will not 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. During construction, a limited amount of construction waste would be generated. Waste would only be sent to permitted landfill facilities with adequate capacity to accept construction waste. The project would not create a long-term source of solid waste needing disposal. Disposal and recycling of materials generated by the construction of the new road and bridge will be

handled and disposed of in accordance with Federal, State, and local requirements. This impact would be less than significant.

MITIGATION: Mitigation Measure D.5 (Regulatory Permits)

T. Wildfire If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
2. 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?				X
3. 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?				X
4. 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?				X

DISCUSSION:

T.1.-T.4. No Impact. The project is not located in or near state responsibility areas or lands classified as moderate, high or very high fire hazard severity zones; therefore, it will not substantially impair an adopted emergency response plan or emergency evacuation plan, exacerbate wildfire risks, require the installation or maintenance of associated infrastructure, or expose people or structures to significant risks. The project site is identified as an area outside of Cal Fire's 'Very High Fire Hazard Severity Zone' (i.e., it is a non-VHFHSZ) as identified by Cal Fire (see the following: <https://databasin.org/datasets/fbb8a20def844e168aeb7beb1a7e74bc>). The project site is located in a Local Responsibility Area (LRA) pursuant to the Fire Hazard Severity Zone and is served by the Glenn County Fire Department as shown in the SRA map last modified by Cal Fire on June 20, 2019. The proposed project would have no impact on wildfire.

MITIGATION: None Required.

U. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. 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?			X	
2. 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)?			X	
3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

DISCUSSION:

U.1 Less Than Significant with Mitigation Incorporated. With the implementation of the mitigation measures included in this Initial Study, (see sections Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, and Hazards and Hazardous Materials, the proposed project would not degrade the environment; result in an adverse impact on fish, wildlife, or plant species including special status species, or prehistoric or historic resources.

U.2 No Impact. The project is the replacement of a structurally deficient bridge which spans Colusa Drain on Glenn County Road 66B with a wider bridge for safety purposes. The project does not involve the addition of new expanded structures, facilities, or growth inducing effects, which would be considered cumulatively considerable with regards to past or future projects.

U.3 No Impact. Based on the preceding environmental analysis and adherence to applicable local, state and federal regulations, as noted in this document, the proposed project would not result in potentially significant cumulative, direct or indirect adverse effects on human beings.

V. MITIGATION MONITORING AND REPORTING PROGRAM

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
Agricultural Resources						
	Mitigation Measure B.1: Preservation of Agricultural Access and Land The following are recommended avoidance and mitigation measures that shall be implemented prior to the start of construction and continue throughout project activities. 1. The advance notification and coordination with local property owners/growers will be conducted to minimize short-term impacts related to construction activities. Before any work that could interfere with agricultural activities, the work will be coordinated with appropriate property owners/growers. 2. The extent of work within temporary construction easements on private land will be minimized to the extents necessary to provide access and construct infrastructure such as driveways and bridges on private land.	The County shall provide advance notification and coordination with property owners/growers and confirm that soils amendments meet specifications prior to and post construction.	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
Air Quality						
Mitigation Measure C.1: (Air Quality) To comply with the Glenn County Air Pollution Control District's (GAPCD) regulations (section 76 visible emissions), the County shall comply with all Best Available Mitigation Measures (BAMMs) for the control of construction related particulate emissions. The contractor shall submit an Air Quality Attainment Plan to the County for approval. The approved plan shall include all applicable BAMMs as specified by GCAPCD's Standard Construction Phase Mitigation Measures, including but not limited to the following: 1. Haul trucks must be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained. 2. Construction equipment exhaust emissions shall not exceed GCAPCD Section 76 Visible Emissions (40 percent opacity or Ringelmann 2.0). Operators of vehicles and equipment found to exceed opacity limits shall act to repair the equipment within 72 hours or remove the equipment from service. 3. The area disturbed by demolition, clearing, grading, earth moving, or excavation operations shall be minimized at all times. 4. Suspend grading or earth moving activities when wind speeds exceed 20 mph 5. Minimize unnecessary idling time to 5 minutes. 6. Water shall be applied as needed to prevent fugitive dust impacts offsite. 7. All onsite vehicles should be limited to a speed of 15mph on unpaved roads.		Air Quality Attainment Plan – Prior to initiation of construction	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
Biological Resources						
<p>MITIGATION D.1. (Giant Garter Snake)</p> <p>Initial construction and the installation of exclusion fencing will be initiated during the active period of GGS; therefore, GGS individuals are expected to avoid harm’s way during initial vegetation removal and ground-disturbing activities. Construction activities will continue as temperatures decrease and GGS enter their dormant season. With the installation of exclusion fencing during the GGS active season and the continuation of construction activities throughout the GGS inactive season, GGS individuals will not be expected to move into the project area. Avoidance and minimization measures will also be implemented to minimize the potential for take. To ensure no direct take of GGS occur due to the proposed project, the following avoidance and minimization measures will be implemented.</p> <p>Avoidance and Minimization Efforts</p> <p>The following recommendations, when implemented, will avoid and minimize impacts to this species:</p> <ul style="list-style-type: none">• The applicant is proposing to work outside of the snake’s active season. Construction and ground disturbing activities will be initiated during the active season, continue through the inactive season, and is anticipated to be completed before the inactive season is over.• Twenty-four hours prior to the commencement of construction activities, the project area shall be surveyed for giant garter snakes by a qualified biologist. The biologist will provide a written report that adequately documents the monitoring efforts within 24 hours of commencement of construction activities. The project area shall be re-inspected by the monitoring biologist whenever a lapse in construction activity of 2 weeks or greater has occurred.• During construction operations, stockpiling of construction materials, portable equipment, vehicles, and supplies will be restricted to the designated construction staging areas and all operations will be confined to the minimal area necessary.		<p>Public Works staff shall ensure the incorporation of avoidance and minimization measures into the plans.</p> <p>Public Works staff shall document the final purchase of required mitigation credits, or other method of compensatory mitigation documenting relief thereof, prior to commencement of construction activities.</p>	<p>Glenn County Public Works Agency</p>			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
MITIGATION D.1. (Giant Garter Snake) Continued		See previous pages	See previous pages			
	<ul style="list-style-type: none">A qualified biologist shall be onsite to monitor for GGS during all vegetation removal and initial ground-disturbing activities. After the initial ground-disturbing activities have been completed, the qualified biologist will monitor the installation of exclusion fencing around the project boundary. The qualified biologist will monitor excavation of suitable GGS habitat and bridge removal.Project-related vehicles will observe a 20-mile-per-hour speed limit within construction areas, except on existing paved roads where they will adhere to the posted speed limits.High visibility fencing will be erected around the habitats of the snake to identify and protect these areas from encroachment of personnel and equipment. These areas will be avoided by all construction personnel. The fencing shall be inspected by the Contractor before the start of each work day and maintained by the Contractor until completion of the project. Fencing will be established in the uplands immediately adjacent to aquatic snake habitat and extending up to 200 feet from construction activities, where feasible. Snake exclusionary fencing will be buried at least 6 inches below the ground to prevent snakes from attempting to burrow or move under the fence.Best Management Practices (BMPs) will be implemented to minimize the potential for erosion and sedimentation into nearby waterbodies.After completion of construction activities, the applicant will remove any temporary fill and construction debris and, wherever feasible, restore disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions.A photo documentation report showing pre- and post-project area conditions will be submitted 1 month after the implementation of the restoration.					

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
MITIGATION D.1. (Giant Garter Snake) Continued Compensatory Mitigation The project will permanently and temporarily impact upland and aquatic GGS habitat. To mitigate permanent and temporary impacts to GGS habitat the following is recommended: <ul style="list-style-type: none">• Permanent loss of GGS habitat will be compensated by purchasing creation credits at the Colusa Basin Conservation Bank or at another USFWS and CDFW approved conservation bank with a service area that accommodates the project location. Credits shall be purchased prior to the start of construction. Table 3 shows the amount of credits that will need to be purchased.• Temporary disturbance to snake habitat shall be restored to pre-project conditions within 1 year of completion of construction.<ul style="list-style-type: none">◦ Restoration and monitoring shall follow the USFWS Guidelines for Restoration and/or Replacement of Giant Garter Snake Habitat (1997). If restoration is unsuccessful, as determined by the USFWS, consultation will be reinitiated.		See previous pages	See previous pages			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
MITIGATION D.2. (Western Pond Turtle)						
	<p>The following measures recommended in order to avoid and minimize potential impacts to western pond turtle:</p> <ul style="list-style-type: none">• Immediately prior to conducting in-stream work, a qualified biologist shall conduct a survey to determine the presence or absence of western pond turtles. If western pond turtles are observed where they could be potentially impacted by project activities, as determined by the onsite biologist, then work shall not be conducted within 100 feet of the sighting until the turtle(s) have left the project site or a qualified biologist has relocated the turtle(s) immediately outside of the project site.• If turtle eggs are uncovered during construction activities, then all work shall stop within a 25 foot radius of the nest and the onsite biologist should be notified immediately. The 25 foot buffer should be marked with identifiable markers that do not consist of fencing or materials that my block the migration of young turtles to the water or attract predators to the nest site. No work will be allowed within the 25 foot buffer until CDFW has been consulted• All portions of the project site that could result in inadvertently trapping turtles, such as open pits, trenches, and de-watered areas will be covered and/or exclusion fencing will be installed to prevent turtles from entering these areas.	Public Works staff will require final copies of the pre-construction surveys for western pond turtle, prior to the commencement of construction. Should the species occur on the project site, a qualified biologist shall be retained on-site during ground-disturbance.	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
	<p>MITIGATION D.3. (Tri-Colored Blackbird)</p> <p>There is suitable tri-colored blackbird nesting habitat present within the BSA in the form of blackberry thickets. The following are avoidance and minimization measures for tricolored blackbird:</p> <ul style="list-style-type: none"> • Project activities, including site grubbing and vegetation removal, within the BSA shall be initiated outside of the bird nesting season (February 1 – August 31). • If project activities cannot be initiated outside of the bird nesting season, or if there is a lapse in construction of more than 7 days during the bird nesting season, then the following will occur: <ul style="list-style-type: none"> ◦ A qualified biologist will conduct a pre-construction survey within 7 days prior to starting work. ◦ If an active tricolored blackbird nest (i.e. with egg(s) or young) is observed within 250 feet of the project boundary during the pre-construction survey, then a species protection buffer will be established. The species protection buffer will be defined by the qualified biologist in consultation with CDFW. • Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored once per week by a qualified biologist and a report submitted to the County weekly. 	Public Works staff will confirm project initiation timing and/or require final copies of the pre-construction surveys for tri-colored blackbird, prior to the commencement of construction. Should the species occur on the project site, a qualified biologist shall be retained on-site during vegetation or ground disturbance.	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
	<p>MITIGATION D.4. (Migratory and Nesting Birds)</p> <p>To avoid impacts to avian threatened species (i.e. tricolored blackbird) or avian species protected under the MBTA and the CFGC, the following avoidance and minimization measures are recommended.</p> <p>The following are avoidance and minimization measures for California avian threatened species and species protected under the MBTA and the CFGC:</p> <ul style="list-style-type: none"> Any vegetation removal and/or ground disturbance activities should take place during the avian non-breeding season (September 1 – January 31). If project activities cannot be initiated outside of the avian nesting season, or if there is a lapse in construction of more than 7 days during the avian nesting season, then a migratory bird and raptor survey shall be conducted within the BSA by a qualified biologist. The qualified biologist shall: <ul style="list-style-type: none"> Conduct a survey for all birds protected by the MBTA and CFGC within 7 days prior to construction activities, and map all nests located within 200 feet of construction areas; Develop buffer zones around active nests as recommended by a qualified biologist. Construction activity shall be prohibited within the buffer zones until the young have fledged or the nest fails. Nests shall be monitored at least once per week by a qualified biologist and a report submitted to the County monthly. All staging and construction activity will be limited to designated areas within the BSA and designated routes for construction equipment shall be established in order to limit disturbance to the surrounding area. 	<p>Public Works staff will confirm project initiation timing and/or require final copies of the pre-construction surveys for migratory and nesting birds, prior to the commencement of construction. Should the species occur on the project site, a qualified biologist shall be retained on-site during vegetation or ground disturbance.</p>	<p>Glenn County Public Works Agency</p>			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
	<p>MITIGATION D.4. (Migratory and Nesting Birds) Continued</p> <p>The following are recommended exclusion and monitoring activities to avoid and minimize impacts to avian species protected under the MBTA and CFGC that have the potential to nest on the existing bridge:</p> <ul style="list-style-type: none"> The removal of the current bridge will be conducted during the avian non-breeding season (September 1 – January 31) so as to avoid impacts to avian species that may potentially nest on the bridge. If the current bridge cannot be removed outside of the avian breeding season (February 1 – August 31) then the following exclusion and monitoring activities shall take place. <p>Exclusion</p> <ul style="list-style-type: none"> All avian nests should be removed from the bridge prior to February 1 so as to deter avian species from nesting on the bridge. Any exclusionary devices that are deemed necessary in order to prevent avian species from nesting on the existing bridge should be established by a qualified biologist prior to February 1. Exclusionary devices shall be maintained by the County or a qualified biologist until the current bridge is removed or the end of the avian breeding season. <p>Monitoring</p> <ul style="list-style-type: none"> Weekly, or as necessary, monitoring or additional exclusion activities will be conducted by a qualified biologist on the current bridge after February 1 until the current bridge is removed or the end of the avian breeding season (August 31). 	See previous pages	See previous pages			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
	MITIGATION D.5. (Regulatory Permits): Prior to commencing construction, the County shall have available the final copies of the permits and authorizations required by the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Regional Water Quality Control Board, California Department of Fish and Wildlife, and the Central Valley Flood Protection Board or copies of relevant correspondence documenting that no permit is required, as applicable.	Public Works staff will require final copies of the required permits or letters documenting relief thereof, prior to the commencement of construction.	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
Cultural Resources						
	MITIGATION E.1. (Unidentified Cultural Resources): A note shall be placed on all grading and construction plans which informs the construction contractor that if any bones, pottery fragments or other potential cultural resources are encountered during construction, all work shall cease within the area of the find equivalent to a 25 foot radius around the materials (100 feet for human remains) pending an examination of the site and materials by a professional archaeologist. If during ground disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the contractor shall cease all work within 25 feet of the materials and notify Glenn County Public Works staff at (530) 934-6530. A professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Glenn County, shall be retained to evaluate the significance of the find. Further, County Public Works staff shall notify the local tribe(s) on the consultation list maintained by the State of California Native American Heritage Commission to provide local tribes the opportunity to monitor evaluation of the site. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the Glenn County Public Works Agency, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by Glenn County to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and plans to ensure contractor knowledge and responsibility for proper implementation.	Public Works staff will verify that the wording is included on construction plans. Should cultural resources be encountered, the contractor shall be responsible for reporting any such findings to Public Works staff, and contacting a professional archaeologist, in consultation with Public Works staff, to evaluate the find.	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
Hazards and Hazardous Materials						
MITIGATION I.1 (Hazard Material Screening): Prior to construction, the soil and water within the proposed construction limits shall be screened for the presence of agricultural chemicals at concentrations sufficient to be an exposure hazard. If excavation for the new bridge abutments encounters groundwater, this should also be screened for agricultural chemicals. Should any constituents of concern be found in excess concentrations, the applicant shall prepare a Soil Management Plan (SMP) or equivalent report for water resources, which shall be distributed to construction personnel. The SMP or equivalent report shall establish protocols for handling, sampling, storage, and disposal of any suspected contaminated soils or water generated during construction activities.		Public works staff will require final copies of the required assessment/plan documenting relief thereof, prior to commencing construction at the site.	Glenn County Public Works Agency			

MM No.	Mitigation Measure	Timeframe for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Agency & Initials	Date	Notes
Tribal Cultural Resources						
	MITIGATION R.1. (Tribal Cultural Resources): If during ground disturbing activities, any potentially paleontological, prehistoric, protohistoric, and/or historic cultural resources or tribal cultural resources are encountered, the contractor shall cease all work within 25 feet of the find (100 feet for human remains) and notify the County. A professional archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeology and being familiar with the archaeological record of Glenn County, shall be retained to evaluate the significance of the find. County staff shall notify all local tribes on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. If human remains are uncovered, the project team shall notify the Glenn County Coroner pursuant to Section 7050.5 of California’s Health and Safety Code. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the County, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the County to be appropriate shall be implemented pursuant to the terms of the archaeologist’s report. The preceding requirement shall be incorporated into construction contracts and documents to ensure contractor knowledge and responsibility for the proper implementation.	Public Works staff will verify that the wording is included on construction plans. Should paleontological, prehistoric, protohistoric, and/or historic cultural resources or tribal cultural resources be encountered, the contractor shall be responsible for reporting any such findings to Public Works staff, and contacting a professional archaeologist or paleontologist in consultation with Public Works staff, to evaluate the find.	Glenn County Public Works Agency			

VI. REFERENCES

- California Air Resources Board. 2019. Area Designations for State/Federal Ambient Air Quality Standards. <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>
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