

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

ORD FERRY ROAD BRIDGE

Seismic Retrofit Project STPLZ-5912(019)
State Bridge No. 12C-120, County Project No. 42071-97-1

DRAFT

NOVEMBER 2002

Lead Agency:
Butte County Public Works Department
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Oroville, CA 95965
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APPENDIX G

NEGATIVE DECLARATION REGARDING ENVIRONMENTAL IMPACT

1. **NOTICE IS HEREBY GIVEN** that the project described below has been reviewed pursuant to the provisions of the California Environmental Quality Act of 1970 (Public Resources Code 2110, et. Seq.) and a determination has been made that it will not have a significant effect upon the environment.
2. **DESCRIPTION OF PROJECT:** Ord Ferry Road Bridge across Sacramento River, Butte County Project Number 42071-97-1.
3. **LOCATION OF PROJECT:** Approximately 7 miles south of Hamilton City, and 10 miles west of the City of Chico on Ord Ferry Road at Sacramento River.
4. **NAME AND ADDRESS OF PROJECT APPLICANT:**
County of Butte
Department of Public Works
7 County Center Drive
Oroville, CA 95965
5. **MITIGATION MEASURES:**
See attached
6. A copy of the Initial Study regarding the environmental effect of this project is on file in the Department of Public Works at 7 County Center Drive, Oroville, CA.

This study was:

Adopted as presented.

Adopted with changes. Specific modifications and supporting reasons are attached.

7. A public hearing on this Negative Declaration was held by the decision making body.

Hearing Body: Butte County Board of Supervisors.


Date: January 28, 2003

Determination:

On the basis of the Initial Study of environmental Impact, the information presented at hearings, comments received on the proposal, and our own knowledge and independent research:

We find the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** is hereby adopted.

We find that the project **COULD** have a significant effect on the environment, but will not in this case because of attached mitigation measures described in item 5 above, which are by this reference made conditions of project approval. A conditional **NEGATIVE DECLARATION** is hereby adopted.



Signature

Chair, Butte County Board of Supervisors
Title

JAN 28 2003

Date:

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INTRODUCTION

Initial Study Purpose

The California Environmental Quality Act (CEQA) requires an environmental analysis of all projects that are not categorically exempt from analysis and which may have an effect upon the environment. The Initial Study is the method prescribed in the CEQA Guidelines for undertaking a preliminary analysis.

As stated in the CEQA Guidelines, the Initial Study is an informational document intended to identify potentially significant effects of a project on the environment. The Initial Study provides the basis for determining whether environmental effects are potentially insignificant and a Negative Declaration may be filed or that effects may be significant, thus requiring the preparation of an environmental impact report (EIR).

The Initial Study is intended to be objective and impartial, so as to allow the reader to arrive at an independent judgment as to the probable effects of the development. (See Section 2 for a description of the project.)

The CEQA Guidelines prescribe the process required in the analysis of potential environmental impacts. The tabular environmental checklist form, contained in Appendix "G" of the Guidelines (revised October 1998), has been incorporated into the text of Section 3 of this Initial Study.

Project Background

The proposed project is a seismic retrofit of State bridge 12C-120 on Ord Ferry Road across the Sacramento River approximately seven miles south of Hamilton City, and 10 miles west of the city of Chico. State bridge 12C-120 is a nine-span reinforced box girder having a total length of 1308 feet and width of 32 feet 7 inches. The structure is supported on round columns founded on driven pile-supported footings. This structure has been deemed by the State to be inadequate for the seismic region in which it is located.

Required Permits and Approvals

As defined by CEQA, the County of Butte is the Lead Agency for this project. Following Department of Public Works staff review, the Board of Supervisors, which is responsible for final action on the environmental determination and project, will review the Initial Study/Mitigated Negative Declaration and Project plans.

Following is a listing of other agencies which may have authority over certain aspects of the Project:

**Table 1-1
Regulatory Action**

Regulatory Agency	Type of Permit/Regulation	Reason for Permit
National Marine Fisheries Service	Federal Endangered Species Act	NEPA and CEQA clearances
U.S. Fish and Wildlife Service	Federal Endangered Species Act	NEPA and CEQA clearances
California Department of Fish and Game	Streambed Alteration Agreement	CDFG jurisdiction along Sacramento River

PROJECT INFORMATION

The following section provides a description of the proposed Project in a level of detail necessary to fully examine the associated environmental consequences.

Project Description

The Project Description consists of a description of the construction necessary to implement the Project, the operational characteristics, and the schedule and proposed phasing of the Project. The Project location is shown in Figures 2-1 and 2-2.

Alternatives

Three alternatives were considered:

- A. Install steel column casings on all the columns and retrofit all of the footings with additional reinforcing steel.
- B. Install steel column casings on all the columns and retrofit footings 2, 4, and 9 with additional reinforcing steel.
- C. Install steel column casings on all the columns and retrofit footings 2, 4, 5, 6, 7 and 9 with additional reinforcing steel.

Of the above alternatives, Alternative A would provide the best performance during potential seismic events. Alternative C was chosen because it met all the Project objectives with a lower level of environmental impact than Alternative A. Alternative B, while providing the lowest potential level of environmental impact, would not meet the Project's goals for predicted performance during a seismic event.

Construction

The following sections describe the construction activities, staging and access areas, and scheduling.

Activities

As depicted on plans prepared by Quincy Engineering, Inc., dated (received) November 14, 1997, the proposed retrofit construction will affect the superstructure, columns, and footings at specific locations throughout the length of the 1,308-foot structure. The superstructure will receive an increase in the capacity of the hinged slabs to withstand longitudinal and lateral displacements. The retrofit will involve all of the columns supporting the structure and all but two footings supporting the columns. The footing retrofit will be completed before beginning column casing.

Additional piles will be driven to depths of approximately 40 feet below grade, increasing the size of selected footings.

Cofferdams will be installed around the footings at selected locations to remove water and allow for additional pile driving and the pouring of concrete to increase the size of the footings.

Access and Staging

The retrofit construction will be accomplished through one or a combination of the following methods:

- **Temporary floating bridge/platform.** The establishment of a temporary bridge would extend eastward from the western bank of the river. Bridge sections would be trucked to the site and assembled to form a platform capable of supporting a crane, vibratory pile driver, and construction materials such as forming materials, concrete, and steel. The temporary bridge will need to be capable of supporting a 100-ton capacity or larger crane for excavation and pile driving operations. The temporary bridge would be located on the upstream or downstream side of the existing bridge. The location of the bridge will depend on whether or not one can be installed during the appropriate construction window.
- **Temporary trestle bridge on driven timber/steel piling.** If a temporary bridge is used, it will likely be constructed by driving either timber or steel piles to support a timber deck. Should a temporary trestle be used, removal of the decking/surfacing will have to occur prior to high water. Support pilings for a temporary structure would likely remain until the roadway is re-installed the following season for completion of retrofit construction. Upon completion of construction, temporary structure pilings will be removed from the waterway and transported off-site.
- **Some Work may be accomplished from the existing bridge superstructure.** All four bridge hinge restrainer assemblies will need to be replaced. This and other work may occur using scaffolding on the existing bridge.

All retrofit work will be accomplished within existing County right-of-way. Access over private property will be obtained through temporary construction easements with property owners. Temporary construction easements and/or rights of entry would be necessary for any staging areas that would be located in the northwest, southwest, northeast, or southwest quadrants of the Project.

The most likely access points to the footings and columns would be from the westerly approaches of the structure. The southwest approach is open and lends itself to a temporary trestle bridge and roadway. The ultimate choice of which access is more suitable will depend upon the construction windows ultimately allowed in relation to the Sacramento Splittail habitat and Chinook salmon spawning.

The staging area for equipment and materials will likely be accomplished on the southwest and/or northeast quadrants of the bridge. In the southwest quadrant is the old Ord Ferry landing area, an area that has been highly disturbed in the past. This area has unvegetated areas where equipment and materials could be stored. The Project contractor may choose to stage from the northeast

and/or southeast corners of the structure then access either one or more columns from the east bank.

Public Passage

During construction, the bridge will remain open for the passage of public traffic; however, traffic may be controlled at certain times and restricted to a single lane during those times when work on the superstructure takes place. Certain operations may require public traffic to be routed over the bridge in one lane. Closing the road is not proposed because of the length of the detour north and south of the Project site. The acquisition of one or more temporary construction easements will be necessary for access to the footing retrofit locations.

Operations

The vertical and horizontal location of the structure and roadways will remain unchanged, and the approach roadways will not be affected. The retrofit will occur entirely within Butte County right-of-way. There is no lane widening, bridge widening, or approach widening associated with the Project. The proposed Project is a safety Project and will not induce growth nearby or increase the capacity of the roadway.

Schedule/Phasing

The proposed construction schedule has been designed to minimize impacts to two special-status fish species present in the vicinity: Splittail and winter-run Chinook salmon. Construction is scheduled to commence in the 2005 or 2006 construction season. It is very likely that this Project will require three construction seasons due to the complexity of the Project and high water conditions.

Construction will consist of the following phases:

- Mobilization
- Construction of temporary access routes, including trestle bridges
- De-watering of the construction area (i.e., cofferdams)
- Pile driving
- Pouring of concrete footings
- Installation of column casings
- Joint retrofit on superstructure

To avoid or minimize impacts on anadromous fish during critical times of the year, the in-water work window is to be from May 15th until October 15th.

Construction will likely occur 40 to 60 hours a week from 6:00 A.M. to 4:00 P.M. Crews may work night shifts if construction windows demand faster scheduling. Weekends may be necessary due to the proposed windows.

The preceding information represents the County Public Works Department's current intentions and plan for development and use of the Project site. In the event the County elects to appreciably modify the Project Description or any mitigation measure described in this document, the Board of Supervisors will conduct a noticed public hearing and will adhere to CEQA requirements.

Figure 2-1
Project Location within Butte County

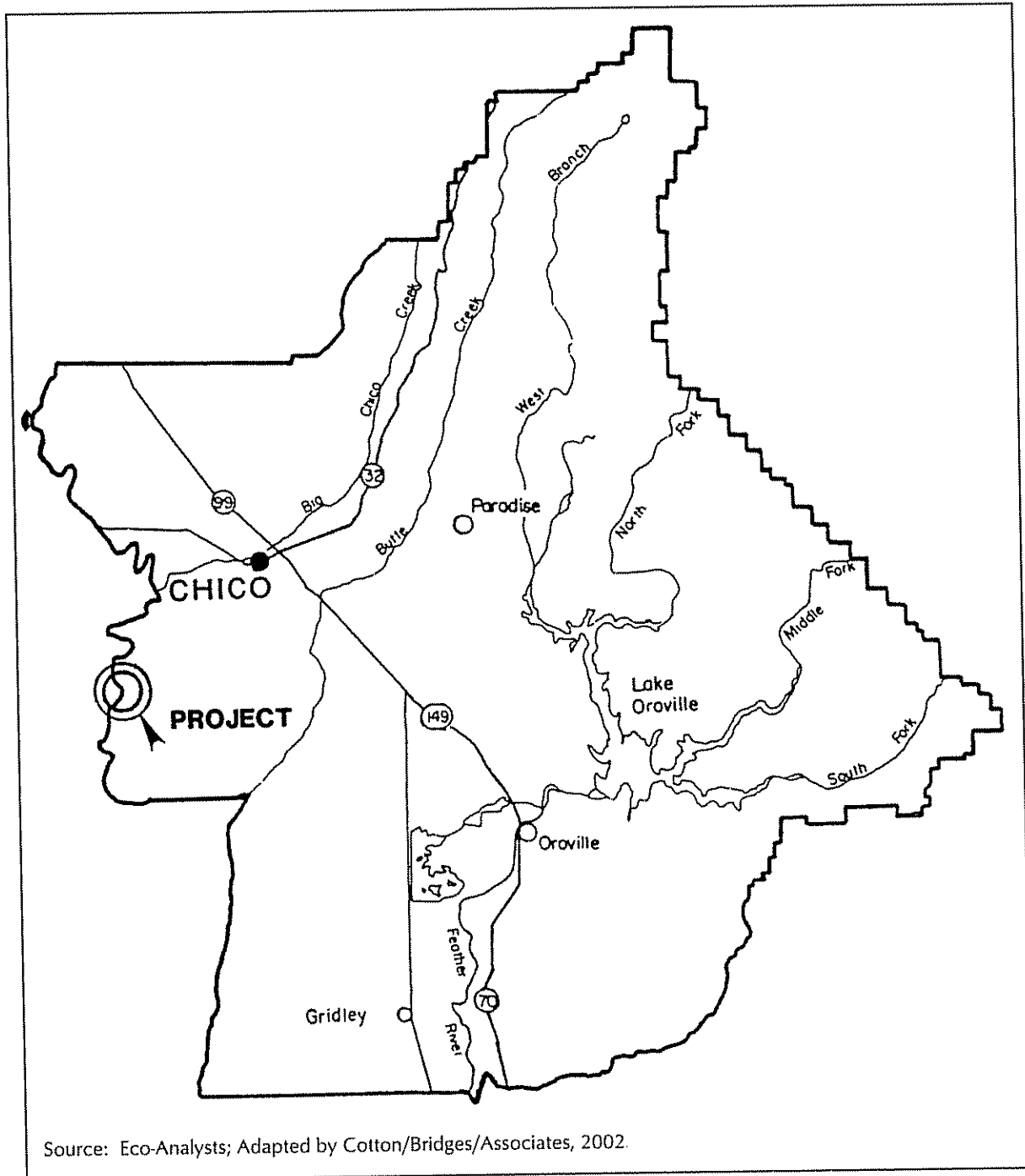
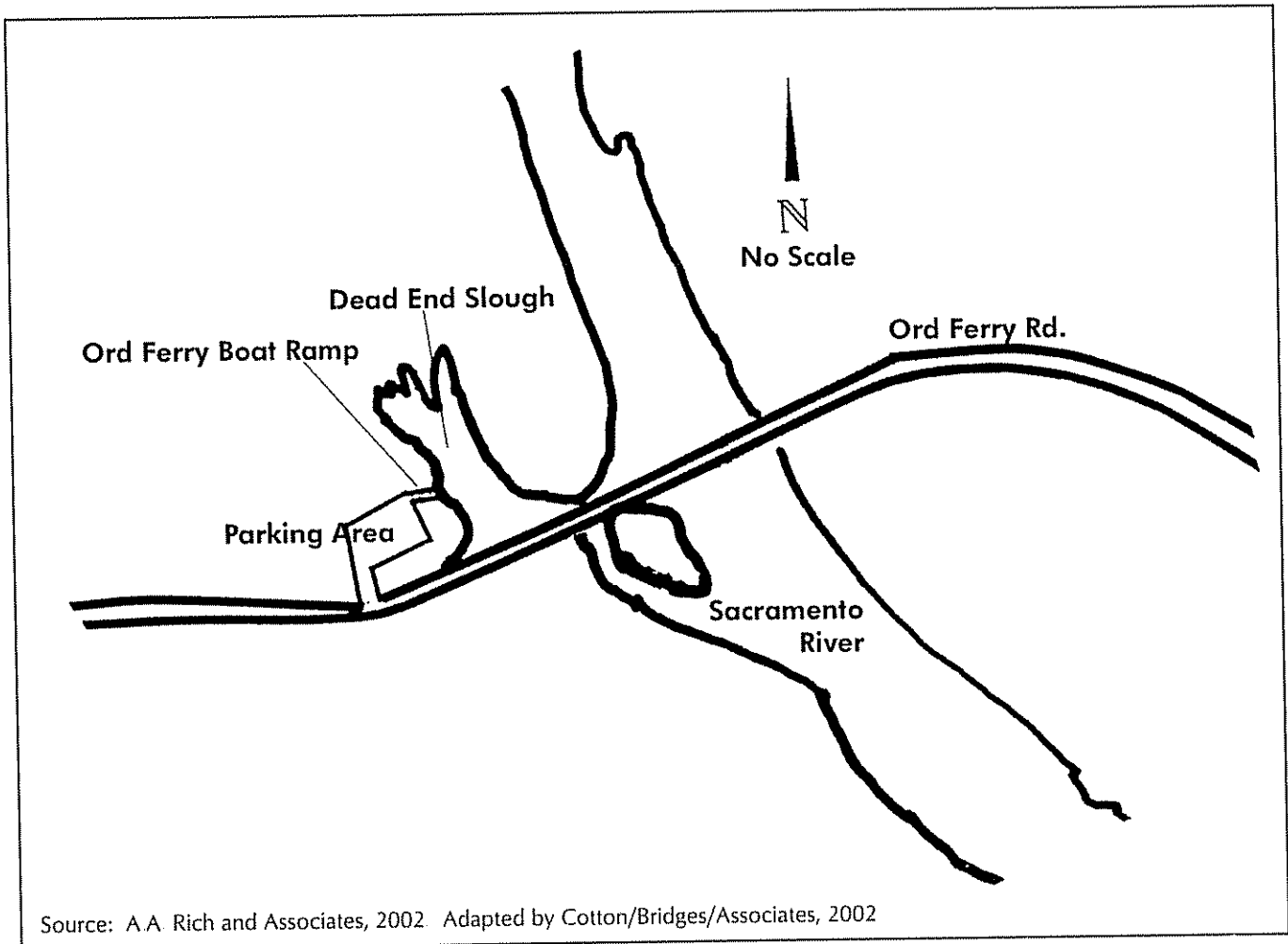


Figure 2-2
Local Vicinity Map



Source: A.A. Rich and Associates, 2002. Adapted by Cotton/Bridges/Associates, 2002

Project Location

The Project site is located approximately seven miles south of Hamilton City, and 10 miles west of the city of Chico. The bridge connects unincorporated portions of Butte County and Glenn County.

The Project location is shown in Figures 2-1 and 2-2.

Project Site Description

The Project site consists of an existing bridge which spans the Sacramento River, connecting Glenn County with Butte County. The existing bridge, State bridge 12C-120, is a nine-span reinforced box girder having a total length of 1308 feet and width of 32 feet 7 inches. The structure is supported on round columns founded on driven pile-supported footings. This structure has been deemed by the State to not be adequate for the seismic region in which it is located.

The Project area was originally part of the Great Valley Mixed Riparian Forest along the Sacramento River. The riparian forest covered both banks of the river in varying depths for most of its length. Agricultural encroachment has reduced this forest to thin scattered strands. Orchards in the Project area have reduced this zone to a narrow strand of trees. It is thinner on the west bank.

The northwest quadrant has a park (Glenn County) with a boat ramp that goes into a small "ox bow" side branch of the river. This "ox bow" supports a dense strand of riparian, scrub-shrub, and palustrine vegetation. The side branch has been dredged between the ramp and the river, and is shallower to the north. The northern portion dries up in low flow periods for the Sacramento River. The bottom and bank edges are silty and unconsolidated. The southwest quadrant has a high and very thin riparian zone.

The Butte County side of the river supports a broader band of Great Valley Mixed Riparian Forest on shallower slopes. East of this band, and also within the Project zone, is an area with shrub vegetation and silty soils which is seasonally flooded with moving water. Trees in this area are in sapling stage of growth, with very few mature trees, which is evidence of successional heavy flooding. The east side of the river appears to bear the brunt of annual inundation and high volume water flows. The southeast quadrant contains a dense strand of riparian vegetation that thins out near the bridge, replaced by orchard.

The river banks are approximately 30 feet above mean sea level. The bridge and approaches are higher, and not subject to flooding.

Adjacent Land Use Description

Surrounding lands are designated on the Butte County General Plan as Orchard and Field Crops. There is no residential development in the immediate vicinity. Adjacent lands are being used as orchards. Immediately adjacent to the Project site on the west side (Glenn County) are Ord Bend Park, a County-maintained facility that includes a boat ramp, and a wildlife refuge owned and managed by the U.S. Fish and Wildlife Service.

Project Objectives

The objective of the Project is to improve the ability of the bridge over the Sacramento River at Ord Ferry Road to withstand seismic groundshaking.

ENVIRONMENTAL ANALYSES

Environmental Factors Potentially Affected

Following is a summary of the environmental impact subject areas that, without mitigation, would be potentially affected by the proposed Project. The mitigation measure number that addresses the potential impact is shown in italic print. Potentially significant impacts are summarized in Table 3-1, below:

**Table 3-1
Summary of Potential Impacts and Mitigation Measures**

Topic Area	Impact	Level of Significance	Mitigation Measures	Level of Significance after Mitigation
Air Quality	Potential short-term release of nonattainment criteria pollutants	Potentially significant	Mitigation Measure #1	Less than significant
Biological Resources	Potential impacts on special-status species	Potentially significant	Mitigation Measures #2-10	Less than significant
	Impact on riparian habitat	Potentially significant	Mitigation Measures #12 and #13	Less than significant
	Impact on wetlands	Potentially significant	Mitigation Measure #11	Less than significant
Cultural Resources	Potential impacts on potentially occurring historic and prehistoric sites and artifacts	Potentially significant	Mitigation Measure #14	Less than significant
Geology and Soils	Potential erosion impacts during construction	Potentially significant	Mitigation Measure #8	Less than significant
Hydrology and Water Quality	Potential impacts on water quality	Potentially significant	Mitigation Measures #8 and #11	Less than significant
Noise	Potential construction noise impacts	Potentially significant	Mitigation Measure #15, and #16	Less than significant

All potential impacts will be reduced to less-than-significant levels as a result of proposed mitigation measures.

Source References

Following is a listing of source documents that were reviewed in the preparation of this analysis. Some were used to reach the conclusions described in the text that follows.

- X *Cultural Resource Study for Sacramento River Bridge Crossing at Ord Ferry Road, Bridge No. 12C-120*, John Furry and Eco-Analysts, April 12, 1999.
- X *Natural Environmental Study for Ord Ferry Road Bridge (12C-120)*, Eco-Analysts, March 17, 1999.
- X *Biological Assessment for Ord Ferry Road Bridge (12C-120)*, Eco-Analysts, August 2000. Revised by Caltrans Environmental Management, December 2001 and February 2002.
- X *Foundation Investigation, Seismic Retrofit Sacramento River Bridge at Ord Ferry Road*, Taber Consultants, July 28, 1997.
- X *Earthquake and Fault Activity Map 11-1, Seismic Safety Element*, CH2M Hill, 1977.
- X *Liquefaction Potential Map 11-2, Seismic Safety Element*, CH2M Hill, 1977.
- X *Butte County Planning Department, Subsidence and Landslide Potential Map 111-1, Safety Element*, CH2M Hill, 1977.
- X *Erosion Potential Map 111-2, Safety Element*, CH2M Hill, 1977.
- X *Expansive Soils Map 111-3, Safety Element*, CH2M Hill, 1977.
- X *Noise Element Map IV-1, Scenic Highway Element*, CH2M Hill, 1977.
- X *Scenic Highways Map V-1, Scenic Highway Element*, CH2M Hill, 1977.
- X *Natural Fire Hazard Classes Map 111-4, Safety Element*, CH2M Hill, 1977.
- X *Archaeological Sensitivity Map, Oroville, CA*, James P. Manning, 1983.
- X *Agricultural Preserves Map*, established by Resolution No. 67-178, Butte County Planning Department, 1987.

- *National Flood Insurance Program, Flood Insurance Rate Maps*, Federal Emergency Management Agency, 1989.
- *Soil Map, Chico (1925)/Oroville (1926) Area*, United States Department of Agriculture.
- *Soil Survey of Chico (1925)/Oroville (1926) Area*, United States Department of Agriculture.
- *Butte County Planning Department. Butte County Fire Protection Jurisdictions and Facilities Map*, Butte County Fire Department and California Department of Forestry, 1989.

Environmental Impact Evaluation Criteria

In each area of potential impact listed in this section there are one or more questions (in *italic print*) which assess the degree of potential environmental effect. A response is provided to each question using one of the four impact evaluation criteria described below. A discussion of the response is also included.

- ***Potentially Significant Impact.*** This response is appropriate when there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made an EIR is required.
- ***Less Than Significant With Mitigation Incorporated.*** This response applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact". The Lead Agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level (mitigation measures from an earlier analysis identified herein may be cross-referenced).
- ***Less than Significant Impact.*** A less than significant impact is one which is deemed to have little or no adverse effect on the environment. Mitigation measures are, therefore, not necessary, although they may be recommended to further reduce a minor impact.
- ***No Impact.*** These issues were either identified in a previous EIR as having no impact on the environment, or they are not relevant to the proposed Project.

Environmental Checklist

This section of the Initial Study incorporates Appendix "G" Environmental Checklist Form, contained in the CEQA Guidelines (revised October 1998). Impact questions and responses are included in both tabular and narrative formats for each of the 17 environmental topic areas.

Aesthetics

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

Discussion:

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

Visual impacts are anticipated only during the construction period, when heavy equipment, cofferdams, temporary access routes (including trestle bridges), and falsework will be present. Since the majority of the construction activity will occur below the bridge superstructure, the visual impact on motorists or any adjacent land uses will be relatively minimal.

No long-term visual impact is anticipated, since no significant change in the appearance of the structure is proposed. The most noticeable effect of the construction will be riverbank vegetation removed at the construction access routes. Potential impacts on vegetation are further addressed in the Biological Resources section of this document.

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

Refer to discussion in item "a", above. Additional information concerning tree impacts is contained in the Biological Resources section. The Project site is not within State scenic highway.

- c) *Substantially degrade the existing visual character or quality of the site and its surroundings?*

Refer to discussion in item "a", above.

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

No permanent lighting will be included in the Project design.

Construction is presently proposed to occur during daylight hours. However, nighttime construction may be necessary. In the event work is required after dark, the Caltrans *Manual of Construction Standard Specifications and Standard Plans* will dictate lighting standards that would be necessary. Night lighting fixtures, if used, would not cause a significant effect because there are no dwellings nearby. The most significant potential effect would be creation of glare hazard for motorists. If nighttime work is necessary, the Caltrans manual will provide direction that would reduce glare hazard for motorists.

Agricultural 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 Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X

Discussion:

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

The land surrounding the Project site is productive orchard land, except for Ord Bend Park and the wildlife preserve to the west. The proposed Project will have no effect on the surrounding farmland.

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

See discussion in item "a", above. There are no prime agricultural soils and no Williamson Act contracts affecting the Project site.

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

See discussion in items "a" and "b". The agricultural operations in the immediate vicinity of the Project site will not be impacted.

Air Quality

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

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		X		
c) Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	

Discussion:

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

See discussion in item "b", below.

b) *Violate any air quality standard or contribute substantially to an existing or projected air quality violation?*

Butte County is located in the central portion of the Northern Sacramento Valley Air Basin and is under the jurisdiction of the Butte County Air Pollution Control District. Butte County and all northern Sacramento Valley Air Districts have been designated as "moderate" nonattainment areas for the State standards for ozone and fine particulate matter (PM₁₀). Currently, Butte County is in attainment for all the federal (less stringent) air quality standards.

On a long-term basis, vehicle traffic and associated air emissions will not increase as a result of the Project. As noted in the Project Description section, the proposed Project is a seismic retrofit of an existing bridge. As such, it will have no effect on traffic volume or speed on a long-term basis.

On a short-term basis, construction equipment used in the construction process will contribute to air emissions from both vehicle exhaust and dust. In particular, diesel-powered pile drivers will contribute to local emissions. All vehicles will be required to comply with California exhaust emissions standards. The Butte County APCD recommends incorporating all feasible mitigation measures to reduce emissions to less-than-significant levels. Potential dust impacts will be mitigated by implementation of the erosion and ozone control plan identified in Mitigation Measure 1.

Mitigation

To reduce potential temporary increases in nonattainment pollutants, the following mitigation measure is required:

Mitigation Measure 1:

A Water Pollution Control Plan shall be prepared in accordance with the Contract Plans and Specifications and include an erosion control plan that involves limiting speeds of trucks on unpaved roads in the construction area, watering, and other feasible methods of dust control that do not result in sediment being deposited in the river. Construction activities shall utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. All construction equipment shall be properly maintained and operated.

With the incorporation of the mitigation measure above, the impact is less than significant.

- c) *Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?*

Since the Project will not contribute to an increase in vehicle traffic, a cumulative increase in air emissions is not expected.

- d) *Expose sensitive receptors to substantial pollutant concentrations?*

Substantial pollutant concentrations are not anticipated, as discussed in item "b", above.

- e) *Create objectionable odors affecting a substantial number of people?*

No new odor-producing activities are proposed, other than that associated with equipment exhaust during construction activities. Diesel fuel fumes may be noticeable in the vicinity of the site; however, this is a short-term effect. All equipment must comply with California emissions standards.

Biological Resources

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		X		
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?			X	

Discussion:

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

Butte County is required to establish the presence or absence of State and federally listed rare, endangered, threatened, and candidate species through literature search and field surveys.

The California Department of Fish and Game Natural Diversity Data Base (NDDDB) and the U.S. Fish and Wildlife Service were contacted for records in their files, and a data run was provided to the biological consultant on November 24, 1997. The NDDDB also provided copies of their October 1997 "Endangered and Threatened Animals of California" list, the July 1997 "Listing of Designated Endangered, Threatened, or Rare Plants of California," and the August 1997 California Department of Fish and Game "Special Plants" list.

Additional contact with National Marine Fisheries (Kelley Finn) was made in February and March of 1999 to discuss conditions to be applied to the Project to avoid any take of special status species. An updated list of species was obtained in December of 2001. A field review was conducted by Jason Ly from the Sacramento office of the U.S. Fish and Wildlife Service on February 1, 2001. An additional meeting was conducted in August of 2002, with representatives of Butte County Department of Public Works (Lead Agency), Caltrans, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service. The purpose of the meetings was to discuss the potential impacts of the project on special status species and their habitat, and agree on mitigation measures that would reduce any potential impact.

All relevant literature was reviewed for previously recorded species of concern that could be affected by the Project. The NDDDB was reviewed again in April of 2000, and the U.S.F.W.S. publication, *Endangered and Threatened Wildlife and Plants*, was also reviewed and incorporated into the results of this environmental report.

The following biological resources surveys, as summarized in Table 3-2, were conducted and the results of the surveys were incorporated into this report.

**Table 3-2
Surveys Conducted**

Type of Survey	Date
Botanical survey	July of 1998
Field survey and assessment of Sacramento splittail habitat	October of 1997
Avian survey	July of 1998
Habitat and wildlife survey	1997 and 1998
Biological Assessment, as revised by Caltrans	February 2002

The NDDDB includes the following:

- **Threatened species:** Swainson's hawk and bank swallow;
- **Endangered species:** western yellow-billed cuckoo;
- **Species of Concern:** great blue heron, great egret, and osprey;
- **Habitats of concern:** coastal and valley freshwater marsh, great valley cottonwood riparian forest, great valley mixed riparian forest, great valley oak riparian forest, and great valley willow scrub;
- **Special Plants:** California hibiscus and fox sedge.

The U.S. Fish and Wildlife Service office in Sacramento was contacted on September 11, 1997 for their records, and a list of species of special. The USFWS list for the Ord Ferry U.S.G.S. 7.5 series quadrangle, Butte County, is on file with the County for review. The list includes the following:

- **Endangered species:** vernal pool tadpole shrimp, conservancy fairy shrimp, winter-run Chinook salmon and habitat, and American peregrine falcon.
- **Threatened species:** valley elderberry longhorn beetle, vernal pool fairy shrimp, delta smelt, California red-legged frog, giant garter snake (GGS), bald eagle, and Aleutian Canada goose.
- **Potentially Endangered:** Central Valley Steelhead.
- **Potentially Threatened:** Sacramento splittail.
- **Species of Concern:** Sacramento anthicid beetle, Antioch Dunes anthicid beetle, green sturgeon, river lamprey, long fin smelt, western spade foot toad, northwestern pond turtle, western burrowing owl, ferruginous hawk, little willow flycatcher, white-faced ibis, Swainson's hawk, Pacific western big-eared bat, pale Townsend's big-eared bat, Yuma myotis bat, Greater western mastiff bat, small-footed myotis, long-eared myotis, fringed myotis, long-legged myotis, Marysville Heerman's kangaroo rat, and San Joaquin pocket mouse.

Of the special-status species listed above, the following species would be potentially impacted by the Project in the absence of mitigation:

Chinook Salmon, Central Valley Steelhead, River Lamprey and Green Sturgeon: With the construction of this Project, there is the potential for take of a listed species. Mitigation Measure #6 limits the work window to the period between May 15th and October 15th. This Project may adversely affect a listed species were it to become trapped or injured upon removal from the cofferdam.

The impact is considered potentially significant without the incorporation of mitigation measures specified below.

Sacramento Splittail: The oxbow slough portion of the river channel provides breeding habitat for the Sacramento splittail. If work in the slough were properly limited, it is unlikely that breeding success will be affected by the proposed Project or that take could occur. If work were prohibited

in this area, impacts are unlikely. Splittail could be caught within the confines of the cofferdam and injured or killed during the dewatering process. This Project may adversely affect Sacramento splittail.

The impact is considered potentially significant without the incorporation of mitigation measures specified below.

Valley Elderberry Longhorn Beetle (VELB): There will be removal of four elderberry bushes that are large enough in diameter to provide habitat for the VELB. With the removal of habitat the Project may adversely affect Valley Elderberry Longhorn Beetle and take may occur.

The impact is considered potentially significant without the incorporation of mitigation measures specified below.

Giant Garter Snake (GGS): The oxbow slough provides aquatic habitat for the GGS. There have been many sightings around the Project area, although none reported directly within the Project limits. Giant Garter snakes are most susceptible to injury during their hibernation period (they hibernate in upland areas adjacent to aquatic habitat). This Project will be working outside of the species hibernation period. Impact will be limited to disturbance by equipment in the area. GGS are very unlikely within the main channel of the Sacramento River and are not likely to be caught in the cofferdams. It is unlikely that any take will occur as a result of construction. The proposed Project may affect, but is not likely to adversely affect, GGS.

The impact is considered less than significant.

Mitigation

The following mitigation measures are designed to reduce impacts to the Chinook Salmon, Central Valley Steelhead, River Lamprey and Green Sturgeon; the Sacramento splittail; and, the Valley Elderberry Longhorn Beetle (VELB).

Mitigation Measure 2:

A qualified biological monitor must be hired by the contractor or the County to supervise the construction activities. Two staging areas have been proposed in this document: the old Ord Ferry launch site and ramp area (southwest quadrant) and the bank area on the Butte County side (northeast quadrant). Should an area other than these two sites be used, the biological monitor will assess the area for additional biological impacts. Should there be additional impacts, these must be cleared through the USFWS and NMFS prior to the start of construction.

Mitigation Measure 3:

A USFWS approved biologist will be present during any activities that may involve the take of a listed species. This includes but is not limited to installation of the cofferdams, all dewatering activities and removal of the cofferdams. Sediment plumes occurring from the proposed work shall be monitored to ensure that the contractor is meeting the regulations set forth by the water quality permits.

Mitigation Measure 4:

During construction of the cofferdams, a monitor, approved by National Marine Fisheries Service (NMFS), must be present during installation to ensure that no fish are trapped in the cofferdam. Methods used to remove fish from the cofferdam must be approved by NMFS. Screens must be placed on pumps used to drain sealed cofferdams and also must conform to NMFS screening standards. The approved biologist will prepare a fish salvage plan prior to the start of construction that will discuss in detail the methods to be used to minimize the take of fish during construction. It is anticipated that seining or electro shock methods will be used to salvage fish from areas that need to be dewatered.

Mitigation Measure 5:

Using native vegetation, primarily consisting of willows the bare slope areas and the areas temporarily disturbed will be replanted. Mitigation of 3:1 for temporary impacts will be completed on site.

Mitigation Measure 6:

Construction work will be limited to the period from May 15 to October 15 within the main channel.

Mitigation Measure 7:

No work will occur in the oxbow slough area, and access to the construction area will not be gained by use of the boat ramp.

Mitigation Measure 8:

Construction will utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. These practices consist of application of permanent and temporary construction treatments for controlling stormwater runoff and preventing discharges of excessively turbid water from the job site. BMPs include treatment controls, soil stabilization practices, mitigation measures, scheduling, and contract Standard Special Provisions (SSP). No concrete washings or water from concrete will be allowed to flow into the river. No concrete will be poured within flowing water in the river.

The following measures will also be incorporated:

- Butte County will Obtain and 401 water quality permit and a DFG 1601 Streambed Alteration Agreement. Both of these permits require procedures to minimize impacts to the live stream.
- All stockpiled material and equipment will be placed away from the river to prevent erosion.
- Access points will be limited to the two locations, discussed previously, in order to minimize extensive erosion into the river.
- Temporary measures including straw bales, silt fencing, and filter fabric will be used to prevent erosion between work periods.
- For permanent erosion control, seeding and revegetation will be conducted the fall directly following the end of construction to coincide with the rain.
- All materials and fluids that may be harmful to the aquatic system will be stored in the staging areas which are more than 25 feet away from the river.
- The contractor will have on hand absorbent material to be used in case of accidental spills.
- All construction equipment must be in good working order and clean of significant fuel and lubrication and is not to have leaks

Mitigation Measure 9:

The County will contract with Wildlands, Inc. to mitigate for take of VELB habitat. Because the County may have no plants to transplant, due to previous damage, they will follow a 1.25 ratio suggested by USFWS. The 1.25 was suggested to compensate for not transplanting an existing healthy bush. The total of seedlings to be mitigated will be 42.5 or 43, which is 8.6 conservation areas (basins) equal to 15300 sq ft or 0.35 acres. If complete basins are purchased from a mitigation bank, it will be an allotment of 9 basins.

Mitigation Measure 10:

An approved biologist will conduct a pre-construction survey 24-hours prior to the start of construction. If a giant garter snake is located at the site, construction will not begin until the snake is captured and relocated or removes itself from the Project area. All results of these activities will be reported to the USFWS. No grading or excavating will take place within 30 feet of GGS habitat between October 1 and May 1. All on-site construction personnel shall be notified of the potential presence of the GGS and that all snakes found are to be left unharmed. During construction, all surface debris shall be carefully removed to avoid contact with, or disturbance to, GGS.

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

The Project area was originally part of the Great Valley Mixed Riparian Forest along the Sacramento River. The riparian forest covered both banks of the river in varying depths for most of its length. Agricultural encroachment has reduced this forest to thin scattered strands. Orchards in the Project area have reduced this zone to a narrow strand of trees, which is thinner on the west bank than on the east.

The northwest quadrant has a park with a boat ramp that goes into a small "ox bow" side branch of the river and thence to the river. It supports a dense strand of riparian, scrub-shrub, and palustrine vegetation. The side branch has been dredged between the ramp and the river, and is shallower to the north. The northern portion dries up in low flow periods for the Sacramento River. The bottom and bank edges are silty and unconsolidated. The southwest quadrant has a high and very thin riparian zone.

The Butte County side of the river supports a broader band of Great Valley Mixed Riparian Forest on shallower slopes. East of this band, and also within the Project zone, is an area with scrub-shrub vegetation and silty soils. It is seasonally flooded with moving water. Trees in this area are in sapling stage of growth, with very few mature trees, successional evidence of routine heavy flooding. The east side of the river evidently bears the brunt of annual inundation and high volume water flows of the river. The southeast quadrant contains a dense strand of riparian vegetation which thins out near the bridge, replaced by orchard.

The banks are approximately 30 feet above mean sea level. The bridge and approaches are higher, and not subject to flooding. The climate is a Mediterranean climate with hot, dry summers and cool, wet winters. River levels are highly variable, in part due to releases from Shasta Dam.

The Sacramento River is designated as both Critical Habitat and Essential Fish Habitat. The Project area, on the Sacramento River, provides migration, holding and rearing habitat essential for the following species: Central Valley Chinook Salmon (Fall/Late Fall, Winter and Spring run). Anadromous fish species use this portion of the Sacramento River to access the spawning grounds. No permanent impact is expected as a result of the Project.

The Project area lies in the Butte Basin Ecological Management Zone. More specifically, the Project area is between the Big Chico Creek Ecological Management Unit and the Butte Creek Ecological Management Unit. The goals of these units are to restore, conserve and preserve watersheds on a more local level. This includes providing sufficient flows, creating spawning habitat and improving and/or maintaining the existing riparian corridor. Implementation of this Project does not threaten or deviate from any of the goals established by the ecological management units.

The main channel is a migration corridor for anadromous fish including Chinook Salmon Central Valley Steelhead, River Lamprey and Green Sturgeon. The Project area does not contain spawning habitat for any of the mentioned species and is lacking the properties that define Essential Fish Habitat specifically, the Project area is lacking spawning substrate.

The oxbow area on the Northwest quadrant of the Project area provides spawning habitat for Sacramento splittail. This is a slow moving area of water that has emergent vegetation. The same area also provides foraging opportunity and cover from predators for the GGS. The area is hydrologically connected to other water bodies via the Glenn-Colusa Irrigation District canals and there is known sightings of GGS outside the Project area.

Four elderberry bushes, which are habitat for the Valley Elderberry Longhorn Beetle, will need to be removed as a result of the Project. The impacts are mitigated by Mitigation Measure #9, above, which requires transplanting of elderberry bushes and purchase of mitigation habitat.

Impacts on habitats of concern in the area contained in the NDDDB are summarized in Table 3-3, below:

**Table 3-3
Habitats of Concern in Project Area**

Habitat	Federal Status	State Status	Project Impact
Great Valley Willow Scrub	None	None	The Butte County side of the Area of Potential Effects (APE) contains small areas of willow scrub habitat. Given the proposed scope of the Project, this scrub area should not be impacted by the Project.
Great Valley Mixed Riparian Forest	None	None	This habitat exists on both sides of the Sacramento River within and adjacent to the APE. Given the scope of the proposed Project, no impact to this habitat should occur.

Permanent, significant habitat alterations are not expected as a result of the Project. Mitigation measures included to reduce biological resources impacts are intended to protect special status species during temporary construction phases. The California Department of Fish and Game, the National Marine Fisheries Service, and the U.S. Fish and Wildlife Service were consulted throughout the preparation of this environmental document, and their input is incorporated into the analysis and recommended mitigation measures. The impact is considered less than significant.

- c) *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

Construction of the Project may result in hydrological interruption or other effects on waters of the U.S.

A Stream Bed Alteration Permit from the California Department of Fish and Game is required for the Project, and compliance with conditions of the permit will reduce impact to U.S. waters. The

following mitigation measure is recommended to ensure compliance with provisions of the federal Clean Water Act and to ensure a less-than-significant impact:

Mitigation Measure #11:

The Regional Water Quality Control Board (RWQCB) shall be contacted for a Water Quality Certification Waiver following review and concurrence of the Project from the U.S. Army Corps of Engineers.

With incorporation of the mitigation measure specified above, the impact is less than significant.

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

Refer to discussion in item "b", above.

Data sheets from NDDDB and the list provided by the U. S. Fish and Wildlife Service are on file with the County for review. Survey information, consultation with the aforementioned agencies, and field reconnaissance establish a basis for determining the value of local habitats for species of special concern. Habitats for 11 species of special concern are summarized in Table 3-4:

**Table 3-4
Species of Concern in Project Area**

Species	Federal Status	State Status	Project Impact
Yuma Myotis Bat	Category 2. May warrant listing but lacks sufficient information to support a proposed rule. Species of Concern	Species of Concern	No significant impact is anticipated from Project-related activities if this species uses the Ord Ferry bridge area as a foraging area. There is no shortage of this type of habitat in the vicinity of the Project. No roost sites were observed near the Project site.
Swainson's Hawk	Protected by the Migratory Bird Act. Species of Concern.	Threatened	Although there is suitable foraging and nesting habitat for this species in the vicinity of this Project, no nest sites have been observed close to, or within, the Project area.
Western Yellow-Billed Cuckoo	Category B. Withdrawn from Candidacy for Federal Listing.	Endangered	The field survey confirmed the presence of one western yellow-billed cuckoo in the vicinity of the bridge. The proposed Project will not impact the limited areas of willows near the bridge, and would have no impact on cuckoos.
Cliff Swallow	Protected under the Migratory Bird Treaty Act of 1918.	None	Large colonies were observed using the underside of the bridge for nesting. Mitigation Measure #12 is required.
Barn Swallow	Protected under the Migratory Bird Treaty Act of 1918.	None	Nests of this species were found around the piles and below deck surfaces of the Ord Ferry Bridge. A few were still occupied by fledglings in July, but all nests were empty by the August survey. Mitigation Measure #12 is required.
Winter-Run Chinook Salmon	Endangered	Endangered	Adult Winter-Run Chinook pass through the area from April through October, the ideal construction window. Smolt migration begins in July and peaks in September through October. There will be no significant permanent impact upon the habitat of this species. Noise and vibration could affect upstream migration by adult winter-run Chinook salmon and downstream migration by smolts, but the project is not expected to result in any internal injury, nor is the project expected to prevent passage through the project area. The aforementioned impacts are mitigated by Mitigation Measures #2, #3, and #4. Impacts could result from increased turbidity and sediment levels in the river in the vicinity of the Project. This impact is reduced by

Species	Federal Status	State Status	Project Impact
			Mitigation Measure #8.
Sacramento splittail	Proposed Threatened	Species of Special Concern	The oxbow remnant used for boat launching on the Glenn County side of the river is typical habitat for splittail spawning. No seining was conducted to determine the presence (or absence) and actual use of the area. Mitigation Measures #2, #3, #4, and #13 reduce potential impact. Use of the boat launch as access to the river for materials and equipment could disrupt splittail spawning. Mitigation Measure #7 reduces impact.
Central Valley Steelhead	Proposed Endangered	None	Construction activities in the river could affect the spring migration. The mitigations required for winter-run Chinook salmon will also reduce impacts upon steelhead.

Impact to movement of these migratory species is considered significant without the incorporation of mitigation measures, specified below:

Mitigation Measure #12:

The Contractor shall be made aware of the presence of Cliff Swallows which nest under the bridge and their subsequent protection under the Federal Migratory Bird Treaty Act of 1918. Measures shall be taken to insure compliance with this law. These measures may include netting or sheeting hung from the bridge deck to below the bridge deck to completely exclude birds from nesting. If implemented, these measures must be in place March 1. Removal of nests, where necessary, shall occur if and only if it is taken down prior to the completion of the nest and prior to any egg laying activity.

Mitigation Measure #13:

The area within the cofferdam (minus the area of the existing pier dimensions) shall be calculated and mitigated at a ratio of 6:1. This calculation results in 0.36 acres of Sacramento splittail habitat. Caltrans has directed this Ord Ferry Bridge project mitigation be included as part of the Caltrans Butte City Bridge Project. This project is located on State Route 162 on the Sacramento River, approximately 15 miles south of the Ord Ferry Bridge.

The mitigation proposed at the Butte City Bridge involves the acquisition of property that contains riverbank adjacent to riverbed. The agreement is that the property can never be stabilized, protected, or improved. Over time, this area will erode naturally and create debris catches and eddies that are valuable habitat for species like the Sacramento splittail.

With the incorporation of mitigation measures specified above, the impact is considered less than significant.

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

The County has no policies or ordinances addressing tree preservation for infrastructure projects that would be violated by the Project as proposed. No replacement trees or landscaping is proposed. There is no impact.

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

There are no Habitat Conservation Plans in effect at the Project site. See item "b," above. The impact is less than significant.

Cultural Resources

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		
d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion:

- a) *Cause a substantial adverse change in the significance of a historic resource as defined in Section 15064.5?*

The Project site is in an area of known prehistoric and historic cultural resources. A Records Search was requested of the Northeast Center of the California Historical Resources Information Center, at California State University, Chico.

According to the Records Search, dated November 17, 1997, there are no recorded prehistoric or historic sites within or immediately adjacent to the Project site. However, the site is located in an area "known to have been heavily utilized by prehistoric and ethnographic populations." The site is located within the territory once inhabited by the Northwest Maidu (Konkow) and Patwin. Unrecorded villages are known to be located in the general vicinity of the Project area.

With regard to historical resources, while there is no recorded site within or immediate adjacent to the Project site, the site of Ord Ferry occurs on the site and the Ord Ferry stage road extends through the site. Additional unrecorded historic sites and features may be present. According to the Records Search, the Project area has not been previously surveyed for cultural resources by a professional archaeologist.

Based on the recommendation contained in the Records Search, a cultural resources survey was conducted by a professional archaeologist. The survey (John Furry and Eco-Analysts, April 12, 1999) consisted of contacts with local Native American representatives relative to their knowledge of sites in the vicinity. According to the survey no archaeological resources were found within or adjacent

to the Project site. No evidence of historic Ord Ferry was encountered. The historic Ord Ferry stage road is maintained and used as the current Ord Ferry Road.

It is possible that there are heretofore undiscovered resources that could be encountered during site development activities. Accordingly, the following mitigation measure is proposed to mitigate potential impacts to a less-than-significant level:

Mitigation Measure #14:

Should grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans, glass, etc.; structural remains; human skeletal remains), work within 50 feet of the find shall cease immediately until a qualified professional archaeologist can be consulted to evaluate the remains and implement appropriate mitigation procedures. Should human skeletal remains be encountered, State law requires immediate notification of the County Coroner. Should the County Coroner determine that such remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State law, to arrange for Native American participation in determining the disposition of such remains.

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

Refer to discussion in item "a."

- c) *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Refer to discussion in item "a", above. No paleontological resources have been encountered in the Project.

- d) *Disturb any human remains, including those interred outside of formal cemeteries?*

Refer to discussion in item "a."

Geology and Soils

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving			X	
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?		X		
c) Be located in a geological 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	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

Discussion:

- a.i) *Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)*

Like all of Butte County, the Project site will be subject to ground shaking to Modified Mercalli VII levels. The most significant mapped fault in the area is the Cleveland Hill Fault. The latest seismic movement on that fault occurred near Oroville in 1975.

While the northern-most edge of Butte County is approximately 50 miles south of Mt. Lassen, a site of historic volcanic activity, there is no record of any portion of Butte County being directly affected by a volcano in historic time. Accordingly, the probability of volcanic activity impacting the Project area is very low.

According to the soils investigation prepared for the Project, the nearest active fault is approximately 24 miles from the Project site.

Requirements embodied in the Uniform Building Code address the local seismic setting (Seismic Zone 3), and will provide adequate resistance to possible seismic activity. The Project itself is intended to provide greater seismic safety.

The impact is less than significant.

- a.ii) *Strong seismic ground shaking?*

Refer to item "a.i", above. This construction Project is being proposed specifically to address seismic concerns. According to the Project geotechnical consultant (Taber Consultants, report dated July 28, 1997) the site has a horizontal bedrock acceleration of 0.2 g associated with a seismic event of 7.0 magnitude on the Coast range - Sierra Nevada Block Boundary seismic source zone. The nearest active fault is believed to be approximately 24 miles away.

The impact is less than significant.

- a.iii) *Seismic-related ground failure, including liquefaction?*

Refer to item "a.i", above. Liquefaction can occur when loose to medium dense granular soils generally within 50 feet of the surface are subjected to severe ground shaking. The presence of high groundwater can exacerbate this potential in certain soil conditions. According to the Project geotechnical engineer, liquefaction potential at the site is low.

The bridge retrofit has been designed in accordance with the recommendations contained in the soils report.

a.iv) *Landslides?*

Landslides are possible in areas of steep topography, particularly where prolonged rainfall has caused soils on slopes to become oversaturated and unstable. The channel banks at the Project site are unstable and subject to sloughing. However, the potential for large-scale landsliding is low.

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

The proposed Project involves a seismic retrofit of the existing bridge. The work, which consists of strengthening existing structural members, will not involve earthwork, except as required for construction staging and equipment access. Construction-related earthwork will be temporary in nature. According to the Public Works Department, affected piers will require excavations prior to driving new pilings for larger footings. The quantity of excavation is roughly estimated at 5,000 cubic yards. A portion of the excavated space will be filled with concrete and steel for the increased footing size. The new footings will be covered with an approved material that is comparable to the existing channel material. Excavated materials will likely be removed off-site.

Since ground surface will be disturbed by grading and movement of construction equipment, there is an increased potential for erosion during the construction process. The river is particularly susceptible to siltation effects. The amount of surface area disturbed for construction access and staging activities will ultimately depend upon which access point is selected.

There will be no excavation or filling associated with the roadway. Pier excavations will range from 27 to 30 feet, comparable to that of existing piers.

The County intends to require the preparation of a Water Pollution and Erosion Control Plan incorporating Best Management Practices (BMP) prior to commencement of the Project (see Mitigation Measures #8 and #11). On the banks of the river, straw bales, silt fences and erosion control blankets will likely be required. Within the water, cofferdams will be installed, behind which new piles will be driven for the retrofitted footings.

The existing ground on access routes to and from the bridge may require some type of temporary surfacing. The surfacing likely will be prepared and maintained with rock. The existing ground on the bank may serve as a somewhat reliable roadway surface if properly maintained at with appropriate moisture content.

Mitigation Measure #8 requires the use of BMPs during construction, and thus reduces potential erosion impact to a less-than-significant level.

c) *Be located in a geological 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?*

Refer to discussion in item "a.iii", above. The potential for liquefaction is slight, according to the soils report prepared for the site.

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

Soil conditions have been addressed in the soils report, and the proposed bridge modifications have been designed in accordance with observed conditions.

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

No on-site wastewater disposal systems are proposed.

Hazards and Hazardous Materials

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

Discussion:

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

Refer to discussion in item "b", below.

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

The County has a Hazardous Materials Emergency Response Plan, but has no program for regulating hazardous materials. Problems are addressed in response to complaints received.

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

Refer to discussion in item "b", above.

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

The site has no history of hazardous materials.

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

The site is not within an airport land use plan or within two miles of an airport.

- f) *For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing in the project area?*

Refer to discussion in item "e", above.

- g) *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Public streets are designated as the primary emergency response and evacuation routes in the county. A connection between Glenn County and Butte County, Ord Ferry Road provides an emergency access route for residents in the area. It is also a travel route for fishermen and river recreationalists.

During the construction period, travel across the bridge will continue, as described in the Project Information section of this report. However, as noted, traffic may be restricted to one travel lane at certain times.

- h) *Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?*

As noted above, travel over the bridge will continue during the construction process. The Project will not increase wildfire hazards in the area. Rather, when completed, the Project will improve safety, including evacuation during wildfires, because the bridge will be less susceptible to earthquake damage and possible closure due to earthquake damage.

Hydrology and Water Quality

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?		X		
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted water?			X	
f) Otherwise substantially degrade water quality?		X		
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X

Discussion:

- a) *Violate any water quality standards or waste discharge requirements?*

The County proposes to channel stormwater runoff into silt fences as part of the erosion control and water pollution control plan.

Effective erosion control measures (see Mitigation Measure 8 and 11) will mitigate temporary, construction-related water quality impacts to a less-than-significant level. With implementation of effective erosion control measures, violations of water quality requirements are not anticipated. Potential impacts on fisheries are discussed in the Biological Resources section of this Initial Study..

- b) *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

The Project will involve driving of piles to depths of 27 to 30 feet below the existing river bed. Effects on groundwater supplies are not anticipated.

- c) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?*

The Project will have no effect on drainage patterns; however, short-term, construction-related impacts could produce siltation impacts. Potential siltation and erosion control mitigation is discussed in the Geology and Soils, and Biological Resources section of this Initial Study.

- d) *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

Refer to discussion in item "c", above. The channel or course of the Sacramento River will not be permanently affected by the proposed Project.

- e) *Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted water?*

Stormwater runoff volumes will not be affected by the proposed Project.

- f) *Otherwise substantially degrade water quality?*

Refer to discussion in item "a", above.

- g) *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?*

The Project does not involve housing.

- h) *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*

The existing bridge supports are within the river channel and are affected by flood flows. As noted in the Project Description, proposed seismic retrofit will not increase the size or number of support members within the floodway.

- i) *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?*

Refer to item "g", above. There are no levees or dams nearby which, as a result of failure, could inundate the Project site. The river is a source of flooding in the event flows overtop levees. The proposed Project will not increase the likelihood of flooding nor will it increase the exposure of persons to flood hazards.

- j) *Inundation by seiche, tsunami, or mudflow?*

Refer to discussion in Item "i".

Land Use and Planning

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	

Discussion:

a) *Physically divide an established community?*

As previously noted, the proposed Project consists of strengthening of the existing bridge, increasing its reliability as a river crossing. As such, the Project will serve to unify, rather than divide, the established community.

b) *Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?*

The Project is not inconsistent with the County General Plan. The plans have been prepared in accordance with County Public Works Department and Caltrans standards and specifications. Possible conflicts with other agencies that may have jurisdiction over affected resources, such as the California Department of Fish and Game and National Marine Fisheries Service, are addressed by mitigation measures recommended in the Biological Resources section of this Initial Study.

c) *Conflict with any applicable habitat conservation plan or natural community conservation plan?*

There are no Habitat Conservation Plans in effect in the vicinity of the Project.

Mineral Resources

Would the Project:

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

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

The site contains no known mineral resources other than river rock and gravel. The Project will not change the accessibility or availability of this mineral resource.

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

Refer to discussion in item "a", above.

Noise

Would the Project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		X		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?		X		
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion:

- a) *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

The County of Butte has not adopted a noise ordinance. Noise standards contained in the Noise Element of the General Plan reference the noise compatibility standards established by the Office of Noise Control, California Department of Health. Under those standards noise impacts of 55 to 70 dB L_{dn} or CNEL would be conditionally acceptable, and noise levels over 70 dB would be unacceptable.

Currently, noise levels in most undeveloped areas of the county are relatively low, the loudest of which are generated by traffic on highways and other streets. Ord Ferry Road is a rural road with low average daily traffic volume. Therefore, while it is a source of noise, it is not significant. The Project site is located in a rural area. There are no homes in the immediate vicinity of the site. Other than orchards, the nearest land use is public park just west of the Project site, in Glenn County.

The proposed Project will not result in any change in traffic-related noise, since it will not affect the bridge vehicle capacity or vehicle speed. Therefore, noise associated with the Project will be short-term in nature and will occur only during the construction period. For example, heavy earthmoving equipment can be expected to generate noise levels of between 85 to 90 decibels (dBA) at a distance of 50 feet from the source, and chain saws used for tree removal will create maximum noise levels of approximately 95 dBA at a distance of 50 feet. Once the bridge construction is completed, noise levels will again be limited to that created by low-level vehicle traffic. No increase in traffic will occur as a result of the Project.

Equipment capable of producing high noise levels will be used on the Project site for varying periods of time. The types of equipment used will depend upon the operation being performed. The following equipment types are anticipated:

- Excavator and wheel loader (Used for clearing)
- 100 ton+ capacity hydro or lattice boom cranes, diesel hammer (pile driver) and drilling rig
- Cranes, diesel hammer, excavator and wheel loader
- Loader, compactor, grader, rollers, water truck, semi-tractor trailers, paving machine
- A concrete pump truck is expected to supply concrete from the bridge deck. It may also supply concrete from the deck of a temporary bridge or barge.

Pile drivers are expected to be the noisiest of the heavy equipment on-site, and will be used for approximately 7 to 10 days to establish pilings. No blasting is expected to be required.

While the ambient daytime noise level in the area is low due to the rural locale, the nighttime ambient noise level is expected to be lower. Therefore, noises produced during nighttime are more likely to be annoying because residents would be engaged in passive activities, such as sleeping, reading, or watching television. There are no dwellings nearby. The following mitigation measures are recommended to minimize noise impacts on the rural environment:

Mitigation Measure #15:

The use of pile driving and any necessary blasting equipment shall be limited to daylight hours, between 7:00 A.M. and 9:00 P.M.

Mitigation Measure #16:

Blasting shall only be conducted under the supervision of a qualified technician authorized by the County Public Works Department.

Incorporation of the mitigation measures specified above will reduce potential impact to a less-than-significant level.

- b) *Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?*

There is a high potential that pile driving equipment will produce vibrations that are noticeable in the vicinity of the Project site. Refer to item "a" for a discussion of probable noise impacts and recommended mitigation measures.

- c) *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?*

Refer to item "a" for a discussion of probable noise impacts and recommended mitigation measures. As noted, the anticipated noise will be short-term, not permanent, in duration.

- d) *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?*

Refer to discussion and recommended mitigation measures in item "a", above.

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

The Project site is not within an airport land use plan.

- f) *For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?*

Refer to discussion in item "e" above.

Population and Housing

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Induce substantial 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
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

Discussion:

- a) *Induce substantial 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)?*

The Project will have no effect on population growth.

- b) *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?*

No homes will be displaced as a result of the Project.

- c) *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?*

Refer to discussion in item "b", above.

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 following public services:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Fire protection?			X	
b) Police protection?			X	
c) Schools?			X	
d) Parks?		X		
e) Other public facilities?			X	

Discussion:

a) Fire protection?

Fire protection services are provided by the Butte County Fire Department, assisted by California Department of Forestry through an annual contract with the County. Twenty-one stations are staffed around the clock during summer and 17 stations are fully staffed during winter. An existing mutual aid agreement with the City of Chico requires specific requests for assistance on an incident-by-incident basis.

No changes in fire protection are proposed as part of this Project; however, the bridge seismic retrofitting will improve the reliability of this river crossing and the ability of fire fighters to respond to emergencies.

b) Police protection?

Law enforcement is provided by the Butte County Sheriff's Department. Traffic enforcement is provided by the California Highway Patrol in unincorporated areas.

The primary Sheriff's Department office is in Oroville, with branch offices in Chico and Paradise Pines. The Sheriff has a mutual aid agreement with the City of Chico.

No changes in police protection are proposed. However, the bridge seismic retrofit will improve the ability of sheriff's personnel to readily cross the river for routine patrol and to respond to calls.

c) *Schools?*

To the extent that Ord Ferry Road may be used by school buses, the proposed bridge strengthening will improve the safety and reliability of this river crossing.

d) *Parks?*

The proposed Project will have no long-term effect on parks. Short-term impacts to Ord Bend Park are described in the Recreation section.

e) *Other public facilities?*

Pacific Gas and Electric Company (PG&E) provides electricity and gas service to many areas in the county. Telephone service is provided by Pacific Bell, and cable television services are provided by Chambers Cable.

Recreation

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

Discussion:

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

See parkland discussion in the Public Services, item "d", and item "b", below.

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

The Project will not involve recreational facilities, and will have no effect on such facilities except for temporary construction-related impacts on Ord Bend Park if it is used for construction staging. In such as instance, some existing parking could be temporarily lost.

Transportation/Traffic

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads and highways?			X	
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?				X
d) Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?			X	
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X

Discussion:

- a) *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?*

As noted in the Land Use and Planning section, the land in the vicinity of the Project is designated for agriculture (Orchard and Field Crops). As indicated in the Population and Housing section, the Project is not expected to induce residential growth in the area. As such, traffic effects associated with the Project will be short-term in duration, and will occur only during the period of construction. Construction-related effects may include temporary delays in crossing the bridge from either direction due to temporary lane restrictions.

It is the County's intention to keep two lanes of traffic open for as much of the time as possible. Lane restrictions would occur if the roadbed is used by heavy equipment to reach construction zones either on or below the superstructure.

- b) *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads and highways?*

Refer to discussion in item "a", above

- c) *Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?*

The Project will not affect air traffic patterns.

- d) *Substantially increase hazards due to a design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

Many of the roads in the undeveloped areas of the county are narrow and have design limitations that make them unsuitable for increased traffic and higher speeds. The proposed Project, while not affecting the road, will improve roadway safety by making the bridge more resistant to seismic shaking. The proposed retrofit will not increase hazards associated with the bridge.

- e) *Result in inadequate emergency access?*

The County of Butte has adopted an Emergency Response Plan which is designed to focus on potential large-scale disasters. Evacuation routes are determined depending upon the location, type and extent of emergency incident.

Public roads provide the primary emergency response and evacuation routes, particularly in hilly, forested portions of the county. Ord Ferry Road provides an important emergency access function for residents and others in the area.

The proposed Project will improve emergency response in the area by increasing the strength of the bridge and its resistance to failure.

- f) *Result in inadequate parking capacity?*

The Project does not include, nor will it generate the need for, permanent parking facilities. Short-term parking will be required for construction workers. The County estimates that there could be as few as 5 and as many as 20 workers on the site at any time. Sufficient space exists in the vicinity to accommodate these vehicles.

The greatest effect on existing parking at the Ord Bend Park will result from the use of a portion of the parking lot for contractor staging. The parking area is typically not used to capacity on a regular basis. It will be necessary for Butte County to make arrangements with Glenn County relative to the amount of parking that may be made available for use by the contractor. If the southwest quadrant is utilized for staging, the access road along on the westerly bridge approach adjacent to the

USFWS wildlife refuge area will likely be cleared of star thistle. At the terminus of this access roadway is a small parking area (suitable for six to seven cars) adjacent to private property that extends downstream and easterly. The wildlife refuge will not be affected directly by the staging. There are no designated or utilized parking areas on the east side of the bridge.

- g) *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?*

The Project is consistent with County circulation policies.

Utilities and Service Systems

Would the Project:

Environmental Issue	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves the project that it has adequate capacity to serve the project's projected demand in addition of the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X

Discussion:

- a) *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?*

While the County is presently under an abatement order to eliminate nitrate contamination of groundwater in the Chico urban area, the proposed Project will not affect wastewater.

- b) *Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No water facilities will be affected by the proposed Project.

- c) *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?*

No storm drainage facilities will be affected or are required.

- d) *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?*

Refer to discussion in item "a".

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

Refer to discussion in item "a".

- f) *Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?*

Refuse is transported by private hauler to the County-owned Neal Road Landfill. The landfill is operated by a private company, under contract with the County. In 1992, it was estimated that the 101-acre site could continue to accept refuse for an additional 15 years.

No changes in solid waste generation, pick-up, or disposal are anticipated. The bridge will improve the reliability of the river crossing, those improving the ability of waste haulers to access homes and businesses in the area.

The proposed Project will have a short-term effect on the landfill, since certain construction materials may be disposed of there.

- g) *Comply with federal, State, and local statutes and regulations related to solid waste?*

No impact is anticipated.

Mandatory Findings of Significance

Environmental Issue	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
a) Does the project have the potential to 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, 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		
b) Does the project have impacts which 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	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

Discussion:

- a) *Does the project have the potential to 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, 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?*

While the Project has the potential to impact biological and cultural resources, it will not impact these resources because of mitigation measures recommended in this Initial Study.

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

No cumulative impacts have been identified.

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

No potential impacts on human beings have been identified.

DETERMINATION

(to be completed by Lead Agency)

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 have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION WILL BE PREPARED.
- I find the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" effect on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.


CHECKLIST PREPARER:

Cotton/Bridges/Associates
for
Butte County Public Works Department

DATE:

November 2002

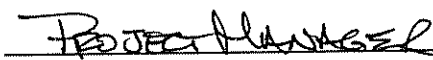
REVIEWED BY:



Signature



Printed Name



Title



Date

PREPARERS

In addition to Cotton/Bridges/Associates, the following specialists were involved in the preparation of this environmental document.

Biological Resources

The Biological Resources and Cultural Resources sections of this report were completed using reports prepared under the direction of Eco-Analysts, 3028 Esplanade, Suite A, Chico, CA, and revised by Caltrans Environmental Management, District 3, Marysville, CA.

Cultural Resources

The Cultural Resources section of this report was completed using a report prepared by John Furry and Eco-Analysts.

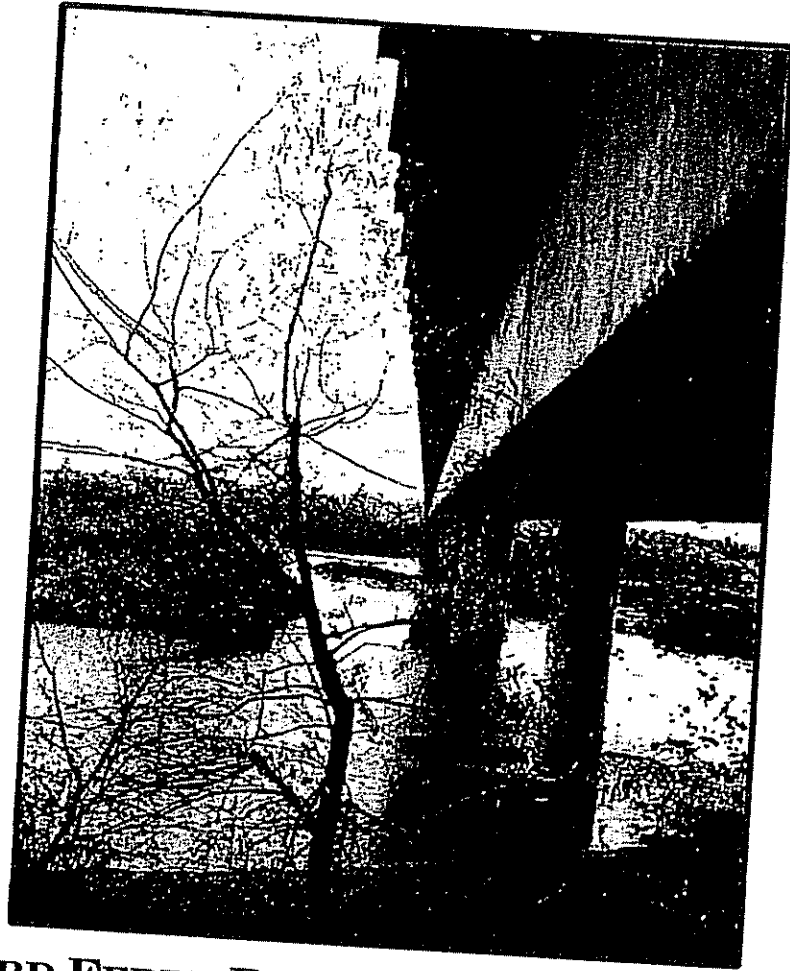
Soils

The Geology and Soils section of this report was completed using soils information prepared under the direction of Taber Consultants, 3911 West Capitol Avenue, West Sacramento, CA.

Specific citations for the reports prepared by the above listed contributors are contained in Section 3 of this report.

Appendix A

BIOLOGICAL ASSESSMENT



ORD FERRY ROAD BRIDGE RETROFIT
(12C-120)
CROSSING THE SACRAMENTO RIVER
BUTTE COUNTY, CALIFORNIA

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SUMMARY OF FINDINGS AND CONCLUSIONS

Butte County Department of Public Works is proposing the seismic retrofit of the Ord Ferry Bridge which spans the Sacramento River. Federal and State listed species will be potentially impacted by this work including Winter-run, Spring-run and Fall/Late Fall Chinook Salmon, Central Valley Steelhead, Sacramento Splittail, Valley Elderberry Longhorn Beetle and Giant Garter Snake. To minimize impacts to anadromous fish during their most critical time, a window of June 1-October 30 has been established by National Marine Fisheries Service (NMFS) for all in-water work. Butte County is proposing working one month outside of the recommended window (June 1 to November 30) in order to complete the work in less time. The recommended work window does not give the contractor time to install cofferdams and complete any of the retrofit work. Even with the extended work window proposed by the county, the project is expected to take three seasons to complete.

Construction may adversely affect threatened and endangered anadromous fish, Sacramento Splittail and Valley Elderberry Longhorn Beetle. Four elderberry bushes, host to the species, will need to be transplanted outside the work area in order for construction to be completed, work is within 20 feet of the bushes. There is habitat present for the Giant Garter Snake within an area referred to as an oxbow slough. With implementation of mitigation measures this project may affect but is not likely to adversely affect Giant Garter Snake.

Butte County has proposed mitigation to minimize impacts to listed and non-listed species. The extended work window has been discussed between Caltrans and both the National Marine Fisheries Service and the Fish and Wildlife Service. The mitigation proposed for impacts to VELB follow the guidelines supported by the Federal Highway Administration, the responsible agency for the proposed bridge retrofit.

INTRODUCTION

Purpose of Document

The purpose of this biological assessment is to review the proposed retrofit of Ord Ferry Bridge and determine the level of affect implementation of the project may have on the species listed below.

Endangered

Vernal Pool Tadpole Shrimp
Conservancy Fairy Shrimp
Winter-run Chinook Salmon

Threatened

Valley Elderberry Longhorn Beetle
Vernal Pool Fairy Shrimp
Delta Smelt
Central Valley Steelhead
Sacramento Splittail
California Red-legged Frog
Giant Garter Snake
Bald Eagle
Aleutian Canada Goose

Species of Concern

Sacramento Anthicid Beetle
Antioch Dunes Anthicid Beetle
Green Sturgeon
River Lamprey
Longfin Smelt
Western Spadefoot Toad
Northwestern Pond Turtle
Western Burrowing Owl
Ferruginous Hawk
Little Willow Flycatcher
White-faced Ibis
Swainson's Hawk
Pacific Western Big-eared Bat
Pale Townsend's Big-eared Bat
Yuma Myotis Bat
Greater Western Mastiff Bat
Small-footed Myotis
Long-eared Myotis
Fringed Myotis
Long-legged Myotis
Marysville Heerman's Kangaroo Rat
San Joaquin Pocket Mouse

Proposed Project

Butte County is proposing to earthquake retrofit the Ord Ferry Bridge which provides vehicle access, on a local road, across the Sacramento River.

Project Description

The proposed project involves the seismic retrofit of the footings and the columns of the bridge (state bridge No. 12 C-120) spanning the Sacramento River on Ord Ferry Road. The project is located approximately 7 miles south of Hamilton City, and 10 miles west of the City of Chico (Figures 1 and 2).

Three alternatives were considered:

- A. Install steel column casings on all the columns and retrofit all of the footings with additional reinforcing steel.
- B. Install steel column casings on all the columns and retrofit footings 2,4,7 and 9 with additional reinforcing steel.
- C. Install steel column casings on all the columns and retrofit footings 2,4,5,6,7 and 9 with additional reinforcing steel.

Alternative C was chosen based on studies that indicated this alternative would provide better predicted performance during a seismic event than Alternative B. Alternative C will meet the project objectives with less impact than Alternative A. The retrofit will involve casing all of the columns supporting the structure and work on all but two footings supporting the columns. The footing retrofit will be completed before beginning column casing. The retrofit could be accomplished through one of the following methods:

- Temporary Floating Bridge/platform: A floating platform (barge) would be extended eastward from the western bank of the river. Sections would be trucked to the site and assembled to form a platform capable of supporting the crane, vibratory pile driver and construction materials.
- Temporary Trestle Bridge on Driven Timber/steel Piling: The preferred location for the trestle is to begin in the northwest quadrant through the Glenn County Ord Bend Park and Boat Ramp. A floating bridge or temporary trestle would be used to reach the island on the east side of the dead end slough.

It is likely that the temporary barge method will be used, in which case access would not be obtained via the Glenn County Boat ramp and impacts to Sacramento Splittail would be significantly reduced. However, since a different contractor may have another method the project will be assessed for both construction alternatives.

Cofferdams will be established around existing footings by driving sheet piling around the column. Once the cofferdam is established around the footing/column, the space will be pumped and excavated to expose the footing. All excavated and pumped material will be removed to an area outside of the right of way for disposal. The footing will then be prepared which involves the driving of additional bearing piles, and the placement of reinforcing steel. The new footing will then be poured.

All four bridge hinges need to be replaced. This work will be done using scaffolding that is suspended from the bridge deck. Access for this work would be obtained through the cells of the box girders.

Butte County will work with the contractor and adjacent landowners to determine the final construction method in conjunction with the requirements of the Biological Opinion received from NMFS and FWS. Controlling factors affecting the method determination include the potential relocation of overhead electrical distribution lines that may have to be raised or moved. The land to the southwest is managed by the Bureau of Reclamation and access from the northeast quadrant would impact a walnut orchard. At this time, it is assumed that the contractor will stage and access the project area from either the northwest or southwest quadrant depending upon the result of the controlling factors listed above. Temporary construction easements will be obtained for access on adjacent land. Both of the assumed staging areas have flat, unvegetated areas, outside the ordinary high water mark for the staging of equipment and personnel. Both assumed areas also have ramps that go down to the river. The northwest quadrant has a boat ramp run by Glenn County. The southwest quadrant has the old ramp used by the Ord Ferry. Should an area be used other than the two listed, the approved biologist monitor will verify that the staging area will not impact any additional resources.

The retrofit will occur entirely within the Butte County right of way. There is no lane widening, bridge widening or approach widening involved with this project. The proposed action is a safety project and the results are not connected to increased capacity or growth in the surrounding areas.

Project Setting

The Northwest section of the project area is dominated by the Glenn County Ord Ferry Bend Park which contains a boat ramp with access to the Sacramento River and a small "oxbow" side branch of the river. In this section there is a dense stand of riparian, scrub-shrub and palustrine vegetation. The oxbow has dried up during low flow periods.

The Southwest Quadrant has a high, bare, almost vertical bank. There is an existing boat ramp that the old ferry used. This area also provides access to the river.

The east side of the river has shallower slopes and a higher concentration of Great Valley Mixed Riparian Forest, including elderberry shrubs. This portion of the river is hydrologically connected to a variety of smaller water bodies via the Glenn-Colusa Irrigation District canals. The surrounding area is agriculture land, primarily orchards.

Staging Areas

Two potential areas have been surveyed as part of this project. The first proposed staging area is the Glenn County Ord Ferry Bend Park which has a recreational boat ramp. There is a large paved parking lot and a paved boat ramp that leads into the oxbow slough. This area is located in the northwest quadrant of the project. The oxbow slough may provide breeding habitat for the Sacramento Splittail and may also provide aquatic habitat for the Giant Garter Snake.

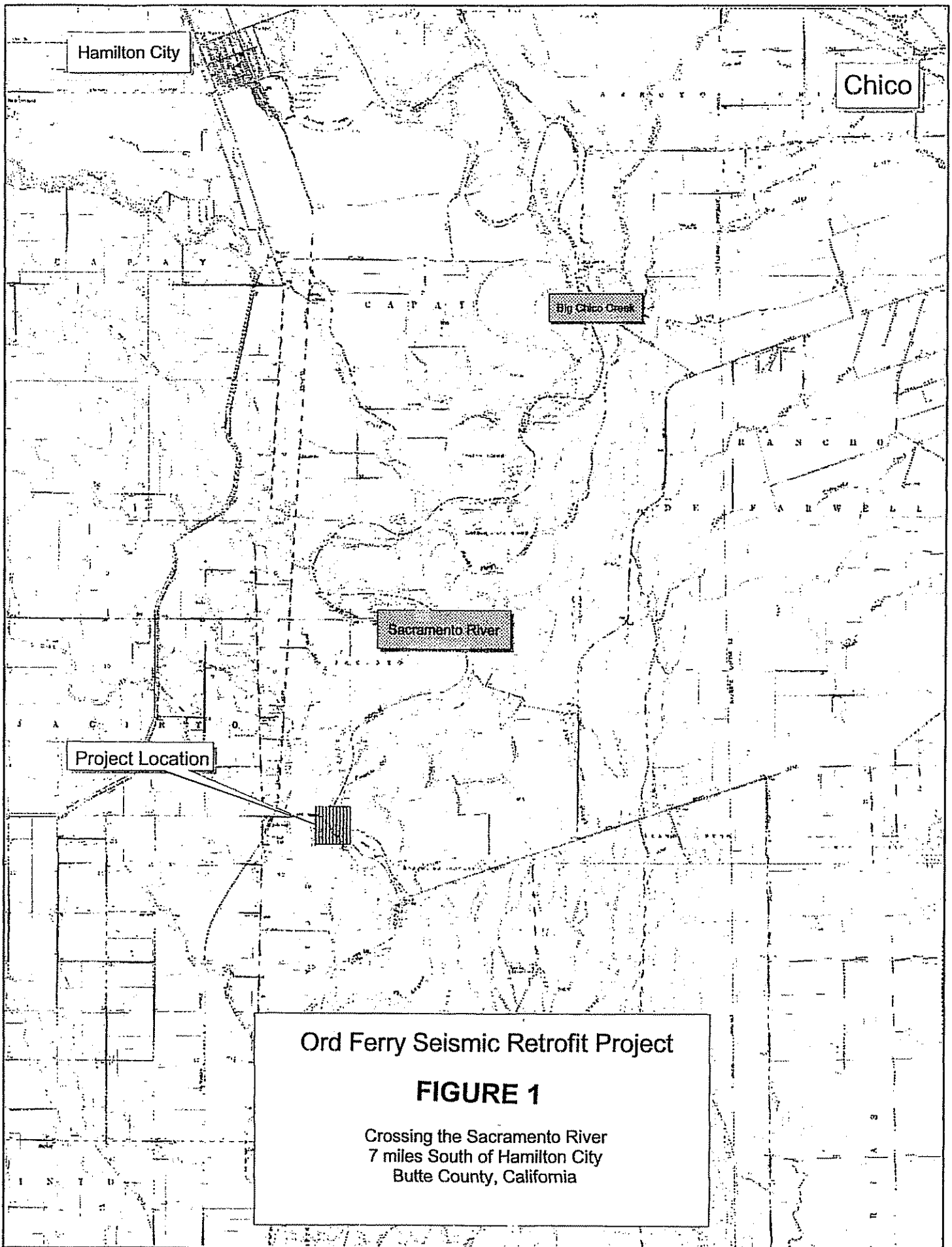
The second proposed staging area is in the southwest quadrant and is the old Ord Ferry landing area. This has historically been a highly disturbed area. There are unvegetated areas that are proposed for staging of equipment and materials. To use what is left of the ramp may require the removal of a thin strip of willows along the bank. This will be replaced following construction at a ratio of 3:1.

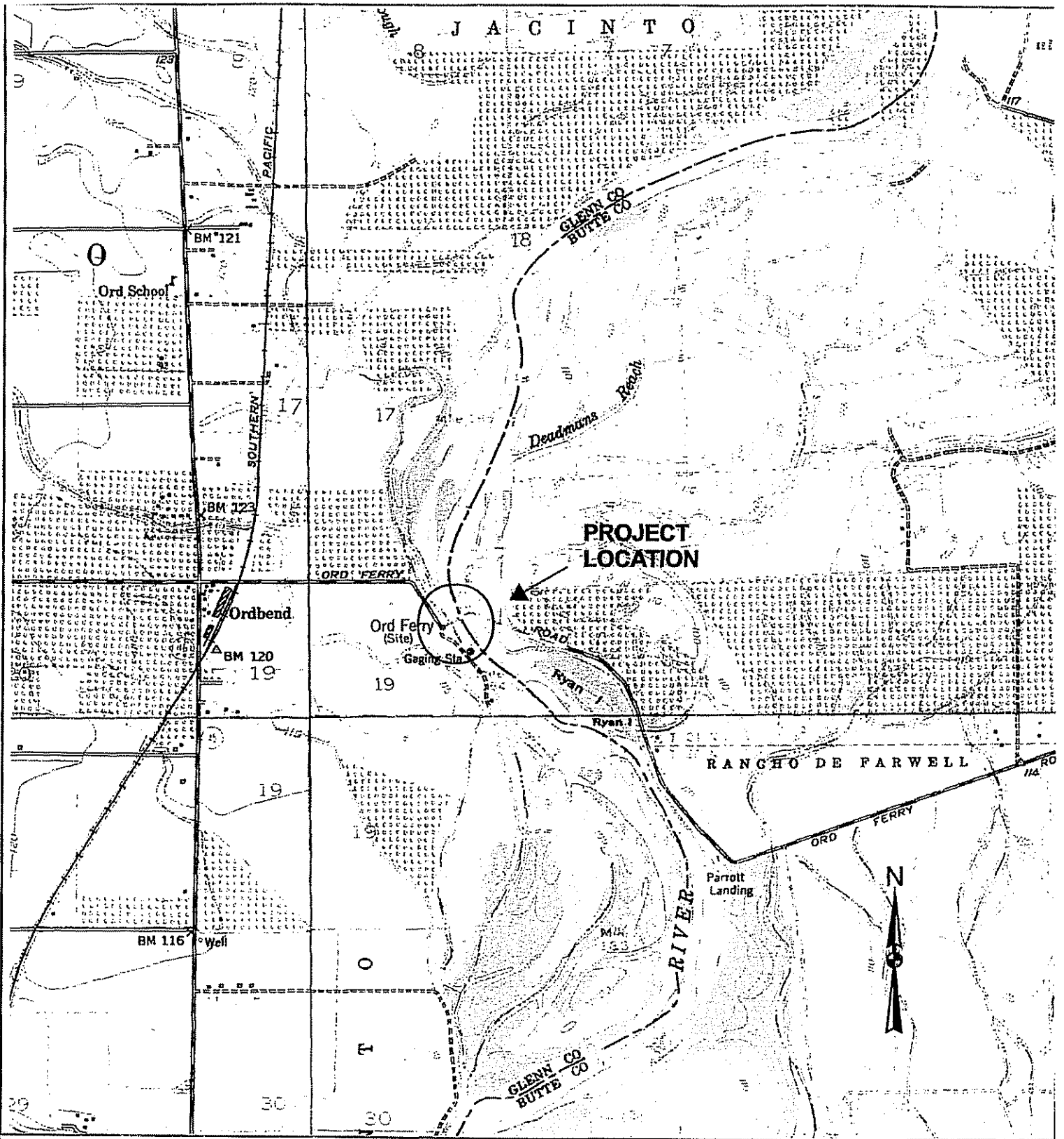
Construction Impacts

Permanent Impacts from construction are limited to the retrofit work, which will occur within the banks of the Sacramento River. Temporary impacts will occur along the banks where access will be required. The equipment expected to be used includes but is not limited to: trucks, floating barges and cranes. The impacts from the construction and mitigation measures include noise and vibration from the placement of the cofferdams and pile driving and the removal of VELB habitat in order to allow room for construction. Figure 3 shows the access that is expected to be used during construction.

Possible use of the park's boat ramp could disturb Sacramento Splittail spawning habitat; bank and instream work could produce increased turbidity and sediment levels. Use of the old ferry ramp may minimize the impacts to spawning splittail. The cofferdams, which are a mitigation measure, may cause some additional disturbance during installation, but will significantly minimize the affects of construction. The impacts will be temporary, six months per season. Mitigation will also include water quality measures.

There will be temporary impacts to riparian vegetation along both east and west banks. Although access will be determined by the contractor, the options have been analyzed and there is not expected to be more than 1/2 acre of total impact to riparian habitat within the project area. None of the riparian impacts will be permanent.





This map is a portion of Ord Ferry, Llano Seco, Glenn and Hamilton City 7.5 Quadrangle U.S.G.S. Maps

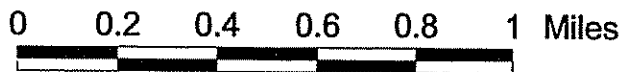
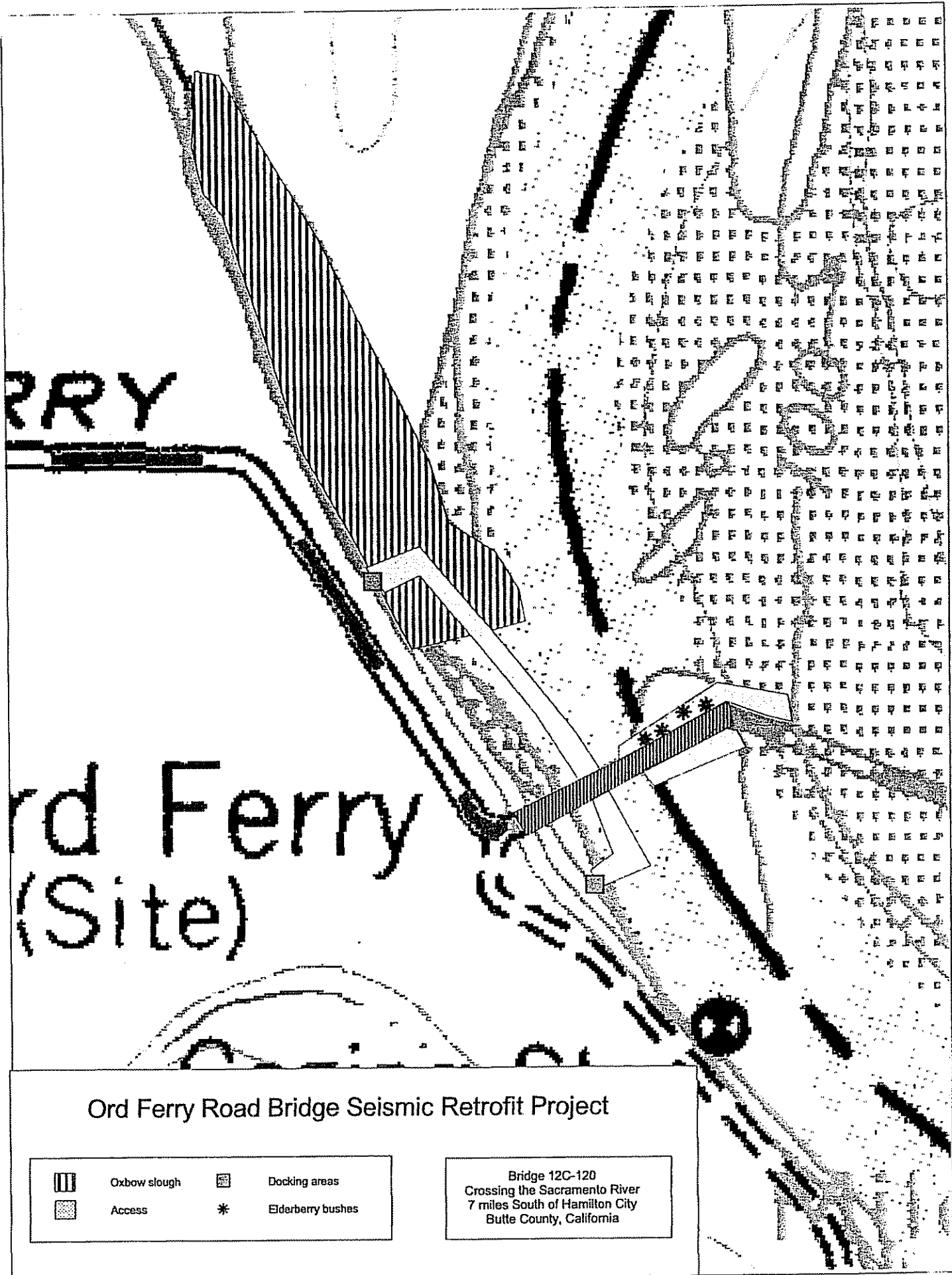






FIGURE 2
Project Location Map

ORD FERRY BRIDGE

03-BUT-0-CR
STPLZ-5912 (019)
FA 965100



Ord Ferry Road Bridge Seismic Retrofit Project

	Oxbow slough		Docking areas
	Access		Elderberry bushes

Bridge 12C-120
 Crossing the Sacramento River
 7 miles South of Hamilton City
 Butte County, California

Study Methodology

Studies Required to Satisfy Endangered Species Laws

The county is required to establish the presence or absence of state and federally listed rare, endangered, threatened and candidate species through literature search and field surveys. The California Department of Fish and Game Natural Diversity Database and the most recent available list of endangered and threatened wildlife and plants documented by the US Fish and Wildlife Service must be reviewed (List can be found in Appendix B)

Consultation to Date

The US Fish and Wildlife Service Office was contacted on September 11, 1997 for documentation regarding a list of species of Special Concern. Additional contact with National Marine Fisheries (Kelley Finn) was made in February and March of 1999 to discuss conditions to avoid any incidental take. Contact was again made in December of 2000 to receive an updated list of species. A field review was conducted with Justin Ly (FWS Sacramento Office) on February 1, 2001.

Literature Studies

The consultant, Eco-Analyst, reviewed their project files for any previously recorded species of concern. The consultant also reviewed The California Department of Fish and Game Natural Diversity Database in 1997 and again in April of 2000. The December 1999 US Fish and Wildlife Service "Endangered and Threatened Wildlife and Plants"(publication, 50 CFR 17.11 and 17.12) were also reviewed by the consultant and incorporated into the results of the report.

Plant Survey Methodology

Initial site review was conducted on March 4, 1997. A botanical survey was conducted by Mary Bailey of Eco-Analysts in early July 1998 and can be located in Appendix A

Wildlife and Fish Survey Methodology

Initial site review was conducted on March 4, 1997. Dr. Alice Rich conducted a field survey and assessment of splittail habitat within the project area. She conducted her surveys in October of 1997.

Jody Galloway, Avian Biologist, conducted an avian survey in July 1998.

A habitat and wildlife survey was conducted between 1997 and 1998 by Dr. Albert Beck, the principal biologist of Eco-Analysts.

SPECIES OF CONCERN

The USFWS has been contacted for informal consultation twice during the progress of this project in an attempt to keep the document current in regards to the special status species that may occur within the project area. Table I analyzes the potential for species to occur within the project area based on required habitat and historical sightings. Species that are known to occur or suspected to occur within the project area and may be impacted by the proposed project are highlighted on the table and further reviewed in the Species Account section of this report.

Table 1: Threatened, Endangered, Proposed Threatened, and Proposed Endangered Species

Taxa	Scientific name	Common name	Federal Status	State Status	Potential to Occur at Project Site
Amphibians	<i>Rana aurora draytonii</i>	California red-legged frog	Threatened	None	Low - no suitable habitat present. No individuals seen during site visits.
Birds	<i>Branta canadensis leucopareia</i>	Aleutian Canada goose	Threatened	None	Low - some habitat present within the vicinity of the project. No individuals or nests seen during site visits.
	<i>Haliaeetus leucocephalus</i>	Bald eagle	Threatened	Endangered	Low - some habitat present within the vicinity of the project. No individuals or nests seen during site visits.
	<i>Hypomesus transpacificus</i>	Delta smelt	Threatened	Threatened	Low - not present at project site, but has potential to be affected indirectly.
Fish	<i>Oncorhynchus mykiss</i>	Central Valley steelhead	Threatened	None	High - suitable migration habitat is present at the project site.
	<i>Oncorhynchus tshawytscha</i>	Sacramento River winter-run chinook salmon	Endangered	Endangered	High - suitable migration habitat is present at the project site.
	<i>Oncorhynchus tshawytscha</i>	Critical habitat, Sacramento River winter-run chinook salmon	Endangered	None	High - suitable migration habitat is present at the project site.
	<i>Oncorhynchus tshawytscha</i>	Central Valley spring-run chinook salmon	Threatened	Threatened	High - suitable migration habitat is present at the project site.
	<i>Oncorhynchus tshawytscha</i>	Critical habitat, Central Valley spring-run chinook salmon	Threatened	None	High - suitable migration habitat is present at the project site.
	<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	Threatened	None	Low - not present at project site, but has potential to be affected indirectly.
	<i>Branchinecta lynchi</i>	Vernal pool fairy shrimp	Threatened	None	Low - no suitable habitat present. No vernal pools seen within project vicinity.
Invertebrates	<i>Desmocerus californicus dimorphus</i>	Valley elderberry longhorn beetle	Threatened	None	Moderate - elderberry shrubs are in the proximity of the project location.
	<i>Lepidurus packardii</i>	Vernal pool tadpole shrimp	Endangered	None	Low - no suitable habitat present. No vernal pools seen within project vicinity.
	<i>Thamnophis gigas</i>	Giant garter snake	Threatened	Threatened	Low - no suitable habitat present. No individuals seen during site visit.

Table 2: Candidate Species, Sensitive Species, and Species of Concern

Taxa	Scientific name	Common name	Federal Status	State Status	Likely to Occur at Project Site	
Amphibians	<i>Scaphiopus hammondi</i>	Western spadefoot toad	Species of Concern	None	Low - no suitable habitat present. No individuals seen during site visit.	
Birds	<i>Agelaius tricolor</i>	Tricolored blackbird	Species of Concern	Species of Special Concern	Low - some habitat present. No individuals or nests seen during site visit.	
	<i>Athene cunicularia hypugea</i>	Western burrowing owl	Species of Concern	None	Low - no suitable habitat present. No individuals or burrows seen during site visit.	
	<i>Buteo regalis</i>	Ferruginous hawk	Species of Concern	None	Low - some habitat present. No individuals or nests seen during site visit.	
	<i>Buteo swainsoni</i>	Swainson's hawk	None	Threatened	Low - some habitat present. No individuals or nests seen during site visit.	
	<i>Coccyzus americanus occidentalis</i>	Western yellow-billed cuckoo	None	Endangered	Low - no suitable habitat present. No individuals or nests seen during site visit.	
	<i>Empidonax traillii brewsteri</i>	Little willow flycatcher	None	Endangered	Low - no suitable habitat present. No individuals seen during site visit.	
	<i>Falco peregrinus anatum</i>	American peregrine falcon	Delisted	Endangered	Low - no suitable habitat present. No individuals or nests seen during site visit.	
	<i>Grus canadensis tabida</i>	Greater sandhill crane	None	Threatened	Low - no suitable habitat present. No individuals seen during site visit.	
	<i>Plegadis chihi</i>	White-faced ibis	Species of Concern	None	Low - no suitable habitat present. No individuals seen during site visit.	
	<i>Riparia riparia</i>	Bank swallow	None	Threatened	Low - some habitat present. No individuals or nests seen during site visit.	
	Fish	<i>Oncorhynchus tshawytscha</i>	Central Valley fall/late fall chinook salmon	Candidate Species	None	Moderate - suitable migration habitat is present at the project site.
		<i>Acipenser medirostris</i>	Green sturgeon	Species of Concern	None	Moderate - suitable migration habitat is present at the project site.
		<i>Lampetra ayresi</i>	River lamprey	Species of Concern	None	Moderate - suitable migration habitat is present at the project site.
<i>Lampetra tridentata</i>		Pacific lamprey	Species of Concern	None	Moderate - suitable migration habitat is present at the project site.	
<i>Spirinchus thaleichthys</i>		Longfin smelt	Species of Concern	None	Moderate - suitable migration habitat is present at the project site.	

Taxa	Scientific name	Common name	Federal Status	State Status	Likely to Occur at Project Site	
Invertebrates	<i>Anthicus antiochensis</i>	Antioch Dunes anthicid beetle	Species of Concern	None	Low - known only to occur at Antioch Dunes.	
	<i>Anthicus sacramento</i>	Sacramento anthicid beetle	Species of Concern	None	Low - no suitable habitat present. No individuals seen during site visit.	
	<i>Lindereia occidentalis</i>	California linderiella fairy shrimp	Species of Concern	None	Low - no suitable habitat present. No vernal pools seen within project vicinity.	
Mammals	<i>Corynorhinus (=Plecotus) townsendii townsendii</i>	Pacific western big-eared bat	Species of Concern	Species of Special Concern	Low - no suitable habitat present. No signs of individuals present were seen underneath the bridge.	
	<i>Dipodomys californicus eximius</i>	Marysville Heermann's kangaroo rat	Species of Concern	Species of Special Concern	Low - no suitable habitat present. No individuals seen during site visit.	
	<i>Myotis ciliolabrum</i>	Small-footed myotis bat	Species of Concern	None	Low - no suitable habitat present. No signs of individuals present were seen underneath the bridge.	
	<i>Myotis evotis</i>	Long-eared myotis bat	Species of Concern	None	Low - no suitable habitat present. No signs of individuals present were seen underneath the bridge.	
	<i>Myotis thysanodes</i>	Fringed myotis bat	Species of Concern	None	Low - no suitable habitat present. No signs of individuals present were seen underneath the bridge.	
	<i>Myotis volans</i>	Long-legged myotis bat	Species of Concern	None	Low - no suitable habitat present. No signs of individuals present were seen underneath the bridge.	
	<i>Myotis yumanensis</i>	Yuma myotis bat	Species of Concern	None	Low - no suitable habitat present. No signs of individuals present were seen underneath the bridge.	
	<i>Perognathus inornatus</i>	San Joaquin pocket mouse	Species of Concern	None	Low - no suitable habitat present. No individuals seen during site visit.	
	Reptiles	<i>Clemmys marmorata marmorata</i>	Northwestern pond turtle	Species of Concern	Species of Special Concern	Low - no suitable habitat present. No individuals seen during site visit.
		<i>Masticophis flagellum ruddocki</i>	San Joaquin coachwhip (=whipsnake)	Species of Concern	Species of Special Concern	Low - no suitable habitat present. No individuals seen during site visit.

SPECIES ACCOUNT

Chinook Salmon (Central Valley Spring-run, Central Valley Fall/Late Fall-run, Central Valley Winter-run)

The physical and biological features essential for the conservation of Central Valley Chinook Salmon include unimpeded access to the Pacific Ocean, upstream spawning habitat, clean silt-free gravel, adequate river flow to oxygenate the developing eggs, water temperature (42.5 and 57.5 degrees) for normal egg and fry development, and accessibility for migrant juveniles.

Research of the Essential Fish habitat for the four Chinook Salmon races shows that the section of the Sacramento River where the Ord Ferry Road crosses is not considered spawning habitat; however, all four races pass through the project area during upstream migration and outrun. The project area is located in a major migratory route used by salmon to access the upper stream reaches.

Central Valley Spring-run – This species typically enters the Sacramento River system from March to July and spawn from late August through early October (there is a peak in September).

Central Valley Fall/Late Fall-run – This race spawns in the Sacramento and San Joaquin Rivers and their tributaries. They enter the system from October to April and spawn from October to February.

Winter-run – Historically, Winter-run Salmon moved into the headwaters of the Sacramento River between December and February and spawned in late spring and early summer. Spawning for this species used to occur much higher, but is now limited to the area between the Red Bluff diversion dam and Keswick Dam. This location is well north of the project area. Smolt out-migration occurs between July and October but peaks in September.

Central Valley Steelhead

Steelhead spawn in cool, clear streams featuring suitable gravel size, water-depth and current velocity. Generally steelhead fry and juveniles inhabit perennial streams. Undercut banks and slopes with heavy vegetative cover provide optimal habitat. Juveniles remain in freshwater streams between one and four years. Out-migration of juveniles usually occurs between November and May with the peak months being March April and May. Adults enter the river system between July and May with the peak being September to February. Spawning begins in late December and may continue as late as April.

Sacramento Splittail

This is a resident species of the Sacramento River and the Delta where flooded vegetation may provide spawning ground and fry foraging. Splittail are mostly found in slow-moving brackish waters and spawning typically occurs in dead-end sloughs subject to period flooding. Typical spawning starts in late-April to May, when the water temperature increases and goes through July. This is very dependent upon temperature and water levels. Their habitat has been reduced to the Sacramento River below the Red Bluff Diversion Dam, below the Oroville Dam on the Feather River and below the Nimbus Dam on the American River. Survival of this species will be dependent upon the protection of spawning grounds from activities like riprapping, channelization and water diversion.

River Lamprey

This anadromous fish is found up and down the Pacific Coast; in California the species is most abundant in the Sacramento-San Joaquin River System. Although they spend most of their adult life in estuaries, they require small, clean tributary streams for spawning. The ammocoetes live in silty backwaters for several years and feed on algae and micro-organisms. It is estimated, based on information collected in British Columbia, that the ammocoetes begin metamorphosis in July and complete it around April of the following year. In May, the species congregate immediately upriver of salt water and enter the ocean from May to July. They spend approximately ten weeks in the ocean where they attach to a host fish. They migrate back into freshwater by September and spawn during the winter months.

Green Sturgeon

This anadromous fish likely spawns within the upper reaches of the Sacramento River and its tributaries. The preferred substrate is large cobble but has ranged from sand to bedrock, and spawning does occur in waters with relatively high velocities. The Sacramento River is the southernmost river where this species spawns. Green Sturgeon migrate upriver between late February and late July. The spawning period is March to July with a peak from mid-April to mid-June. Juveniles migrate out to sea before 2 years of age, primarily during summer-fall. (CDFG, 1995)

Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle is endemic to moist, riparian woodlands along the margins of rivers and streams in the lower Sacramento and upper San Joaquin Valley of California and is dependent on its host plant the valley elderberry (*Sambucus mexicana*) (USFWS 1993b). Adult beetles are present from March to early June with the largest percentage of specimens collected in May. During this period, the beetles mate, and the female lays eggs in bark crevices or at the junction of stem/trunk or leaf/petiole/stem. The life cycle takes one to two years. Exit holes are circular or slightly oval and are usually 7-10 mm in diameter. At the start of this project there were four elderberry shrub clusters located directly underneath the existing bridge (see Figure 4). One bush was 50 feet from pier 8 and was in the way of construction access and could not be avoided; one bush was fifteen feet from pier 9 and the third and fourth bushes were 35 feet from pier 9 and could not be avoided. At some point between field surveys and the writing of this document the bushes were cut down below ground level. It is unclear who was responsible for this action; however, it was not the County or other responsible agency. At this point there are no bushes present to transplant. However, it is expected that the bushes will regrow this spring. A preconstruction survey will be done to attempt to locate new sprouts. If the bushes are found they will be transplanted to an approved mitigation bank.

Giant Garter Snake

The giant garter snake is endemic to the wetlands of the Sacramento and San Joaquin valleys. The species inhabits marshes, sloughs, ponds, small lakes, agricultural wetlands (irrigation canals and rice fields) low gradient streams and the adjacent uplands. Areas with adequate water provide food and cover; while upland habitat like grassy banks and waterside vegetation provide basking sites. Giant garter snakes utilize the higher elevation uplands for cover and refuge from flood waters during the dormant season (Hansen 1980). Giant garter snakes are typically absent from larger rivers and water bodies that support introduced populations of large, predatory fish (Hansen 1980, Rossman and Stewart 1987, Hansen 1988).

Giant garter snakes are active foragers, feeding primarily on aquatic prey such as fish and amphibians; the predominant prey is introduced species such as carp, mosquitofish bullfrogs and Pacific treefrogs (Fitch 1941, Rossman et al, 1996)

Surveys done by CDFG (Hansen 1988) show that the distribution of giant garter snake in California largely correspond with agricultural land use throughout the Central Valley, primarily the rice production zones. Distribution starts as far north as the Butte Basin in the Sacramento Valley as far south as Fresno with a western border in the Yolo-bypass area and an eastern boundary that follows the Sacramento-San Joaquin delta from the Laguna Creek-Elk Grove region.

Although there are no known sightings of giant garter snake in the project vicinity, there are several sightings in the surrounding areas. It is assumed that these species are using natural drainages as well as the canals belonging to the Glenn Colusa Irrigation District. One such canal is adjacent to but not within the project work area. According to the database collected by USFWS there are two sightings on Nelson Road, two on Butte creek, two west of Midway and one south of Chico found in a canal (per conversation with Justin Ly). Within the project, the oxbow area contains habitat that could be used by the giant garter snake including prey base, cover and adjacent basking sites.

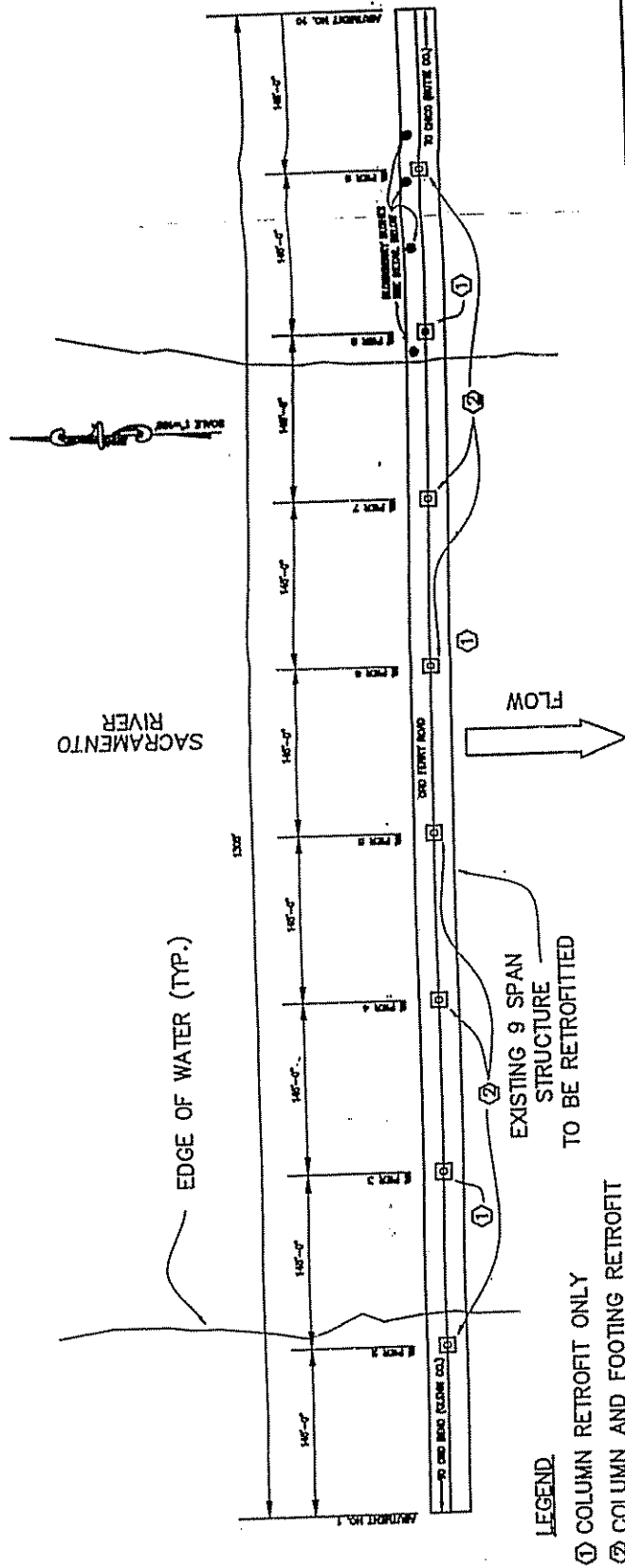
HABITAT STATUS

The Sacramento River is designated as both Critical Habitat and Essential Fish Habitat. The project area, on the Sacramento River, provides migration, holding and rearing habitat essential for the following species: Central Valley Chinook Salmon (Fall/Late Fall, Winter and Spring run). Anadromous fish species use this portion of the Sacramento River to access the spawning grounds.

The project area lies in the Butte Basin Ecological Management Zone. More specifically the project area is between the Big Chico Creek Ecological Management Unit and the Butte Creek Ecological Management Unit. The goals of these units is to restore, conserve and preserve watersheds on a more local level. This includes providing sufficient flows, creating spawning habitat, and improving and/or maintaining the existing riparian corridor. Implementation of this project does not threaten or deviate from any of the goals established by the ecological management units.

The main channel is a migration corridor for anadromous fish including Chinook Salmon, Central Valley Steelhead, River Lamprey and Green Sturgeon. The project area does not contain spawning habitat for any of the mentioned species and is lacking the properties that define Essential Fish Habitat specifically, the project area is lacking spawning substrate.

The oxbow area on the Northwest quadrant of the project area provides spawning habitat for Sacramento Splittail. This is a slow moving area of water that has emergent vegetation. The same area also provides foraging opportunity and cover from predators for the Giant Garter Snake. The area is hydrologically connected to other water bodies via the Glenn-Colusa Irrigation District canals and there are known sightings of GGS outside the project area.



LEGEND

- ① COLUMN RETROFIT ONLY
- ② COLUMN AND FOOTING RETROFIT

EXISTING 9 SPAN
STRUCTURE
TO BE RETROFITTED

SCALE 1"=20'

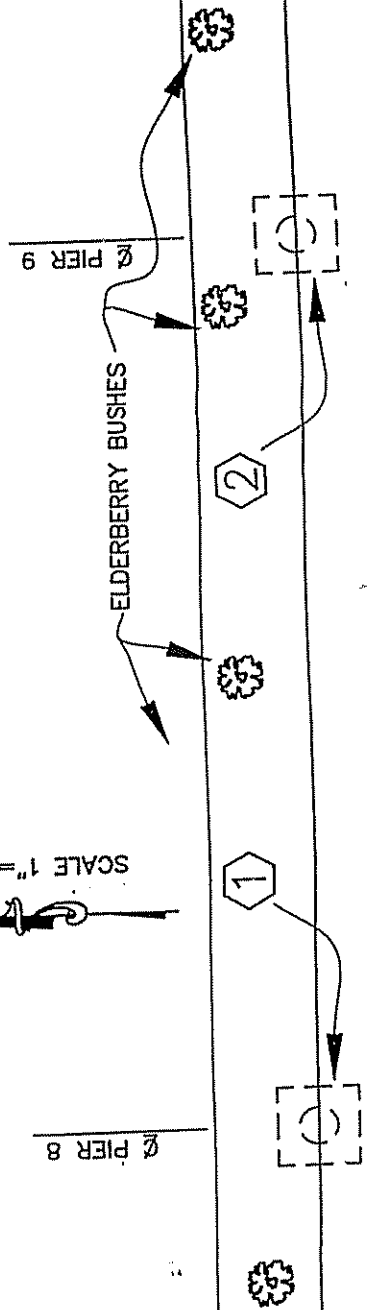


FIGURE 4

EFFECTS OF THE PROPOSED PROJECT

The project does have the potential to affect the following species: Chinook Salmon, Central Valley Steelhead, Sacramento Splittail, River Lamprey, Green Sturgeon, Giant Garter Snake, Valley Elderberry Longhorn Beetle. Impacts will occur to Critical Habitat and Essential Fish Habitat. There will be direct effects including potential take of listed species and removal of habitat as well as indirect effects from noise, disturbance and a reduction in water quality. Direct and indirect effects are analyzed for each species.

Chinook Salmon, Central Valley Steelhead, River Lamprey and Green Sturgeon: The recommended work window is June 1 to October 30. Work during this time will reduce impacts to migrating fish species. Butte County has determined that they will need to work from June 1 to November 30. The additional month could cause impacts to entering Fall/late fall Chinook, entering Central Valley Steelhead and entering River Lamprey. The total number of seasons of in water work will be fewer. The slightly longer work window is not expected to increase take of listed species – all minimization measures will be in place throughout the in water work.

Work is confined to an area that is categorized as a migration corridor to and from spawning grounds. Cofferdams will surround the columns and create a work area that will be pumped and then dug out to allow dry conditions for work on the footing. Fish within the work area could be impacted during the placement of the cofferdams by being trapped within. The cofferdams will not create a channeling affect or prevent movement upstream/downstream by migrating fish. The noise and vibration from the pile driving may cause some disturbance to migrating fish but is not expected to cause internal injury or prevent the fish from passing through the project area.

The project may impact water quality. The placement of cofferdams will prevent the placement of wet cement in the waterway and minimize construction impacts; however, the installation and removal of these structures may create additional sedimentation. Measures will be included during construction to reduce these impacts to less than significant.

Critical Habitat and Essential Fish Habitat

The Sacramento River has been designated as critical habitat for spring-run Chinook salmon and steelhead. In accordance with section 4(a)(3)(A) of the Endangered Species Act(ESA), NMFS has designated critical habitat for 19 evolutionary significant units of salmon and steelhead (65 FR 7764, February 12, 2000). This designation was in accordance with 16 USC 1553 and 50 CFR part 226. Critical habitat is defined in section 3(5)(A) of the ESA as "(i) the specific areas within the geographic area occupied by the species...on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and (III) specific areas outside the geographical area occupied by the species... upon a determination by the Secretary (of Commerce) that such areas are essential for the conservation of the species. Critical habitat features include: (1) juvenile rearing areas; (2) juvenile migration corridors; (3) areas for growth and development to adulthood; (4) adult migration corridors; and (5) spawning areas.

Freshwater Essential Fish Habitat (EFH) for Chinook Salmon consists of four major components (1) spawning and incubation; (2) juvenile rearing; (3) juvenile migration corridors; and (4) adult migration corridors and adult holding habitat. Important features of essential fish habitat for spawning, rearing and migration include adequate: substrate composition, water quality, water quantity, depth and velocity, channel gradient and stability, food, cover and habitat complexity, space, access and passage and habitat connectivity.

The proposed project will not permanently affect Essential Fish Habitat. The Sacramento River, within the project area does not provide spawning habitat within or immediately downstream of the work area. The project will not significantly affect other critical elements such as Chinook migration, rearing or holding habitat. The permanent impacts will occur to the bridge and footings but not the main or side channels.

Sacramento Splittail: The recommended work window is June 1 to October 30 for anadromous fish, the work window for splittail is July 1 to November 30. Butte County has determined that the work will need to be done from June 1 to November 30. The early start date could impact breeding Sacramento Splittail. Breeding habitat is limited to the area in the oxbow of the river, including the boat ramp. Should the park boat ramp be required for access to the river, access will be limited to after July 1 to minimize the impact to breeding splittail. The noise and vibration from the pile driving in the channel, may cause some disturbance to fish present in the area but is not expected to cause internal injury, prevent movement or impact breeding.

Valley Elderberry Longhorn Beetle: Four elderberry bushes will need to be transplanted and mitigated for following Fish and Wildlife Service guidelines. The bushes are located within twenty-five feet of either the piers or the access area and will be significantly impacted by construction. The equipment cannot reach the piers without damaging the elderberry bushes. The removal of these bushes would have had a direct effect on any beetles present within the stems. As stated earlier some unknown entity pruned the bushes to ground level.

Beetle habitat will be mitigated following the guidelines established by the Federal Highway Administration. There was an attempt made by USFWS, Butte County and Caltrans to avoid impacts to the elderberry plants, but it was determined that they would have to be removed to provide even minimal room for construction. Summary of plants, size and number of stems:

TABLE 3: VELB IMPACTS AND MITIGATION

Plant #	Stem Size	# Stems	Exc. Holes	Remo.	Total Seedlings	Assoc. Plant Ratio	Total Associates
1	3 in.	2	Yes	1	5	1	5
2	4 in.	3	No	2	10	1	10
3	4 in.	4	No	3	20	1	20
4	4 in.	1	No	2	5	1	5
5	4 in.	1	No	2	5	1	5
TOTAL		11		10	45		45

A conservation area (or basin) equals 1800 sq ft. In that area one elderberry plant can be transplanted, up to five additional seedlings and five associate plants may be planted. Four basins will contain one transplanted plant each and 5 elderberry seedlings and 5 associate native plants. There will be 14 remaining seedlings and associate natives. An additional three basins will be needed to plant the remaining seedlings and associate natives. There will be a total of 7 conservation areas equal to 12,600 sq ft or 0.28 acres. These numbers were derived from a determination developed by the Federal Highway Administration, the responsible agency for the proposed project.

Giant Garter Snake -- The oxbow slough provides aquatic habitat for the giant garter snake. The adjacent uplands may provide hibernation habitat for this species; however, no work is proposed in the upland areas adjacent to the slough or river channel. No direct impacts are expected to occur to this species. Barges or equipment may create some disturbance; however, take of a giant garter snake is unlikely.

Cumulative Effects

There are a large number of bridge retrofits and bridge replacements occurring up and down the Central Valley; however, like the Ord Ferry bridge retrofit there is little permanent habitat loss and, with mitigations measures, minimal chance of take. In most of the bridge replacement projects the final design has resulted in fewer in-water structures and an actual gain in aquatic habitat and reduction in the channeling of waterways. If all the projects were to occur at the same time there could be serious impacts to anadromous fish and Sacramento Splittail but the schedules and funding for the various projects are staggered making it unlikely that more than a few projects will take place in a season.

It is difficult to quantify the overall loss of riparian habitat (specifically elderberry bushes) from the number of projects along the various creeks and rivers throughout the Central Valley. The removal of the four elderberry bushes on the Ord Ferry project in combination with removal on other projects could be significant. Mitigation measures, especially those that replace and transplant the elderberry shrubs within the riparian corridor from which they were removed helps reduce the overall impact to the Valley Elderberry Longhorn Beetle.

Like many of the other bridge retrofit and replacement projects occurring within the Central Valley, this is not considered a growth inducing project. The Ord Ferry Bridge provides a travel way for locals in a very rural portion of Butte County. These projects are based on safety and the retrofit method does not result in any widening of the original structure.

MITIGATION

A biological monitor must be hired by the contractor or the county to supervise the construction activities. Two staging areas have been proposed in this document: the Glenn County Ord Ferry Bend Park and Boat ramp(northwest quadrant) and the old Ord Ferry launch site and ramp area (southwest quadrant). Should an area other than these two sites be used, the biological monitor will assess the area for additional biological impacts. Should there be additional impacts, these must be cleared through the FWS and NMFS prior to the start of construction.

Fisheries

1. A FWS approved biologist will be present during any activities that may involve the take of a listed species, this includes but is not limited to installation of the cofferdams, all dewatering activities and removal of the cofferdams. The biologist will monitor sediment plumes occurring from the proposed work and ensure that the contractor is meeting the regulations set forth by the water quality permits.
2. Cofferdams
During construction of the cofferdams, an individual, approved by National Marine Fisheries Service(NMFS), will be required to ensure that no fish are trapped in the cofferdam. Methods used to remove fish from the cofferdam must be approved by NMFS. Screens must be placed on pumps used to drain sealed cofferdams and also must conform to NMFS screening standards. The approved biologist will prepare a fish salvage plan prior to the start of construction that will discuss in detail the methods to be used to minimize the take of fish during construction. It is anticipated that seining or electro shock methods will be used to salvage fish from areas that need to be dewatered.
3. Replanting
Temporary impacts to riparian vegetation on the east side of the project are expected to occur and possibly some with the use of the old Ord Ferry ramp for a staging area and access point; the impact is expected to be less than ½ acres. Riparian vegetation will be replanted following construction. There are bare slopes on both the east and west side. Using native vegetation, primarily consisting of willows the bare areas and the areas temporarily disturbed will be replanted. There is enough area that the mitigation of 3:1 for temporary impacts will be completed on site.
4. Limited Operating Period
Work will be limited from June 1 to November 30 within the main channel, although this window does not completely follow the recommended June 30 to October 15, it is the most feasible window in which to conduct the extensive work. A slightly longer work window will allow for less total seasons of construction.
5. Limited Use of Boat Ramp
Work within the oxbow slough area, including access gained by use of the boat ramp is limited to a time after July 1 to avoid impacts to breeding Sacramento Splittail.
6. Use of BMP
Construction will utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. These practices consist of application of permanent and temporary construction treatments for controlling stormwater runoff and preventing discharges of excessively turbid water from the job site. BMP's include treatment controls, soil stabilization practices, mitigation measures, scheduling, and contract Standard Special Provisions (SSP). No concrete

washings or water from concrete will be allowed to flow into the streams. No concrete will be poured within flowing water in the streams. The following measures will also be incorporated:

- Butte County will Obtain and 401 water quality permit and a DFG 1601 Streambed Alteration Agreement. Both of these permits require procedures to minimize impacts to the live stream.
- All stockpiled material and equipment will be placed away from the river to prevent erosion
- Access points will be limited to the two locations, discussed previously, in order to minimize extensive erosion into the river.
- Temporary measures including straw bales, silt fencing and filter fabric will be used to prevent erosion between work periods
- For permanent erosion control, seeding and revegetation will be conducted the fall directly following the end of construction to coincide with the rain.

Additional Water Quality Measures

Also included in the water quality permits and the standard BMP are spill prevention measures which require the following:

1. All materials and fluids that may be harmful to the aquatic system will be stored in the staging areas which are more than 25 feet away from the river
2. The contractor will have on hand absorbant material to be used in case of accidental spills.
3. All construction equipment must be in good working order and clean of significant fuel and lubrication and is not to have leaks

VELB Mitigation

A preconstruction survey will be conducted to determine if the elderberry bushes that were cut down have resprouted and still need to be transplanted. The County will contract with Wildlands, Inc. to remove, transplant, monitor and report all VELB habitat. The bushes need to be removed during the dormant period, before the start of construction. Table 3 shows the breakdown of stems being affected and the appropriate number of transplants. There will be a total of 7 conservation areas purchased from Wildlands Inc. to mitigate for take of VELB habitat and potential impacts to the species.

GGG Mitigation

1. An approved biologist will conduct a pre-construction survey 24-hours prior to the start of construction. If a giant garter snake is located at the site, construction will not begin until the snake is captured and relocated or removes itself from the project area. All results of these activities will be reported to the USFWS.
2. No grading or excavating will take place within 30 feet of GGS habitat between October 1 and May 1.
3. All on-site construction personnel shall be notified of the potential presence of the GGS and that all snakes found are to be left unharmed.
4. During construction, all surface debris shall be carefully removed to avoid contact with or disturbance to GGS.

DETERMINATION

Chinook Salmon, Central Valley Steelhead, River Lamprey and Green Sturgeon: With the construction of this project, primarily the placement of cofferdams, there is the potential for take of a listed species. Butte County proposes working slightly longer than the recommended work window. The benefits of working one month longer than the work window allows is that construction is expected to last only one season. In the long term, one season of work is much less disturbing than two seasons where the barge will have to come in and out of the river and the cofferdams may have to be put up and removed more than once. Mitigation measures do not prevent the possibility of take of a listed species. This project may adversely affect a listed species were it to become trapped or injured upon removal from the cofferdam. There is not expected to be any greater amount of take with the slight extension of in water

Sacramento Splittail: The oxbow slough portion of the river channel provides breeding habitat for the Sacramento Splittail. This area may be used for access to and from the piers. With the mitigation measures proposed above (limited work window in the slough) it is unlikely that breeding success will be affected by the proposed project or that take could occur. Splittail could be caught within the confines of the cofferdam and injured or killed during the dewatering process. This project may adversely affect Sacramento Splittail.

Valley Elderberry Longhorn Beetle(VELB): There will be removal of four elderberry bushes that are large enough in diameter to provide habitat for the VELB. The bushes will be transplanted to a nearby location if possible or moved to an approved mitigation bank (at this time the nearest bank is in Sheridan and has been approved for other projects in the area). With the removal of habitat the project may adversely affect Valley Elderberry Longhorn Beetle and take may occur.

Giant Garter Snake: The oxbow slough provides aquatic habitat for the Giant Garter Snake. There have been many sightings around the project area although none reported directly within the project limits. Giant Garter snakes are most susceptible to injury during their hibernation period (they hibernate in upland areas adjacent to aquatic habitat). This project will be working outside of the species hibernation period. Impact will be limited to disturbance by equipment in the area. GGS are very unlikely within the main channel of the Sacramento River and are not likely to be caught in the cofferdams. It is unlikely that any take will occur as a result of construction. The proposed project may affect but is not likely to adversely affect Giant Garter Snake.

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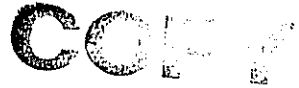
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DEPARTMENT OF TRANSPORTATION

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September 5, 2002

Mr. Michael Aceituno
National Marine Fisheries Service
Attn: Howard Brown
650 Capitol Mall, Suite 8-300
Sacramento, CA 95814

Dear Mr. Aceituno:

Subject: Results of a Meeting to Discuss Project Plans for the Ord Ferry Bridge
Seismic Retrofit in Butte County, California

On August 20, 2002 a meeting was held with representatives from the following agencies: Butte County Department of Public Works, Caltrans, National Marine Fisheries Service and the U. S. Fish and Wildlife Service (FWS). The purpose of the meeting was to discuss potential project effects as they relate to anadromous fish and other threatened and endangered species under the jurisdiction of the FWS. With regard to anadromous fish, specifically juvenile winter-run Chinook salmon, the following amendments to the Biological Assessment were agreed upon:

Project Description

Construction Schedule

Butte County will need 5-6 months a season for the bridge retrofit. It is estimated the contractor will be able to retrofit two columns during this period. Under this schedule the retrofit project will take three seasons. To minimize impacts to the fall outmigration of juvenile winter-run Chinook salmon the work window was changed from June 1-November 30 to May 15-October 15.

Construction Access

Accessing the project area using the current boat ramp in Glenn County will no longer be included as part of the plans. On the Glenn County side, the contractor will be limited to using the old Ord Ferry ramp which is located on the southwest quadrant. This area is highly disturbed and there are unvegetated areas that can be used for staging of equipment and materials.

Mr. Michael Aceituno
September 5, 2002
Page 2

Mitigation

Revisions to the mitigation measures on page 19 of the BA include:

- Replanting. By moving the work window forward the project has the potential to cause an increased adverse affect on Sacramento splittail. As mitigation for the potential increase in take, the vegetation replacement ratio has been increased to 6:1 for a total of 0.36 acres of mitigation.
- Limited Operating Period. The operating period within the main channel has been changed to May 15-October 15.
- Limited Use of Boat Ramp. There will be no work in the oxbow slough area since the access point in the northwest quadrant has been eliminated.

All parties involved agreed upon the changes to the project description and mitigation. It was also agreed that revision of the Biological Assessment was not necessary as long as the changes were outlined in a letter to each regulatory agency. The estimated date for issuance of the Biological Opinion by NMFS is September or October 2002.

Questions should be directed to Suzanne Melim at (530) 741-4484 or Virginia Denison at (530) 741-4491.

Sincerely,

Original signed by

JEFFREY M. LOUDON, Chief
Environmental Management, M-1 Branch

Cc: Raymond Cooper, Butte County
Michael McCollum, Caltrans Local Assistance
R. Clayton Slovensky, FHWA

DEPARTMENT OF TRANSPORTATION

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September 16, 2002

Mr. Justin Ly
U. S. Fish and Wildlife Service
Sacramento Valley Branch
2800 Cottage Way - W 2605
Sacramento, California 95825

Dear Mr. Ly:

Subject: Results of a Meeting to Discuss Project Plans for the Ord Ferry Bridge
Seismic Retrofit in Butte County, California

On August 20, 2002 a meeting was held with representatives from the following agencies: Butte County Department of Public Works, Caltrans, National Marine Fisheries Service and the U. S. Fish and Wildlife Service (FWS). The purpose of the meeting was to discuss potential project effects as they relate to Sacramento splittail, valley elderberry longhorn beetle (VELB), giant garter snake (ggs) and winter-run chinook salmon. By virtue of this memo, the following amendments to the Biological Assessment were agreed upon:

Project Description

Construction Schedule

Butte County will need 5-6 months a season for the bridge retrofit. It is estimated the contractor will be able to retrofit two columns during this period. Under this schedule the retrofit project will take three seasons. To minimize impacts to the fall outmigration of juvenile winter-run Chinook salmon the work window was changed from June 1-November 30 to May 15-October 15. This will increase the potential impacts to the Sacramento splittail because juvenile splittail are still migrating through the mainstream of the Sacramento River in May. Construction of the cofferdams could cause an increase in the number of individuals killed, harmed or harassed. As mitigation for this potential increase in take, additional mitigation was proposed by FWS (see below).

Mr. Justin Ly
September 16, 2002

Construction Access

Accessing the project area using the current boat ramp within Oxbow Slough in the northwest quadrant will no longer be included as part of the plans. On the Glenn County side, the contractor will be limited to using the old Ord Ferry ramp which is located on the southwest quadrant. This area is highly disturbed and there are unvegetated areas that can be used for staging of equipment and materials.

The oxbow area contains habitat that could be used by ggs for foraging opportunity, cover and adjacent basking sites as well as spawning habitat for Sacramento splittail. Eliminating the use of the boat ramp will lessen the potential impact to both species.

Mitigation

Sacramento splittail

Due to a change in the proposed construction window, there is a potential for an increase take of juvenile Sacramento splittail during the installation and dewatering of cofferdams. As compensation for this potential increased take, the FWS has requested that the area within the cofferdam (minus the area of the existing pier dimensions) be calculated and mitigated at a ratio of 6:1. This calculation results in 0.36 acres of Sacramento splittail habitat. Jason Douglas and Chris Nagano proposed, and Caltrans agreed, that the Ord Ferry Bridge project mitigation be included as part of the Caltrans Butte City Bridge Project. This project is located on State Route 162 on the Sacramento River, approximately 15 miles south of the Ord Ferry Bridge.

The mitigation proposed at the Butte City Bridge involves the acquisition of property that contains riverbank adjacent to riverbed. The agreement is that the property can never be stabilized, protected or improved. Over time this area will erode naturally and create debris catches and eddies that are valuable habitat for species like the Sacramento splittail.

Valley Elderberry Longhorn Beetle

As discussed at the meeting, the elderberry bushes within the project area were cut down by an unknown person. If the bushes survived, it is not possible to predict whether they will be cut down again. FWS has agreed that the County, in conjunction with FHWA, could mitigate by multiplying the total number of stems to be planted by 1.25 to compensate for being unable to transplant.

The work window will now read May 15 to October 15 and the mitigation will follow the 1999 mitigation measures agreed to by FHWA and FWS.

Mr. Justin Ly
September 16, 2002
Page 3

Per concurrence from FHWA and FWS, Table 3 – VELB Impacts and Mitigation - will be revised as shown below (refer to page 17 in the BA):

Plant #	Stem size	# Stems	Exit Holes?	Ratio	Total Seedlings	Assoc. Plant Ratio	Total Associates
1	3 in	2	Yes	4:1	8	2:1	16
	1 in	5	No	2:1	10	1:1	10
2	1 in	4	No	2:1	8	1:1	8
3	1 in	1	No	2:1	2	1:1	2
4	1 in	3	No	2:1	6	1:1	6
TOTAL		15			34		42

A conservation area (or basin) equals 1800 sq ft. In that area one elderberry plant can be transplanted, up to five additional seedlings and five associate plants may be planted. Because the County may have no plants to transplant they will follow the 1.25 ratio suggested by USFWS. The 1.25 was suggested to compensate for not transplanting an existing healthy bush. The total of seedlings to be mitigated will be 42.5 or 43, which is 8.6 conservation areas (basins) equal to 15300 sq ft or 0.35 acres. If complete basins are purchased from a mitigation bank then it will be an allotment of 9 basins.

All parties involved agreed upon the changes to the project description and mitigation. It was also agreed that revision of the Biological Assessment was not necessary as long as the changes were outlined in a letter to each regulatory agency. FWS estimated that the Biological Opinion would be issued in April 2003.

Questions should be directed to Suzanne Melim at (530) 741-4484 or Virginia Denison at (530) 741-4491.

Sincerely,

Original signed by

JEFFREY M. LOUDON, Chief
Environmental Management, M-1 Branch

Cc: Raymond Cooper, Butte County
Michael McCollum, Caltrans Local Assistance
R. Clayton Slovensky, FHWA
Howard Brown, NMFS

Appendix B

CULTURAL RESOURCE STUDY
for

SACRAMENTO RIVER BRIDGE CROSSING AT ORD FERRY ROAD,
BRIDGE NO. 12C-120,
APPROXIMATELY 16 KILOMETERS SOUTHWEST OF CHICO,
BUTTE COUNTY, CALIFORNIA .

03-BUT-0-CR
STPLZ-5912 (019)
EA 965100

Prepared for:

Butte County Department
of Public Works
7 County Center Drive
Oroville, CA 95965

Prepared by:

John Furry, M.A.,
and
ECO-ANALYSTS
3028 Esplanade
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April 12, 1999

HISTORIC PROPERTY SURVEY REPORT - NEGATIVE FINDINGS

1. HIGHWAY PROJECT DESCRIPTION AND LOCATION

District	County	Route	Post Mile	Charge Unit	Expenditure Authorization
03	Butte	CR			965100

The project is being proposed by the County of Butte in conjunction with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). The proposed project is the renovation of pier supports for earthquake retrofit for the Ord Ferry Road bridge (State Bridge No.12C-120) at its crossing with the Sacramento River approximately 11.2 kilometers (7 miles) south of Hamilton City, and 16 kilometers (10 miles) west of Chico. The majority of the proposed work will be performed on bridge piers in the river itself. No change in the roadways or approaches is anticipated. Work will be done from a barge moored in the Sacramento River. The boat launch area on the Glenn County side of the bridge will be used as a construction staging area.

(See Figures 1 and 2: Project Location and APE maps)

2. AREA OF POTENTIAL EFFECTS (APE)

FHWA Area Engineer Approval
George S. Wishman

23 October 1997

Description: The APE extends approximately 823 meters (2700 feet) in an east-west direction, including the existing bridge and its approaches. The APE is approximately 36.6 meters (120 feet) wide at the east and west edges. There is an additional extension of the APE by approximately 107 meters (350 feet) by 94.5 meters (310 feet) into the northwest quadrant to include the boat landing area in the Ord Bend Park facility. In the southwestern quadrant, the APE widens to approximately 91.5 meters (300 feet) west of the river and east of the western approach.

(See Figure 3: Area of Potential Effects)

HISTORIC PROPERTY SURVEY REPORT - NEGATIVE FINDINGS" (Continued)

3. SOURCES CONSULTED

(X) National Register of Historic Places thru July 1996
(X) California Inventory of Historic Resources Yr. 1976
(X) California Historical Landmarks Yr. 1996
(X) Archaeological Site Records: Northeast Information Center,
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Native American Heritage Commission
Butte County Historical Society
Local Native American contacts (Attachment C)

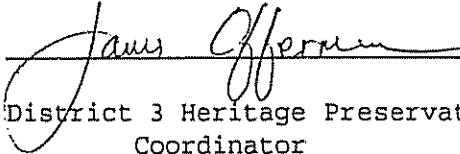
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4. RESUME OF SURVEY

Archaeological Survey Report (Attachment A) (X)Yes ()No ()N/A
Bridge Evaluation (X)Yes ()No ()N/A
Historic Architectural Evaluation ()Yes ()No (X)N/A
Historic Research Evaluation Report ()Yes ()No (X)N/A
Native American Input (Attachment C) (X)Yes ()No ()N/A
(Certified letter receipts included as
proof of mailing)
Northeast Information Center
Record Search Report (Attachment D) (X)Yes ()No (X)N/A
Archaeological Inventory Survey(Attachment E) (X)Yes ()No ()N/A

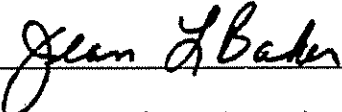
5. CALTRANS APPROVALS

Recommended for
Approval:


District 3 Heritage Preservation
Coordinator

June 28, 1999
Date

Approved:

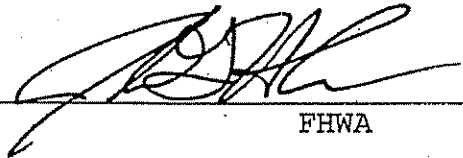

Chief, Office of Environmental
Engineering/Technical Studies

7-6-99
Date

6. FHWA DETERMINATION

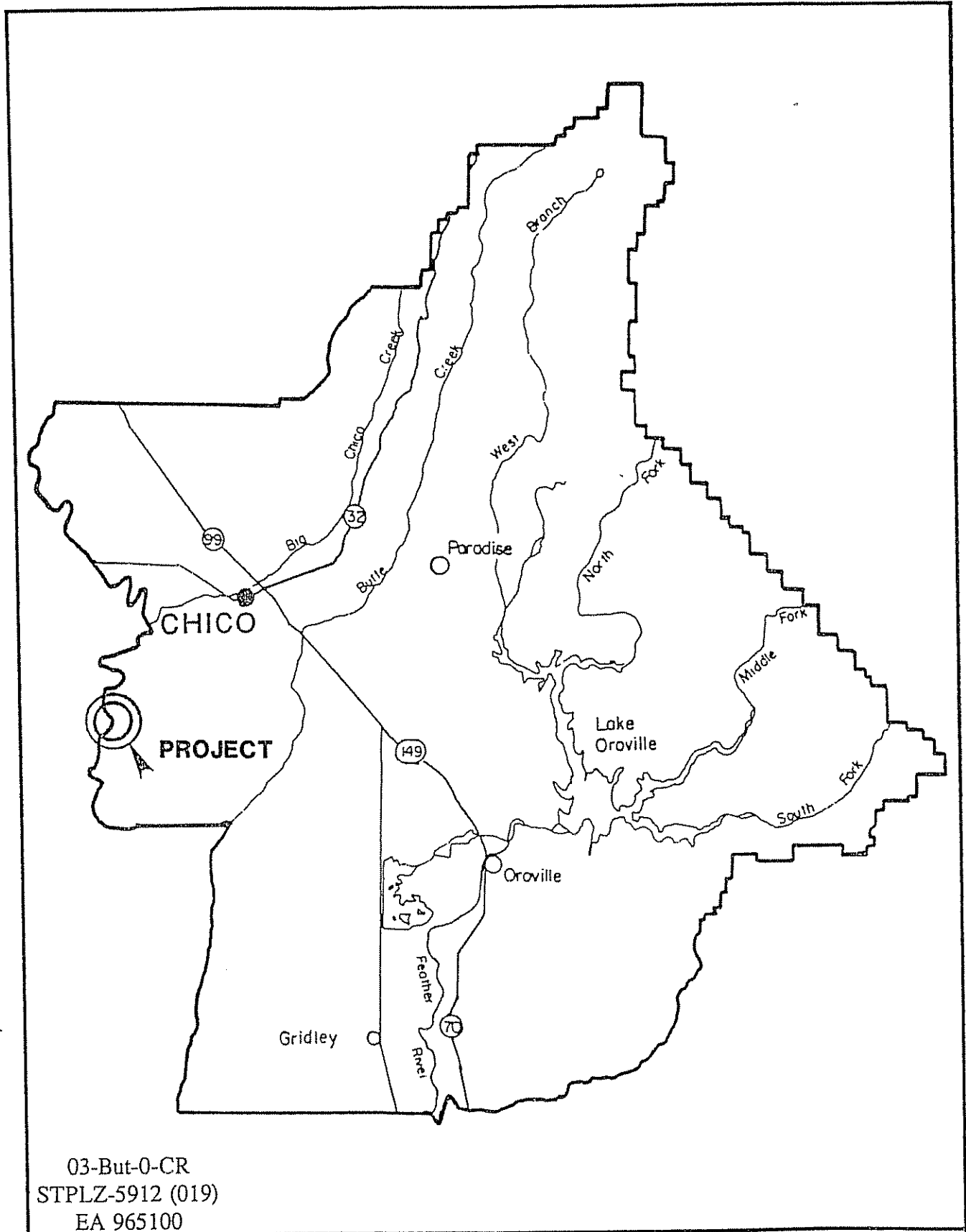
- (X) A. No cultural resources are present within or adjacent to the project's APE.
- () B. Cultural resources within or adjacent to the project's APE do not possess any historical, architectural, archaeological or cultural value.

Cultural studies are complete and satisfactory. The requirements of 36 CFR 800 have been completed.


FHWA

7/20/99
Date

Bridge 12c-120 built 1971

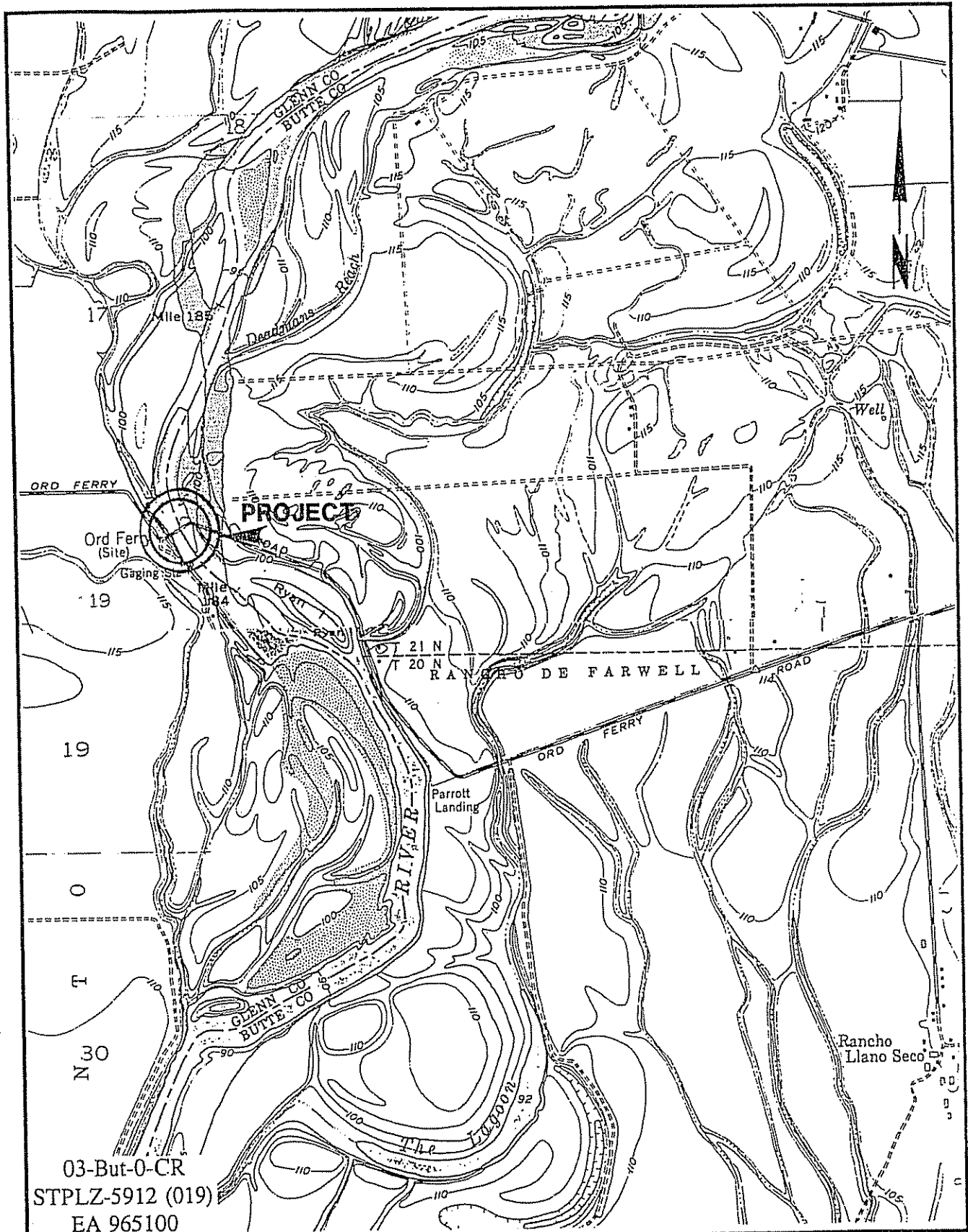


03-But-0-CR
 STPLZ-5912 (019)
 EA 965100

ECO-ANALYSTS
 Environmental Analysis • Planning
 3028 Esplanade, Ste. A
 Chico, CA 95973-4924
 530-342-5991 • FAX 530-342-5991

**ORD FERRY
 BRIDGE**

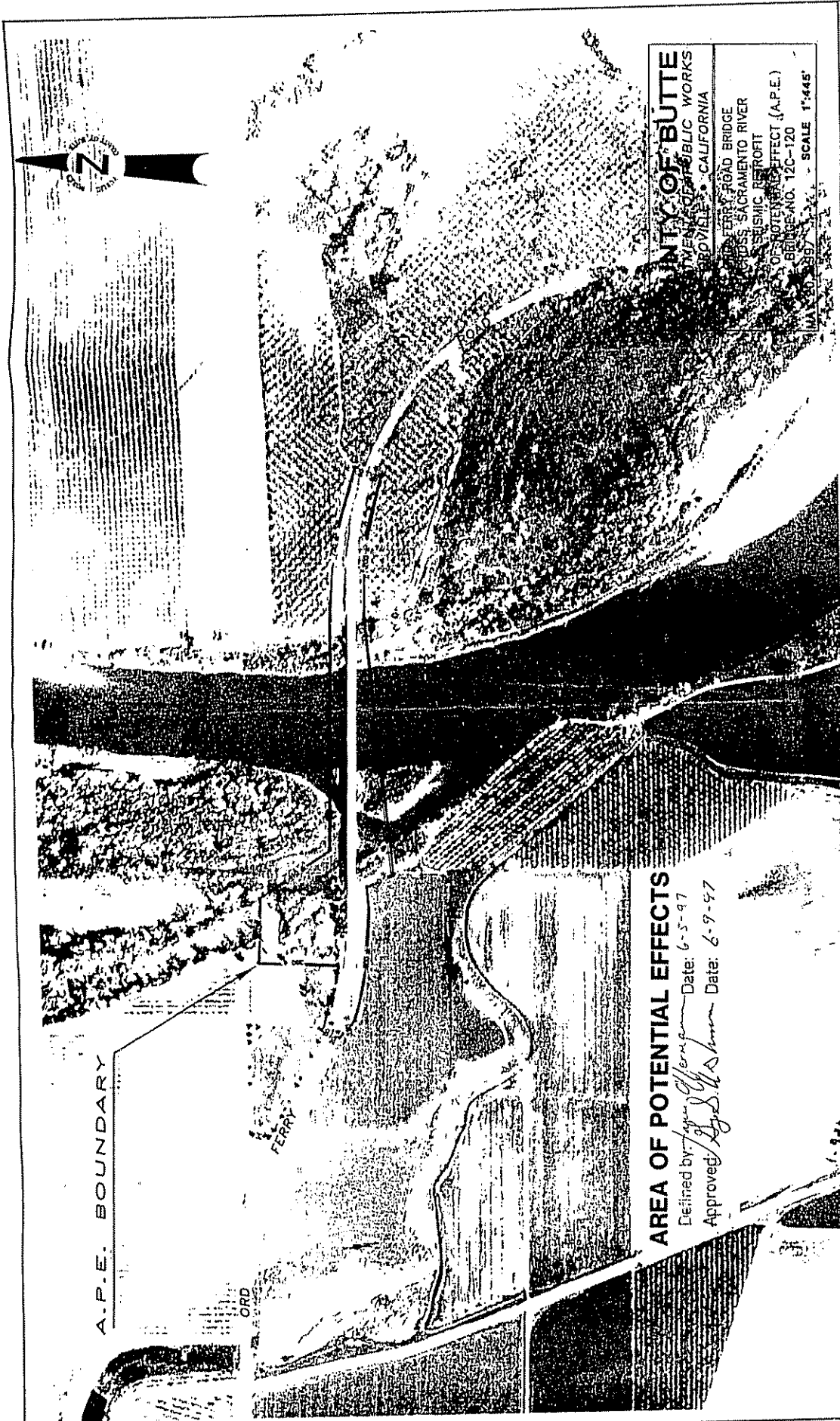
**FIGURE 1
 PROJECT LOCATION**



ECO-ANALYSTS
 Environmental Analysis * Planning
 302B Esplanada, Ste. A
 Chico, CA 95973-4924
 530-342-5991 * FAX 530-342-5991

ORD FERRY
BRIDGE

FIGURE 2
SITE VICINITY



AREA OF POTENTIAL EFFECTS

Defined by *Jayne O'Brien* Date: 6-5-97
 Approved by *Dr. S. W. Shuman* Date: 6-9-97

A.P.E. BOUNDARY

ORD FERRY

CITY OF BUTTE
 DEPARTMENT OF PUBLIC WORKS
 BUTTE, CALIFORNIA
 ORD FERRY ROAD BRIDGE
 CROSS, SACRAMENTO RIVER
 SEISMIC RETROFIT
 ENVIRONMENTAL EFFECT (A.P.E.)
 BRIDGE NO. 12C-120
 SCALE 1"=445'

ECO-ANALYSTS
 Environmental Analysis & Planning
 3028 Esplanade, Ste. A
 Chico, CA 95973-4924
 530-342-5991 • FAX 530-342-5991

FIGURE 3
ORD FERRY BRIDGE
AREA OF POTENTIAL EFFECTS

A B C D E F

ATTACHMENT A

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT

I. HIGHWAY PROJECT DESCRIPTION

District	County	Route	Post Mile	Charge Unit	Expenditure Authorization
03	Butte	CR			965100

The project is being proposed by the County of Butte in conjunction with the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA). The proposed project is the renovation of pier supports for earthquake retrofit for the Ord Ferry Road bridge (State Bridge No.12C-120) at its crossing with the Sacramento River approximately 11.2 kilometers (7 miles) south of Hamilton City, and 16 kilometers (10 miles) west of Chico. Most of the work will be performed on piers that are in the river itself. No change in the roadways or approaches is anticipated. Work will be done from a barge moored in the Sacramento River. The boat launch area on the Glenn County side of the bridge will be used as a construction staging area.

II. STUDY FINDINGS

No archaeological resources were found within or adjacent to the project APE. According to the 1949 USGS quadrangle, the site of the Ord Ferry is located within the project boundaries. Also, the old Ord Ferry stage road extends through the APE. No evidence of the Ord Ferry was identified during the field study; the Ord Ferry stage road has been maintained as a modern county road.

III. INTRODUCTION

Name(s) of Surveyor(s)	Qualifications	Date(s) of Fieldwork
John Furry	M.A. Anthropology, SOPA eligible. 25 years field work experience in reconnaissance surveys.	12 October 1997

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT (Continued)

III. INTRODUCTION (Continued)

Present Environment: The project site is in an agricultural area which supports orchards and field crops. Elevation is approximately 30.5 meters (100 feet) above sea level. The project site exists in both Butte and Glenn Counties, as the county line is located midway across the Sacramento River. A small recreational park and boat ramp facility exist in and adjacent to the northwest quadrant of the project area. The project area supports remnants of Great Valley Mixed Riparian Forest habitat in a band along either side of the Sacramento River. A silty, unconsolidated shore is present near the boat ramp on the west side of the river (Glenn County). This area supports dense areas of hydrophytic and emergent riverine vegetation. The Butte County side of the river supports a broader band of Great Valley Mixed Riparian Forest. East of this band, and also within the project zone, is an area with scrub-shrub vegetation, silty soils, and which is seasonally flooded with moving water. Trees in this area are in a sapling stage of growth, with very few mature trees, successional evidence of routine, heavy flooding. The east side of the river evidently bears the brunt of annual inundation and high volume water flows of the river.

Ethnography: Available ethnographic records do not reveal specific ethnographic villages or sites within the APE. The entire project area lies within the area once occupied by the Mechopta-Konkow Maidu, a Penutian speaking peoples who, together with the Southern and Mountain Maidu, occupied large areas of the interior of California (Riddell 1978).

IV. SOURCES CONSULTED

-
- (X) National Register of Historic Places thru July 1996
 - (X) California Inventory of Historic Resources. Rhodes, Herbert, Director. 1976
 - (X) California Historical Landmarks. Engbeck, Joseph H. Jr., Managing Editor. 1996
 - (X) Archaeological Site Records: Northeast Information Center, CSU, Chico. November, 1997
 - "Gold Districts of California" Clark, William B. 1970
 - "A Collection of Places in Butte County" Dunn, Forrest D. 1977
 - "Handbook of North American Indians, Volume 8, California" Sturtevant, William C., General Editor, and Robert F. Heizer, Volume Editor. 1978
 - "The Directory of Properties in the Historic Property Data File for Butte and Glenn counties" (1977)

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT (Continued)

IV. SOURCES CONSULTED (Continued)

The California Office of Historic Preservation, "Archaeological Determinations of Eligibility Listing for Butte and Glenn counties" (1977)

California Department of Transportation "Historic Bridge Inventory"

"California Points of Historic Interest" Sacramento Office of Historic Preservation. 1992

Butte County Historical Society

Native American Heritage Commission

Native American Contacts for Butte County (Attachment C)

Results:

Negative for the presence of cultural resources within or adjacent to the project site. California Department of Transportation "Historic Bridge Inventory" lists Bridge 12C-120 as Category 5, ineligible for the NRHP.

V. FIELD METHODS

The project area was inspected by John Furry, M.A. An intensive pedestrian ground survey was conducted by walking systematic transects 10 meters apart. All areas within and adjacent to the project site were visually examined. Ground visibility was good to excellent.

VI. REMARKS

No further archaeological work should be necessary unless project plans change to include unsurveyed areas. If buried cultural materials are encountered during construction, it is California Department of Transportation (Caltrans) policy that work in that area must halt until a qualified archaeologist can evaluate the nature and significance of the find

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT (Continued)

VII. CERTIFICATION

Preparer: John Furry Title: Archaeologist

Signature John D Furry Date April 12, 1999

Reviewer: Title:
Signature _____ Date _____

VIII. MAPS

Site Location (X) Project Vicinity (X) APE (X)

IX. PHOTOGRAPHS

Yes () No (X)

X. BIBLIOGRAPHY

Beck, Warren A., and Ynez D. Haase. Historical Atlas of California. 1974. Norman, Oklahoma. University of Oklahoma Press.

California Department of Transportation. Historic Bridge Inventory.

Clark, William B. Gold Districts of California. 1980. Sacramento. Bulletin 193, California Division of Mines and Geology.

Dunn, Forrest D. A Collection of Places in Butte County California. 1977. Chico, CA. Occasional Publication Number 3, Association for Northern California Records and Research.

Engbeck, Joseph H. Jr., Managing Editor. California Historical Landmarks. 1990. Sacramento. Office of Historic Preservation. California Department of Parks and Recreation.

NEGATIVE ARCHAEOLOGICAL SURVEY REPORT (Continued)

Bibliography (continued)

Murtagh, William J., Keeper of the National Register;; Ronald M. Greenberg, Editor in Chief; Sarah A. Marusin, Editor; and Maricca J. Lutz, Photo Editor. The National Register of Historic Places. 1988. Washington, D.C. U.S. Department of the Interior. National Park Service.

Ibid. Computer Listings. 1966-7/96.

Rensch, Hero Eugene and Ethel Grace, Mildred Brooke Hoover, and Rev. William N. Abeloe. Historic Spots in California. 1966. Palo Alto, California. Stanford University Press.

Rhodes, Herbert, Director. California Inventory of Historic Resources. 1976. Sacramento. State of California Department of Parks and Recreation.

Riddell, F.A. Maidu and Konkow. 1978. Handbook of American Indians. Volume 8, California. Smithsonian Institute, Washington, D.C.

Sacramento Office of Historic Preservation. California Points of Historical Interest. 1992. California Department of Parks and Recreation.

Sacramento Office of Historic Preservation. Directory of Properties in the Historic Property Data File for Butte County. 1996.

Sturtevant, William C., General Editor, and Robert F. Heizer, Volume Editor. Handbook of North American Indians, Volume 8: California. 1978. Washington D.C. Smithsonian Institution.

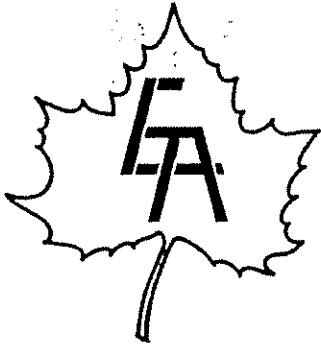
Wells, Harry L., and W.L. Chambers. History of Butte County. 1882. H.L. Wells Printers.

ATTACHMENT B

COUNTY 12 (BUT)

BRIDGE NUMBER	ROUTE	FEATURES INTERSECTED	FACILITY CARRIED	HIST CITY SIG
12C0067	00000	LINDO CHANNEL	GRAPE WAY	5
12C0068	00000	MUD CREEK	SACRAMENTO AVE	5
12C0069	00000	BUTTE CK OVERFLOW	NELSON RD	5
12C0070	00000	BUTTE CK	NELSON RD	5
12C0071	00000	SCHOHR DRAIN	BIGGS PRINCETON HY	5
12C0072	0V356	CHEROKEE CNL	GRIDLEY COLUSA HWY	5
12C0073	0V356	BUTTE CR	GRIDLEY COLUSA HWY	5
12C0075	00000	EDGAR SLU OFL	7 MILE LANE	5
12C0077	00000	BUTTE CREEK	HUMBUG ROAD	5
12C0080	00000	FLEA VALLEY CREEK	PULGA RD	5
12C0081	00000	CAMP CREEK	PALGA RD	5
12C0082	00000	DRY CREEK	WHEELOCK RD	5
12C0085	00000	DRY CREEK	NELSON RD	5
12C0087	00000	CHEROKEE CANAL	NELSON	5
12C0088	0V460	W BRANCH EDGAR SLOUGH	ORD FERRY RD	5
12C0090	0V460	PERKINS CR	ORD FERRY RD	5
12C0093	00000	PINE CR	CANA-PINE CR RD	5
12C0094	00000	DIANNE'S DITCH #3	CANA HWY	5
12C0096	00000	ROCK CR O'FLOW CHANNEL	HAMILTON CANA HWY	5
12C0097	00000	JORDAN CREEK	BENNETT RD	5
12C0098	00000	PINE CREEK	BENNETT RD	5
12C0101	00000	MUD CREEK	BELL RD	5
12C0102	00000	MUD CREEK	MERIDIAN RD	5
12C0104	00000	KEEFER SLOUGH	GARNER LANE	5
12C0105	00000	MUD CREEK	HICKS LANE	5
12C0106	0Y773	LITTLE CHICO CREEK	BRUCE RD	5
12C0107	00000	COMANCHE CREEK	EDGAR AVE	5
12C0108	00000	LITTLE CHICO CREEK	TAFEE AVE	5
12C0109	00000	LITTLE CHICO CREEK	S END ALBERTON AVE	5
12C0110	00000	WYMAN RAVINE	LONE TREE RD	5
12C0111	00000	WYMAN RAVINE	CENTRAL HOUSE RD	5
12C0112	00000	WYMAN RAVINE	MIDDLE HONCUT RD	5
12C0113	0Y694	E BRA WYANDOTTE CR	PALERMO-HONCUT HWY	5
12C0114	0Y776	DEAD HORSE SLU DRV CH	HUMBOLDT RD(CHICO) CHC	5
12C0117	00000	DREDGER GULCH	PACIFIC HEIGHTS RD	5
12C0118	00000	WYMAN RAVINE	BAGGETT-PALERMO RD	5
12C0119	0Y775	COMANCHE CR	DAYTON RD	5
12C0120	0V460	SACRAMENTO RIVER	ORD FERRY RD	5
12C0123	00000	BELDING LATERAL	FARRIS RD	5
12C0124	0Y765	MUD CR	COHASSET RD	5
12C0125	0Y705	RUDY CR(GRAND AVE)	GRAND AVE	OVL 5
12C0127	0Y707	TAILING DITCH	FEATHER RIVER BLVD	5
12C0128	0Y694	WYANDOTTE CREEK	PALERMO-HONCUT HWY	5
12C0129	00000	WYANDOTTE CR	MIDDLE HONCUT RD	5
12C0130	00000	CLEAR CREEK	CLR CR CEMETERY RD	5
12C0131	00000	SPENCER LATERAL	W EVANS-REINIER RD	5
12C0132	00000	SUTTER BUTTE CANAL	EVANS-REIMER RD	5
12C0133	00000	SUTTER BUTTE CANAL	ALEXANDER AVE	5
12C0138	00000	WYANDOTTE CREEK	COX LANE	5

ATTACHMENT C



ECO-ANALYSTS

310 B Salem Street • Chico, California 95928 • (916) 342-5991 Fax (916) 342-1553

Dick Bjork
Tyme Maidu Tribe
Berry Creek Rancheria
5 Tyme Way
Oroville, CA 95966

September 10, 1997

Dear Dick;

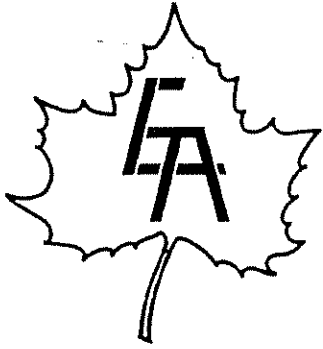
The Butte County Department of Public Works, in conjunction with Caltrans, is presently planning for the renovation of pier supports for earthquake retrofit of state bridge 12-120. The proposed project is located on the Ord Ferry Road at its crossing of the Sacramento River, approximately 7 miles south of Hamilton city and 10 miles southwest of Chico, California. The site is situated in Rancho Jacinto, T21N, R1W, on the Ord Ferry 7.5' U.S.G.S. topographic map. A location map and Area of Potential Effects map are enclosed.

Do you have any knowledge of or information pertaining to the project site or the immediate vicinity which may be considered important to the Maidu people, their culture, tradition or heritage? As a representative of your cultural heritage, we would like to include your comments and considerations as part of our report.

Thank you for your cooperation in this matter. A self-addressed stamped envelope is included for your convenience. Should you have any questions or comments, please contact Dr. Albert Beck, or myself, Mary Bailey, at (916) 342-5991.

Sincerely,

Mary Bailey
Environmental Analyst



ECO-ANALYSTS

310 B Salem Street • Chico, California 95928 • (916) 342-5991 Fax (916) 342-1553

Peter R. Ramirez, tribal chairperson
Chico Rancheria
3006 Esplanade
Suite I
Chico, CA 95926

September 10, 1997

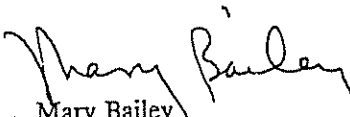
Dear Mr. Ramirez;

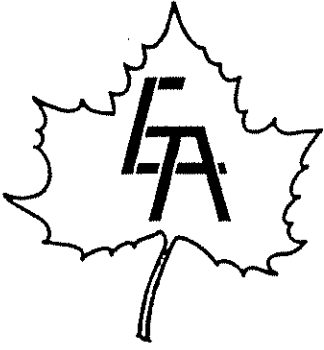
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Sincerely,


Mary Bailey
Environmental Analyst



ECO-ANALYSTS

310 B Salem Street • Chico, California 95928 • (916) 342-5991 Fax (916) 342-1553

Darlene Cummings, chairperson
Mooretown Rancheria
P.O.Box 1842
Oroville, CA 95965

September 10, 1997

Dear Ms. Cummings;

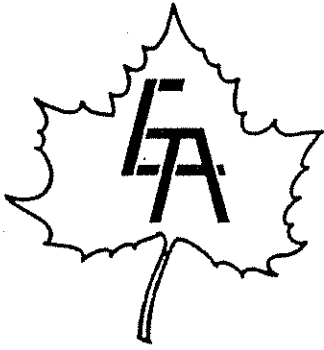
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Thank you for your cooperation in this matter. A self-addressed stamped envelope is included for your convenience. Should you have any questions or comments, please contact Dr. Albert Beck, or myself, Mary Bailey, at (916) 342-5991.

Sincerely,

Mary Bailey
Environmental Analyst



ECO-ANALYSTS

310 B Salem Street • Chico, California 95928 • (916) 342-5991 Fax (916) 342-1553

Jewel Pavalunas or
Sharon Guzman
Butte Tribal Council
3300 Spencer Ave.
Oroville, CA 95966

September 10, 1997

Dear Ms. Pavalunas or Ms. Guzman;

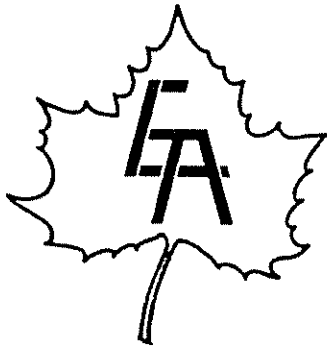
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Thank you for your cooperation in this matter. A self-addressed stamped envelope is included for your convenience. Should you have any questions or comments, please contact Dr. Albert Beck, or myself, Mary Bailey, at (916) 342-5991.

Sincerely,

Mary Bailey
Environmental Analyst



ECO-ANALYSTS

310 B Salem Street • Chico, California 95928 • (916) 342-5991 Fax (916) 342-1553

Beryle Cross
2329 Lia Laton
Oroville, CA 95966

September 10, 1997

Dear Mr. Cross;

The Butte County Department of Public Works, in conjunction with Caltrans, is presently planning for the renovation of pier supports for earthquake retrofit of state bridge 12-120. The proposed project is located on the Ord Ferry Road at its crossing of the Sacramento River, approximately 7 miles south of Hamilton city and 10 miles southwest of Chico, California. The site is situated in Rancho Jacinto, T21N, R1W, on the Ord Ferry 7.5' U.S.G.S. topographic map. A location map and Area of Potential Effects map are enclosed.

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Sincerely,

Mary Bailey
Environmental Analyst

Ord Ferry Bridge

P 534 840 356

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to Beryl Cross	
Street & Number 2329 Lia Laton	
Post Office, State, & ZIP Code Orville CA 95966	
Postage	\$.32
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 1.67
Postmark or Date	SEP 10 1997 MOORETOWN STA USPS

PS Form 3800, April 1995

P 534 840 358

US Postal Service
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 No Insurance Coverage Provided.
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Street & Number P.O. Box 1842	
Post Office, State, & ZIP Code ORVILLE CA 95965	
Postage	\$.32
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 1.67
Postmark or Date	SEP 10 1997 MOORETOWN STA USPS

PS Form 3800, April 1995

P 534 840 357

US Postal Service
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Sent to Butte Tribal Council	
Street & Number 3300 Spencers Ave.	
Post Office, State, & ZIP Code Orville CA 95966	
Postage	\$.32
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	

P 534 840 359

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to Chico Rancheria	
Street & Number 3006 Esplanade, Ste I	
Post Office, State, & ZIP Code Chico CA 95926	
Postage	\$.32
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 1.67
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PS Form 3800, April 1995

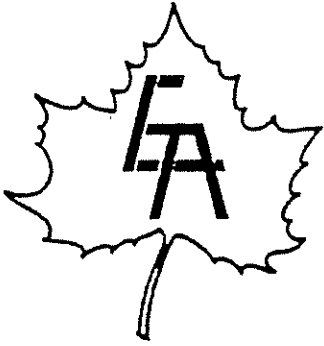
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Showing to Whom, Date, & Addressee's Address	
Postage & Fees	\$ 1.67
Date	SEP 10 1997 MOORETOWN STA USPS

P 534 840 360

US Postal Service
Receipt for Certified Mail
 No Insurance Coverage Provided.
 Do not use for International Mail (See reverse)

Sent to Berry Creek Rancheria Tyme Maidu Tribe	
Street & Number 5 Tyme Way	
Post Office, State, & ZIP Code ORVILLE CA 95966	
Postage	\$.32
Certified Fee	1.35
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$ 1.67
Postmark or Date	SEP 10 1997 MOORETOWN STA USPS

PS Form 3800, April 1995



ECO-ANALYSTS

3028 Esplanade, Suite A • Chico, California 95973 • (530) 342-5991 • Fax (530) 342-1553

Debbie Pilas-Treadway
Native American Heritage Commission
915 Capitol Mall, Room 288
Sacramento, CA 95814

March 30, 1999

Dear Ms. Pilas-Treadway;

Our firm is preparing a Cultural Resource Study for a bridge project conducted by the Butte County Department of Public Works. We are concerned with the possible presence of cultural resources in or near the construction area.

The current project plan is for the renovation of pier supports for earthquake retrofit of state bridge 12-120. The proposed project is located on the Ord Ferry Road at its crossing of the Sacramento River, approximately 7 miles south of Hamilton city and 10 miles southwest of Chico, California. The site is situated in Rancho Jacinto, T21N, R1W, on the Ord Ferry 7.5' U.S.G.S. topographic map. A location map and Area of Potential Effects map are enclosed.

Do you have any knowledge of or information pertaining to the project site or its immediate vicinity which may be considered important to Native Americans, their culture, tradition or heritage?

Should you have any questions or comments, please contact Dr. Albert Beck, or myself, Mary Bailey, at (530) 342-5991.

Sincerely,

Mary Bailey
Environmental Analyst

STATE OF CALIFORNIA

Gray Davis, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
 SACRAMENTO, CA 95814
 (916) 653-4082
 Fax (916) 657-5390



March 31, 1999

Mary Bailey
 ECO-Analysts
 3028 Esplanada, Suite A
 Chico, CA 95973

RE: Ord Ferry Bridge, Butte County

SENT VIA FAX: (530) 342-1553
 # of Pages: 2

Dear Ms. Bailey:

A record search of the sacred lands file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend other with specific knowledge.

If you receive notification of change of addresses and phone numbers from any these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 653-4038.

Sincerely,

Debbie Pitas-Treadway
 Associate Governmental Program Analyst

FILE NO. 0100010000

NATIVE AMERICAN CONTACTS

Butte County

March 31, 1999

Berry Creek Rancheria of Maidu Indians

David Edwards, Chairperson Tyme Maidu
#5 Tyme Way
Oroville, CA 95966
(530) 534-3859
(530) 534-1151 FAX

Chico Band of Mechoopda Indians

Pete Ramirez, Chairperson Mechoopda Maudi
1907 F. Mangrove Ave. Concow
Chico, CA 95926
(530) 899-8922
Fax: (530) 899-8517

Enterprise Rancheria of Maidu Indians

Art Angle, Chairperson Maidu
2950 Feather River Blvd.
Oroville, CA 95965
(916) 532-9214
(916) 532-1768 FAX

Beryle Cross

2329 Via Laton Maidu
Oroville, CA 95966

Maidu Nation

Clara LeCompte Maidu
P.O. Box 204
Susanville, CA 96130
(916) 257-9691

Butte Tribal Council

Jewel Pavalunas Maidu
1963 Mt. Ida Road
Oroville, CA 95966
(916) 538-7986

Mooretown Rancheria of Maidu Indians

#1 Alverda Drive Maidu
Oroville, CA 95966 Concow
(530) 533-3625
(530) 533-3680 Fax

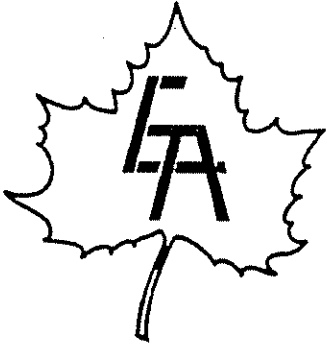
Joe Marine

3024 63rd Street Maidu
Sacramento, CA 95828
316 736-1541

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7059.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans with regards to the cultural assessment of the proposed Bridge Project, Butte County.



ECO-ANALYSTS

3028 Esplanade, Suite A • Chico, California 95973 • (530) 342-5991 • Fax (530) 342-1553

March 30, 1999

Butte County Historical Society
1749 Spencer Avenue
Oroville, CA 95965

Dear Sir;

Our firm is preparing a Cultural Resource Study for a bridge project conducted by the Butte County Department of Public Works. We are concerned with the possible presence of cultural resources in or near the construction area.

The current project plans for the renovation of pier supports for earthquake retrofit of state bridge 12C-120. The proposed project is located on the Ord Ferry Road at its crossing of the Sacramento River, approximately 7 miles south of Hamilton City, and 10 miles southwest of Chico, California. The site is situated in Rancho Jacinto, T21N, R1W, on the Ord Ferry 7.5' U.S.G.S. topographic map. A location map is enclosed.

Do you have any knowledge of or information pertaining to the project site or its immediate vicinity which may be considered historically important?

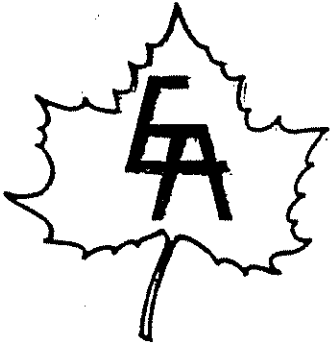
Should you have any questions or comments, please contact Dr. Albert Beck, or myself, Mary Bailey, at (530) 342-5991.

Sincerely,

Mary Bailey

Mary Bailey
Environmental Analyst

ATTACHMENT D



ECO-ANALYSTS

3028 Esplanade, Suite A • Chico, California 95973 • (530) 342-5991 • Fax (530) 342-1553

Jary Kraft or Lisa Swillinger
Northeast Information Center
Department of Anthropology
California State University, Chico
Chico, CA 95928

September 2, 1997

Dear Jary or Lisa;

The Butte County Department of Public Works in conjunction with Caltrans, is presently planning for the renovation of pier supports for earthquake retrofit of state bridge 12C-120. The proposed project is located on the Ord Ferry Road at its crossing of the Sacramento River, approximately 7 miles south of Hamilton City, and 10 miles southwest of Chico, California. The site is situated in Rancho Jacinto, T21N, R1W, on the Ord Ferry 7.5' U.S.G.S. topographic map.

We are requesting a records search for any known cultural resources in the immediate vicinity of the proposed bridge work. A copy of the topographic map with the project area circled is enclosed. An Area of Potential Effects map is also included.

Eco-Analysts authorizes the Northeast Information Center to bill us for this record search at a rate of \$90.00 per hour for a maximum of 3 hours plus necessary xerox costs.

Thank you,

Mary Bailey

The Northeast Center of the California
Historical Resources Information System

BUTTE SIERRA
GLENN SISKIYOU
LASSEN SUTTER
MODOC TEHAMA
PLUMAS TRINITY
SHASTA

Department of Anthropology
California State University, Chico
Chico, CA 95929-0400

(916) 898-6256



November 17, 1997

Eco-Analysts
310 B Salem Street
Chico, CA 95928
ATTN: Ms. Mary Bailey

RE: ORD FERRY BRIDGE PROJECT (Bridge #12C-120); I.C. File # D97-68
 T21N, R1W, Section 19;
 USGS Ord Ferry 7.5' and Chico 15' quadrangles
 Approximately 10 acres estimated from map provided (Butte and Glenn counties)

Dear Ms. Bailey,

In response to your request, a record search for the above mentioned project was conducted by examining the official maps and records for archaeological sites in Butte and Glenn counties.

RESULTS:

PREHISTORIC RESOURCES: According to our files, there are no recorded sites of this type known to be located within or immediately adjacent to project boundaries. However, the project is located in an area known to have been heavily utilized by prehistoric and ethnographic populations. The project is located within territory claimed ethnographically by the Northwest Maidu (Konkow) and Patwin. Unrecorded ethnographic village sites are known to be located in the general vicinity of the project area.

HISTORIC RESOURCES: According to our files, there are no recorded sites of this type known to be located within or immediately adjacent to project boundaries. However, the USGS quads (1949) indicate the site of the Ord Ferry is located within project boundaries, and the old Ord Ferry stage road extends through project boundaries. These are unrecorded historic sites/features, and additional unrecorded resources associated with the use of these sites/features may also be located within project boundaries. Caltrans Local Bridge Survey lists bridge # 12C-120 as appearing to not meet the criteria for listing on the National Register of Historic Places.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS: According to our files, the project area has not been previously surveyed for cultural resources by a professional archaeologist.

LITERATURE SEARCH: Reviewed were the official records and maps for archaeological sites and surveys in Butte and Glenn counties. Also reviewed were the **National Register of Historic Places - Listed Properties and Determined Eligible Properties** (1988, Computer Listings 1966 through 7-96 by National Park Service), the **California Inventory of Historic Resources** (1976), **California Points of**

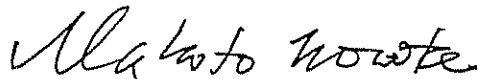
Historical Interest (1992), California Historical Landmarks (1996), Gold Districts of California (1970), A Collection of Places in Butte County (1977), Caltrans Local Bridge Survey (1989), Handbook of North American Indians, Volume 8, California (1978), The Directory of Properties in the Historic Property Data File for Butte and Glenn counties (1997), and The California Office of Historic Preservation Archaeological Determinations of Eligibility Listing for Butte and Glenn counties (1997).

RECOMMENDATIONS: Based upon the above information and the local topography, the project is located in an area considered to be extremely sensitive for prehistoric, ethnographic, and historic cultural resources. Therefore, we recommend that a professional archaeologist be contacted in order to conduct a cultural resource survey of the entire project area prior to any project operations. The project archaeologist will be able to identify, record, assess, and prepare appropriate preservation/mitigation measures for any cultural resources encountered as a result of this survey. The project archaeologist should also contact the appropriate local Native American representatives in order to determine if any unrecorded ethnographic sites are located within project boundaries for which we have no records. The project archaeologist may also wish to consult historic Government Land Office (GLO) maps for information on unrecorded historic sites which may be located within project boundaries for which we have no records.

The charge for this record search is \$135.00 (one and one half hours of Information Center time @ \$90.00 per hour). An invoice for billing purposes will follow. Thank you for your concern in preserving California's cultural heritage, and please feel free to contact us if you have any questions.

With regard to your September 2, 1997 note on the Laughlin graves, site recordation for those burials would be appropriate and greatly appreciated!

Sincerely,



Makoto Kowta, Coordinator
Northeast Information Center

ATTACHMENT E

ARCHAEOLOGICAL INVENTORY SURVEY
OF THE
ORD FERRY BRIDGE APPROACHES AND GENERAL AREA

Across the Sacramento River, Southwest of Chico,
Butte County, California

Prepared for:
Eco-Analysts
310 Salem Street, Suite B
Chico, California 95928

By:
John Furry

October 13, 1997

INTRODUCTION

The Butte and Glenn Counties' Public Works Departments and Caltrans propose to make repairs to the existing bridge over the Sacramento River at Ord Ferry, California. Construction on the bridge will make repairs to the existing bridge and necessitate the excavation and clearing of land for the staging of equipment and access to the river.

This report is the result of an Archaeological Inventory Survey of those areas which would be impacted by the repairs on the Ord Ferry bridge over the Sacramento River. Reports such as this are required when the project area may have potential effects on cultural resources within the project area as dictated by the Guidelines of the California Environmental Quality Act. For any project funded in part or total by Caltrans, archaeological assessments are required as follows:

1. Section 106 of the National Historic Preservation Act and its impending regulations (36CFR Part 800).
2. Section 1 (b) of the Executive Order 11593.
3. Section 101 (b) (4) of the National Environmental Policy Act.
4. The Joint Resolution on American Indian Freedom.
5. The Archaeological Protection Act.

An archaeological inventory survey of this nature comprises three (3) components:

1. A record search completed by the Northeast Center of the California Resources Information System, at California State University, Chico. This record search will include a check of the records of Prehistoric Resources, Historic Resources, and any previous archaeological investigations, and a literature search.
2. A field survey accomplished by walking and observing features of the project's area as dictated by the Record Search and the project's sensitivity for cultural resources.
3. The final stage of the archaeological inventory survey is the preparation of a professional report detailing the findings and recommendations of the record search and field survey.

PROJECT LOCATION

All parts of this project lie with the 7.5' Minute Series Ord Ferry USGS California Quadrangle. The bridge construction area lies approximately seven (7) miles south of Hamilton City, *Glenn County*, California, and ten (10) miles southwest of Chico, *Butte County*, California. For purposes of this report, the survey area is divided into the eastern and western halves of the purposed project.

RECORD SEARCH

Prior to conducting the field survey portion of this project, the records of the Northeast California Information Center, at California State University, Chico, were examined for any existing recorded historic or prehistoric cultural resources within or immediately adjacent to the project area. The record search indicated the following existent conditions:

Previous Survey: None of the project area has been formally surveyed in the past. There have been no recorded sites within the bounds of this project.

Recorded Sites: There is one recorded site (Indian Fishery) located just more than one (1) mile north of the project area. A recorded prehistoric site lies just over one (1) mile to the southeast. None of these sites are near the vicinity of the proposed project.

CULTURAL CONTEXT

Several types of information were considered relevant to the evaluation of the types of sites and site distribution which might be encountered within the project area. The information evaluated prior to conducting the field work includes data on regional prehistory, ethnography, and early historic-era developments in the region.

PREHISTORY

Available ethnographic records do not reveal specific ethnographic villages or sites within this project area. The entire project lies within the area once occupied by the Mechoopta-Konkow Maidu, a Penutian speaking peoples who, together with the Southern and Mountain Maidu, occupied large areas of the interior of California. (Riddell 1978)

The Maiduan peoples were probably not the earliest inhabitants of this area. They are believed, by some researchers, to have entered California from the north, sometime around 500 A.D. Before this time, the area of the current project may have been occupied by Hokan speaking peoples. (Kowta 1988:190)

In prehistoric times, the Konkow were peoples who subsisted by hunting and gathering. Many of the plants and animals utilized by the Konkow had multiple uses. Roots, stems, leaves, and seeds of plants were used as food, for basketry, and medicine. Buckeye and acorns were the primary plant staples. Many small animals were hunted and trapped. Fish were taken with nets, weirs, harpoons, hooks, or poisons. Insects such as grasshoppers, crickets, and ants were also used as food.

The location of village sites varied according to topography. In the foothills, permanent settlements were generally located on ridges that separated streams or creeks, knolls and terraces, or part of the way down canyons on flats. (Dixon 1905:175 and Krøeber 1925:395) In the valley, villages were located along streams, at the junction of feeder streams, and by larger rivers. Sometime after 800 A.D. the use of rock shelters, found in the Lovejoy and Tuscan formations in the foothills, intensified. Many awls, for the use in basketry, are found from this time period. The bow and arrow was probably introduced into this area at this time. This is evidenced by a replacement of larger points by smaller points of the notched and stemmed variety.

ARCHAEOLOGICAL BACKGROUND

Just south and east of the project area, the Mesilla Valley is of importance. The chronology of the archaeological sequences representing this locale is based on the excavation and analysis of sites encountered during the relocation of the Western Pacific Railroad during the construction of Oroville Dam. This chronology is composed of four sequential Complexes predating the historic period. (Kowta 1988, Olsen and Riddell 19663, Ritter 1970)

The Mesilla Valley Complex, dating prior to 1000 B.C. is characterized by leaf shaped, stemmed, and larger side-notched points. These points are very large and were most likely used in conjunction with a spear thrower. The mano and metate are the dominant seed processing tools. The abundant corn crops were only minimally used, as hard seeds were more favored. Bowl mortars were used to a limited extent. There may have been seasonal villages and locations such as rock shelters, which were utilized during different times of the year. Linguistically, the people of the Mesilla Complex were most likely speakers of a Hokan dialect, possibly related to other peoples of similar cultures of the north state.

Within one (1) mile of the bridge location a large prehistoric mound is located on the Llano Seco property. This mound dates to approximately 4,000 years before the present time. Excavations in the 1960-1970's yielded a vast collection of artifacts.

The Bidwell Complex, dating sometime between 1 A.D. and 800 A.D., exhibited a change in the types of food processing tools. There was a shift from the use of the mano and metate to the more predominant use of the mortar and pestle. Bone awls were much more plentiful. Basketry flourished, as evidenced by the fine awls. There was a shift from hard seed processing to a reliance on acorns. Slab and bedrock mortars in the area were in use during this time period. (Ritter 1970)

The Sweetwater Complex, dating from 800 A.D. to 1600 A.D., is marked by a dramatic population increase in our study area. Although the people were still hunters and gatherers, they utilized a much wider range of plant and animal resources. One of these resources, the acorn, was the most dominant and reliable food source. The use of rockshelters

and caves intensified during this period. The Sweetwater Complex is characterized by the use of very small projectile points and the use of slab/bedrock mortars. The Maidu most likely intruded into this area during this time period, forcing the Hokan speakers to the fringe areas of the valley and Coast Range.

The last group to occupy the area of our study were the present day branch of the Maidu, the Konkow. They represent the Oroville Complex, dating from 1600 A.D. to 1850.

In summary, the examination of the ethnographic and archaeological information in the area of the proposed project indicates the possibility of encountering one or more of the following types of prehistoric cultural resources:

1. Occupation sites, with or without housepits, along the banks of the Sacramento River.
2. Surface finds of basalt, chert, or obsidian in the form of flakes or artifacts.
3. Food processing stations, which would include bedrock mortars and single cups in boulders.

HISTORICAL BACKGROUND

During the historical period, when written information became available, exploration, fur trapping, and early settlement in the north valley area occurred. The immediate impact of these early contacts was the decimation of the native population through the introduction of diseases.

The earliest documented exploration of the foothill area of Butte County was by Captain Luis Arguello, in 1820. For the next two decades, trappers from the Hudson Bay Company and the American Fur Company were trapping in this area. (Wells and Chambers 1973:128)

Trappers from Oregon in 1883, spreading malaria, decimated much of the native population. As many as 75 percent of the population may have died. (Cook:1952:322)

During the period of Mexican rule in California, several persons obtained land grants in what is now Butte County. In the immediate study area these grants included the Farwell Grant and the Arroyo del Chico Grant, later becoming General Bidwell's Rancho Chico. Just south of the study area, Sam Neal obtained the Esquon Grant. For the most part, these large grants were used to raise cattle. Sam Neal is reported to be the first to raise cattle in this area. (McGie 1982:35-37)

After the discovery of gold in 1848, the influx of people into California changed the subsequent history of the region. The decades following the Gold Rush are marked by Indian removal, gold mining, agriculture, and commerce. Rail lines were established to transport people and goods more efficiently. Historical resources that may be encountered during this survey may include:

1. Artifacts related to mining.
2. Foundations, dumps, etc. related to homesites.
3. Artifacts related to commerce (river shipping).

RECORDING STRATEGY AND FIELDWORK

Whenever artifacts and archaeological resources are encountered in a survey such as this, the location is plotted onto a U.S.G.S. topographic map. Each find of an isolate, feature, or site would be assigned a field number. Complexes of features or artifacts would be identified as sites and recorded on S.H.P.O approved forms. Isolated individual components would be considered 'isolates' and the appropriate location and descriptive information secured in notebook form. Locations of sites and isolates would be documented in terms of section quadrants and textual description, and for these sites U.T.M. coordinates will be provided. For recorded sites, the environmental setting would be described in terms of local geology, land form, slope, soils, hydrology, and vegetation. The dimensions of all sites would be recorded in metric units. Graphic documents for sites would include sketch maps, accompanied by compass bearings and distances to key features.

The fieldwork portion of this archaeological inventory was undertaken by John Furry, M.A., Chico, California, on October 12, 1997. The entire project area was subjected to an intensive pedestrian field survey which was achieved by walking systematic transects at ten (10) meter intervals. Vegetation was dominated by a variety of grasses and star thistle, as well as blackberry vines along the river. There are orchards on the west side of the project area. The ground was clear. Some agricultural related disturbances have occurred in the past.

PROJECT FINDINGS

During the course of this survey, no prehistoric or historic cultural remains were encountered.

RECOMMENDATION

Archaeological clearance is recommended for this project. Surface archaeological remains are encountered, a professional archaeologist should be called in to properly assess and record their significance.

REFERENCES

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- Jensen, Peter*
1990 Archaeological Inventory Survey of the Proposed Happ Subdivision. Chico, California.
- Kowta, Makota*
1988 The Archaeology and Prehistory of Plumas and Butte Counties, California. Northeast Information Center, California State University, Chico, California.
- Kroeber, Alfred*
1925 Handbook of the Indians of California. Bureau of America Ethnology Bulletin 78. Smithsonian Institute, Washington, D.C.
- McGie, Joseph*
1992 History of Butte County (2 Volumes) Revised Edition. Butte County Board of Education, Oroville, California.
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1963 The Archaeology of the Western Pacific Railroad Relocation, Oroville Project, Butte County, California. Department of Parks and Recreation, Division of Beaches and Parks Archaeological Reports 7.
- Riddell, F. A.*
1978 Maidu and Konkow. Handbook of American Indians. Volume 8, California. Smithsonian Institute, Washington, D.C.
- Ritter, Eric*
1970 Northern Sierra Foothill Archaeology. Center for Archaeological Research at Davis. Publication 2:173-184. University of California, Davis.



July 16, 2010

Raymond Cooper, P.E.
Senior Civil Engineer
Butte County Public Works
7 County Center Drive
Oroville, CA 95965

Re: CEQA Review/Adopted Mitigated Negative Declaration for the Ord Ferry Road Bridge Seismic Retrofit Project (County Project 42071-97-1; Federal Project STPLZ-5912 (019); State Bridge 12C-9120; EA 03-452804L)

Dear Mr. Cooper:

Gallaway Consulting was retained by the Butte County Public Works Department to prepare a Subsequent Mitigated Negative Declaration or Addendum to the Mitigated Negative Declaration, whichever was deemed appropriate. However, based upon review of the existing Initial Study/Adopted Mitigated Negative Declaration (Adopted MND) and CEQA Guidelines, it has been determined that no additional environmental documentation for CEQA is necessary. Provided below is a summary of our findings.

Background

The Butte County Board of Supervisors (BOS) adopted a Mitigated Negative Declaration for the proposed project on January 28, 2003 (**Attachment A**). In the existing Initial Study/Adopted Mitigated Negative Declaration, the county identified a potential commencement date of 2006. The Caltrans *Seismic Design Criteria* (version 1.4) underwent substantial updates in 2006. Changes to the proposed project, including bringing the structure up to Caltrans 2006 Seismic Design Criteria, were identified subsequent to the adoption of the Mitigated Negative Declaration.

According to CEQA Guidelines §15162, a subsequent negative declaration would be required if: 1) substantial changes are proposed in the project, 2) substantial changes occur with respect to the circumstances under which the project is undertaken, or 3) new information of substantial importance.

No Substantial Changes in the Project

Based upon review of the existing Initial Study/Adopted MND, the proposed project has not been substantially changed (CEQA Guidelines §15162(a)(1)). Both the current site plans and the project description set forth in the existing CEQA analysis identified the following improvements:

- Retrofit existing hinges with hinge seat extenders

- Retrofit existing piers with steel column casings
- Retrofit foundations for six of the eight piers

The Initial Study and Adopted MND identified two potential techniques for gaining access to the structure via the Sacramento River, floating bridge/platform or temporary trestle. Through the ongoing process of site plan refinement, a temporary trestle has been identified as the most practicable approach. This is consistent with the project description in the existing Initial Study. Therefore, the currently proposed project was evaluated in the Initial Study/Adopted MND.

No Substantial Changes in Circumstances

Although there have been some changes in circumstances under which the Initial Study/Adopted MND was prepared, none of these changes involve new significant environmental effects or a substantial increase in the severity of previously identified effects (CEQA Guidelines §15162(a)(2)). The project would be required to adhere to the mitigation measures of the Adopted MND (**Attachment B**). The Biological Resources section of the Initial Study/Adopted MND identifies twelve (12) mitigation measures, including appropriate permitting, certification and/or consultation with the USACE, NOAA Fisheries, USFWS, RWQCB, and the DFG. Regulatory approval from these agencies requires adherence to standard permit conditions. The County would be required to comply with the applicable regulations, including the Clean Water Act, the federal Endangered Species Act, the California Endangered Species Act, and the Streambed/Lakebed Alteration program, and identified permit conditions. The project would be required to obtain the same permits as identified in the Initial Study/Adopted MND and mitigation measures.

Current updates to the Biological Assessment and Historic Property Survey Report/Archaeological Survey Report will ensure compliance with the standard conditions of the regulatory agencies.

No New Information of Substantial Importance

The currently proposed project improvements are consistent with the Initial Study/Adopted MND; therefore no new significant or potentially significant effects would be generated by the proposed project (CEQA Guidelines §15162(a)(3)). (**Attachment C**).

Anticipated Compliance Requirements, Permits, Agreements and Conditions

The proposed project would be required to adhere to federal requirements for FHWA-funded projects, as overseen by Caltrans (**Attachment D**). Caltrans would ensure compliance with the following:

- National Environmental Policy Act (NEPA), on behalf of FHWA
- Department of Transportation Act and the Land and Water Conservation Fund Act relative to §4(f) and §6(f) resources, respectively.

- Department of Transportation Act and the Land and Water Conservation Fund Act relative to §4(f) and §6(f) resources, respectively.
- NHPA §106 requirements, as determined through SHPO consultation.

In addition, the proposed project would be required to adhere to all identified mitigation measures in the Initial Study/Adopted MND and regulatory permit requirements. The following agencies and corresponding permits are required for the project:

- USACOE: Clean Water Act §404, Nationwide Permit; Rivers and Harbors Act §10
- RWQCB: Clean Water Act §401, Water Quality Certification
- USFWS and NOAA Fisheries: Endangered Species Act §7 Consultation
- CDFG: Fish and Game Code §1602, Streambed Alteration Agreement
- CDFG: California Endangered Species Act §2081, Incidental Take Permit

As stated previously, the project has undergone refinements as a result of project engineering and design since the preparation of the Initial Study and adoption of the MND. However, the Initial Study/Adopted MND evaluated two methods for gaining access to the bridge structure via the Sacramento River, including the proposed project; a temporary trestle. Therefore, the currently proposed project was evaluated in the Initial Study/Adopted MND. The project does not result in any substantial changes to the project or circumstances that would result in new significant effects or substantial increase in the severity of effects (CEQA Guidelines §15161 and 15164). In addition, the mitigation measures identified in the Initial Study/Adopted MND and regulatory permit requirements and standard conditions reduce all potentially significant impacts to less than significant levels. Therefore, a subsequent MND or addendum to an existing MND is not necessary.

Please feel free to contact me with any questions at (530) 343-8327 or kloeser@gallawayconsulting.net.

Sincerely,



Kamie Loeser, M.A., Senior Planner/Project Manager

Literature Cited

Air Resources Board (CA). 2008. *Government Operations Protocol for the quantification and reporting of greenhouse gas emissions inventories*. Sacramento, CA

Butte, County of. 2000. *Butte County General Plan*. Butte County, CA

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Cotton/Bridges/Associates (P&D Consultants, Inc). 2002. *Initial Study/Mitigated Negative Declaration Ord Ferry Road Bridge Seismic Retrofit Project*. Roseville, CA

Eco-Analysts. 1999. *Natural Environmental Study for Ord Ferry Road Bridge (12C-120)*.

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Attachment A

Board of Supervisors Minutes

BUTTE COUNTY BOARD OF SUPERVISORS

MINUTES - JANUARY 28, 2003

PUBLIC HEARING AND TIMED ITEMS

03-029 Timed Item - Consideration of a Mitigated Negative Declaration Regarding Environmental Impacts for the Proposed Project for the Construction of the Ord Ferry Road Bridge Across the Sacramento River - County Project Number 42071-97-1 - the proposed project is a seismic retrofit of State Bridge 12C-120 on Ord Ferry Road across the Sacramento River approximately seven miles south of Hamilton City and 10 miles west of the City of Chico. State Bridge 12C-120 is a nine-span reinforced box girder having a total length of 1308 feet and width of 32 feet 7 inches. The structure is supported on round columns founded on driven pile-supported footings. The structure has been deemed by the State to be inadequate for the seismic region in which it is located. The California Environmental Quality Act requires an environmental analysis of all projects that are not categorically exempt from analysis and which may have an effect on the environment - action requested:

1. FIND THAT THE ORD FERRY ROAD BRIDGE ACROSS THE SACRAMENTO RIVER, BUTTE COUNTY PROJECT 42071-97-1, COULD HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT; AND
2. SUBJECT TO FINDINGS II(A AND B) AS DETAILED IN THE STAFF REPORT DATED JANUARY 13, 2003, ADOPT THE NEGATIVE DECLARATION REGARDING ENVIRONMENTAL IMPACTS, WITH MITIGATIONS 1-16 AS DETAILED IN THE STAFF REPORT DATED JANUARY 13, 2003, AND AUTHORIZE THE CHAIR TO SIGN THE NEGATIVE DECLARATION REGARDING ENVIRONMENTAL IMPACTS (APPENDIX G). (**689)

MOTION: I MOVE TO FIND THAT THE ORD FERRY ROAD BRIDGE ACROSS THE SACRAMENTO RIVER, BUTTE COUNTY PROJECT 42071-97-1, COULD HAVE A SIGNIFICANT EFFECT ON THE ENVIRONMENT; AND SUBJECT TO FINDINGS II (A AND B) AS DETAILED IN THE STAFF REPORT DATED JANUARY 13, 2003, MOVE TO ADOPT THE NEGATIVE DECLARATION REGARDING ENVIRONMENTAL IMPACTS, WITH MITIGATIONS 1-16 AS DETAILED IN THE STAFF REPORT DATED JANUARY 13, 2003, AND AUTHORIZE THE CHAIR TO SIGN THE NEGATIVE DECLARATION REGARDING ENVIRONMENTAL IMPACTS (APPENDIX G).

S M

VOTE: 1 Y 2 Y 3 NP 4 Y 5 Y (Motion Carried)

REGULAR AGENDA

03-030 Operation of Neal Road Landfill - consideration of the actions necessary to assume operation of the Neal Road Landfill upon termination of the contract with Waste Management - action requested:

1. DIRECT THE DEPARTMENT OF PUBLIC WORKS TO UNDERTAKE THE OPERATION OF THE NEAL ROAD LANDFILL UPON TERMINATION OF THE CONTRACT WITH WASTE MANAGEMENT;

MINUTES

PAGE 15

JANUARY 28, 2003

Attachment B

Project Mitigation Measures

In addition to the local, state, and federal compliance reviews described in the preceding discussion, the project will be required to implement the established mitigation measures pursuant to the adopted Mitigated Negative Declaration (SCH #2002122056). The following, project-specific Mitigation Measures are recreated from the Initial Study/Adopted Mitigated Negative Declaration.

Mitigation Measure 1 (Air Quality): A Water Pollution Control Plan shall be prepared in accordance with the Contract Plans and Specifications and include an erosion control plan that involves limiting speeds of trucks on unpaved roads in the construction area, watering, and other feasible methods of dust control that do not result in sediment being deposited in the river. Construction activities shall utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. All construction equipment shall be properly maintained and operated.

Mitigation Measure 2 (Biological Resources): A qualified biological monitor must be hired by the contractor or the County to supervise the construction activities. Two staging areas have been proposed in this document: the old Ord Ferry launch site and ramp area (southwest quadrant) and the bank area on the Butte County side (northeast quadrant). Should an area other than these two sites be used, the biological monitor will assess the area for additional biological impacts. Should there be additional impacts, these must be cleared through the USFWS and NMFS prior to the start of construction.

Mitigation Measure 3 (Biological Resources): A USFWS approved biologist will be present during any activities that may involve the take of a listed species. This includes but is not limited to installation of the cofferdams, all dewatering activities and removal of the cofferdams. Sediment plumes occurring from the proposed work shall be monitored to ensure that the contractor is meeting the regulations set forth by the water quality permits.

Mitigation Measure 4 (Biological Resources): During construction of the cofferdams, a monitor, approved by National Marine Fisheries Service (NMFS), must be present during installation to ensure that no fish are trapped in the cofferdam. Methods used to remove fish from the cofferdam must be approved by NMFS. Screens must be placed on pumps used to drain sealed cofferdams and also must conform to NMFS screening standards. The approved biologist will prepare a fish salvage plan prior to the start of construction that will discuss in detail the methods to be used to minimize the take of fish during construction. It is anticipated that seining or electro shock methods will be used to salvage fish from areas that need to be dewatered.

Mitigation Measure 5 (Biological Resources): Using native vegetation, primarily consisting of willows the bare slope areas and the areas temporarily disturbed

will be replanted. Mitigation of 3:1 for temporary impacts will be completed on site.

Mitigation Measure 6 (Biological Resources): Construction work will be limited to the period from May 15 to October 15 within the main channel.

Mitigation Measure 7 (Biological Resources): No work will occur in the oxbow slough area, and access to the construction area will not be gained by use of the boat ramp.

Mitigation Measure 8 (Biological Resources): Construction will utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. These practices consist of application of permanent and temporary construction treatments for controlling stormwater runoff and preventing discharges of excessively turbid water from the job site. BMPs include treatment controls, soil stabilization practices, mitigation measures, scheduling, and contract Standard Special Provisions (SSP). No concrete washings or water from concrete will be allowed to flow into the river. No concrete will be poured within flowing water in the river.

The following measures will also be incorporated:

- Butte County will Obtain and 401 water quality permit and a DFG 1601 Streambed Alteration Agreement Both of these permits require procedures to minimize impacts to the live stream.
- All stockpiled material and equipment will be placed away from the river to prevent erosion.
- Access points will be limited to the two locations, discussed previously, in order to minimize extensive erosion into the river.
- Temporary measures including straw bales, silt fencing, and filter fabric will be used to prevent erosion between work periods.
- For permanent erosion control, seeding and revegetation will be conducted the fall directly following the end of construction to coincide with the rain.
- All materials and fluids that may be harmful to the aquatic system will be stored in the staging areas which are more than 25 feet away from the river.,
- The contractor will have on hand absorbent material to be used in case of accidental spills.
- All construction equipment must be in good working order and clean of significant fuel and lubrication and is not to have leaks

Mitigation Measure 9 (Biological Resources): The County will contract with Wildlands, Inc. to mitigate for take of VELB habitat Because the County may have no plants to transplant, due to previous damage, they will follow a 1.25 ratio suggested by USFWS The 1.25 was suggested to compensate for not transplanting an existing healthy bush. The total of seedlings to be mitigated will be 425 or 43, which is 86 conservation areas (basins) equal to 15300 sq ft or 035 acres If

complete basins are purchased from a mitigation bank, it will be an allotment of 9 basins.

Mitigation Measure 10 (Biological Resources): An approved biologist will conduct a pre-construction survey 24-hours prior to the start of construction. If a giant garter snake is located at the site, construction will not begin until the snake is captured and relocated or removes itself from the Project area. All results of these activities will be reported to the USFWS. No grading or excavating will take place within 30 feet of GGS habitat between October 1 and May 1. All on-site construction personnel shall be notified of the potential presence of the GGS and that all snakes found are to be left unharmed. During construction, all surface debris shall be carefully removed to avoid contact with, or disturbance to, GGS.

Mitigation Measure 11 (Biological Resources): The Regional Water Quality Control Board (RWQCB) shall be contacted for a Water Quality Certification Waiver following review and concurrence of the Project from the U.S. Army Corps of Engineers.

Mitigation Measure 12 (Biological Resources): The Contractor shall be made aware of the presence of Cliff Swallows which nest under the bridge and their subsequent protection under the Federal Migratory Bird Treaty Act of 1918. Measures shall be taken to insure compliance with this law. These measures may include netting or sheeting hung from the bridge deck to below the bridge deck to completely exclude birds from nesting. If implemented, these measures must be in place March 1. Removal of nests, where necessary, shall occur if and only if it is taken down prior to the completion of the nest and prior to any egg laying activity.

Mitigation Measure 13 (Biological Resources): The area within the cofferdam (minus the area of the existing pier dimensions) shall be calculated and mitigated at a ratio of 6:1. This calculation results in 0.36 acres of Sacramento splittail habitat. Caltrans has directed this Ord Ferry Bridge project mitigation be included as part of the Caltrans Butte City Bridge Project. This project is located on State Route 162 on the Sacramento River approximately 15 miles south of the Ord Ferry Bridge.

The mitigation proposed at the Butte City Bridge involves the acquisition of property that contains riverbank adjacent to riverbed. The agreement is that the property can never be stabilized, protected, or improved. Over time, this area will erode naturally and create debris catches and eddies that are valuable habitat for species like the Sacramento splittail.

Mitigation Measure 14 (Cultural Resources): Should grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans, glass, etc.; structural remains; human skeletal remains), work within 50 feet

of the find shall cease immediately until a qualified professional archaeologist can be consulted to evaluate the remains and implement appropriate mitigation procedures. Should human skeletal remains be encountered, State law requires immediate notification of the County Coroner. Should the County Coroner determine that such remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State law, to arrange for Native American participation in determining the disposition of such remains.

Mitigation Measure 15 (Noise): *The use of pile driving and any necessary blasting equipment shall be limited to daylight hours, between 7:00 A.M. and 9:00 P.M.*

Mitigation Measure 16 (Noise): *Blasting shall only be conducted under the supervision of a qualified technician authorized by the County Public Works Department.*

Attachment C

Excerpts from the CEQA Guidelines

Subsequent Negative Declarations

Per CEQA Guidelines §15162 (*Subsequent EIRs and Negative Declarations*), a subsequent Negative Declaration would be warranted under the following circumstances:

§15162 SUBSEQUENT EIRS AND NEGATIVE DECLARATIONS

- (a) *When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:*
- (1) *Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
 - (2) *Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
 - (3) *New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:*
 - (A) *The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
 - (B) *Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
 - (C) *Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
 - (D) *Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*
- (b) *If changes to a project or its circumstances occur or new information becomes available after adoption of a negative declaration, the lead agency shall prepare a subsequent EIR if required under subdivision (a). Otherwise the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation.*
- (c) *Once a project has been approved, the lead agency's role in project approval is completed, unless further discretionary approval on that project is required. Information appearing after an approval does not require reopening of that approval. If after the project is approved, any of the conditions described in subdivision (a) occurs, a subsequent EIR or negative declaration shall only be prepared by the public agency which grants the next discretionary approval for the project, if any. In this situation no other responsible agency shall grant an approval for the project until the subsequent EIR has been certified or subsequent negative declaration adopted.*
- (d) *A subsequent EIR or subsequent negative declaration shall be given the same notice and public review as required under Section 15087 or Section 15072. A subsequent EIR or negative declaration shall state where the previous document is available and can be reviewed.*

Significant Effects

Much of the discussion in §15162 is centered on the identification of new significant and/or potentially significant effects. The following definition is recreated from Article 20 (*Definitions*) of the CEQA Guidelines:

§15382 SIGNIFICANT EFFECT ON THE ENVIRONMENT

“Significant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

Addenda to Negative Declarations

Finally, the following is a description of procedural requirements for addenda to existing CEQA analyses, as recreated from the CEQA Guidelines:

§15164 ADDENDUM TO AN EIR OR NEGATIVE DECLARATION

- (a) The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*
- (b) An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred.*
- (c) An addendum need not be circulated for public review but can be included in or attached to the final EIR or adopted negative declaration.*
- (d) The decision making body shall consider the addendum with the final EIR or adopted negative declaration prior to making a decision on the project.*
- (e) A brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR, the lead agency’s findings on the project, or elsewhere in the record. The explanation must be supported by substantial evidence.*

Attachment D

Caltrans Federal Compliance Requirements

The following represent federal laws, regulations, and executive orders that may be considered during federal compliance evaluations conducted by Caltrans:

Caltrans Federal Compliance Requirements

General

- National Environmental Policy Act
- Council on Environmental Quality Regulations
- Department of Transportation Act of 1966, §4(f) and 6(f)
- Federal-Aid Highway Act of 1970
- Intermodal Surface Transportation Efficiency Act of 1991
- Transportation Efficiency Act for the 21ST Century
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
- Director's Title VI Statement (August 2009)
- Environmental Impact and Related Procedures, 23CFR
- FHWA (California Division) NEPA Document Checklist
- FHWA Environmental Guidebook
- FHWA Revised Guidance on Cooperating Agencies (1992)
- T6640.8A Guidance for Preparing and Processing Environmental and §4(f) Documents (1987)
- FHWA/FTA Public Involvement Techniques for Transportation Decision Making (1996)

Physical Environment

- Clean Air Act, 1990
- Clean Water Act, 1977 and 1987
- CERCLA, 1980
- Federal Water Pollution Control Act of 1972
- Noise Control Act of 1972
- Pollution Prevention Act of 1990
- Resource Conservation and Recovery Act of 1976
- Federal Land Policy and Management Act of 1976

Natural Environment

- Emergency Wetlands Resources Act of 1986
- Endangered Species Act of 1973
- Executive Order 11990, Protection of Wetlands
- Executive Order 12962, Recreational Fisheries
- Executive Order 13112, Invasive Species
- Executive Order 13186, Migratory Birds
- Fish and Wildlife Coordination Act of 1934
- Marine Mammal Protection Act of 1972
- Magnuson-Stevens Fishery Conservation and Management Act of 1976
- Marine Protection Research and Sanctuaries Act of 1972
- Migratory Bird Treaty Act
- Water Bank Act Wetlands Mitigation Banks, ISTEPA, §1006-1007
- Wildflowers, Surface Transportation and Uniform Relocation Act of 1987

Cultural Resources

Caltrans Federal Compliance Requirements

- Act for the Preservation of American Antiquities (1906)
- Archaeological and Historical Preservation Act of 1974
- Archeological Resources Protection Act of 1979
- Executive Order 11593 - Protection and Enhancement of Cultural Environment (1971)
- Executive Order 13007 - Indian Sacred Sites (1996)
- Executive Order 13287 - Preserve America (2003)
- Historic Bridges, Surface Transportation and Uniform Relocation Act of 1987 §123(f)
- Historic Sites and Buildings Act of 1935
- National Historic Preservation Act of 1966, §106
- Native American Graves Protection and Repatriation Act of 1990
- Reservoir Salvage Act of 1960

Communny and Land Use

- Coastal Zone Management Act of 1972
- Coastal Zone Management Act Reauthorization Amendments Of 1990
- Executive Order 11988, Floodplain Management
- Flood Disaster Protection Act
- DOT EO5650.2, Floodplain Management and Protection
- Land and Water Conservation Fund Act of 1964, §6(f)
- National Trails System Act
- Rivers and Harbors Appropriation Act of 1899, §9 – §10
- Wild and Scenic Rivers Act of 1968
- Wilderness Act of 1964
- American Indian Religious Freedom Act of 1978
- Executive Order 12898 - Environmental Justice
- CEQ Guidance - Environmental Justice (1997b)
- EO13166, Improving Access (Limited English)
- Farmland Protection Policy Act of 1981
- Public Hearings, 23 USC 128
- Civil Rights Act of 1964, Title VI
- Uniform Relocation Assistance and Real Property Acquisition Act of 1970

3795 CEQA

CC: 242.3795

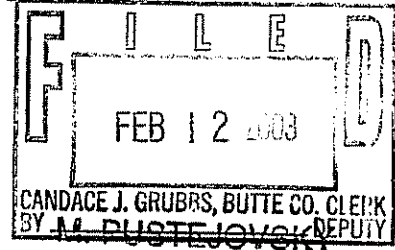
NOTICE OF DETERMINATION

To: X Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Butte County Department of Public Works
7 County Center Drive
Oroville, CA 95965

X County Clerk
County of Butte
25 County Center Drive
Oroville, CA 95965

COPY



Subject:

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Ord Ferry Road Bridge Seismic Retrofit

Project Title

2002122056	Mike Crump	(530) 538-7681
State Clearinghouse Number (if submitted to Clearinghouse)	Lead Agency Contact Person	Area Code/Telephone/Extension

Ord Ferry Road across Sacramento River, approximately 10 south-southwest of Chico (Butte County)

Project Location (include county)

Project Description:

The proposed project is a seismic retrofit of State bridge 12C-120 on Ord Ferry Road across the Sacramento River approximately seven miles south of Hamilton City, and 10 miles west of the city of Chico. State bridge 12C-120 is a nine-span reinforced box girder having a total length of 1308 feet and width of 32 feet 7 inches. The structure is supported on round columns founded on driven pile-supported footings. This structure has been deemed by the State to be inadequate for the seismic region in which it is located.

This is to advise that the Butte County Department of Public Works has adopted an environmental document for

Lead Agency Responsible Agency

the above described project on January 28, 2003 and has made the following determinations regarding the above

(Date)

described project:

1. The project [will will not] have a significant effect on the environment.
2. The project is within the scope of the _____ (campus name) Master Plan Program EIR and pursuant to Section 15168(c)(2) of CEQA Guidelines no further environmental document is required.
3. An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
 A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
4. Mitigation measures [were were not] made a condition of the approval of the project.
5. A statement of Overriding Considerations [was was not] adopted for this project.
6. Findings [were were not] made pursuant to the provisions of CEQA.

This is to certify that the final Initial Study/Mitigated Negative Declaration with comments and responses and record of project approval is available to the General Public at:

Butte County Department of Public Works
7 County Center Drive
Oroville, CA

Mike Crump
Signature (Public Agency)

2/11/03
Date

Director of Public Works
Title

DECLARATION OF FEES DUE
(California Fish and Game Code Section 711.4)

NAME AND ADDRESS OF APPLICANT

Butte County Board of Supervisors
7 County Center Drive
Oroville, CA 95965

FILING NO.

Project Title/file number: Ord Ferry Road Bridge Seismic Retrofit across Sacramento River
APN# n/a – within County road right of way

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT:

1. NOTICE OF EXEMPTION/STATEMENT OF EXEMPTION
 - () A. Statutorily or Categorically Exempt
\$25.00 Clerk's Documentary Handling Fee
 - (X) B. De Minimus Impact - Certificate of Fee Exemption
\$25.00 Clerk's Documentary Handling Fee

2. NOTICE OF DETERMINATION - FEE REQUIRED
 - () A. Negative Declaration
\$1,250 State Filing Fee
\$25.00 Clerk's Documentary Handling Fee
 - () B. Environmental Impact Report
\$850 State Filing Fee
\$25.00 Clerk's Documentary Handling Fee

3. () OTHER (Specify)
\$25.00 Clerk's Documentary Handling Fee

PAYMENT / NON-PAYMENT OF FEES:

1. () PAYMENT: The above fees have been paid.
See attached receipt(s).

2. (X) NON-PAYMENT: The above fees are required. Not paid.

Chief Planning Official

By: Yvonne Christopher

Title: Director - Development Services

Lead Agency: Butte County Department of
Development Services

Date: 2/11/03

TWO COPIES OF THIS FORM MUST BE COMPLETED AND SUBMITTED WITH ALL ENVIRONMENTAL DOCUMENTS FILED WITH THE BUTTE COUNTY CLERK'S OFFICE

THREE COPIES OF ALL NECESSARY DOCUMENTATION ARE REQUIRED FOR FILING.

ALL APPLICABLE FEES ARE DUE AND PAYABLE PRIOR TO THE FILING OF ANY ENVIRONMENTAL DOCUMENT WITH THE BUTTE COUNTY CLERK'S OFFICE MAKE CHECKS PAYABLE TO THE COUNTY OF BUTTE

**CALIFORNIA DEPARTMENT OF FISH AND GAME
CERTIFICATE OF FILING FEE EXEMPTION**

De Minimus Impact Finding
(Fish and Game Code Sec.711.4; Section 753.5c, Title 14, California Code of Regulations)

**Ord Ferry Road Bridge Seismic Retrofit across Sacramento River
Federal Bridge Replacement Project No. STPLZ-5912(019
State Bridge No. 12C-0120, County Project No. 42071-97-1**

The proposed project is a seismic retrofit of State bridge 12C-120 on Ord Ferry Road across the Sacramento River approximately seven miles south of Hamilton City, and 10 miles west of the city of Chico. State bridge 12C-120 is a nine-span reinforced box girder having a total length of 1308 feet and width of 32 feet 7 inches. The structure is supported on round columns founded on driven pile-supported footings. This structure has been deemed by the State to be inadequate for the seismic region in which it is located.

Findings of Exemption (attach as necessary):

1. The County of Butte has conducted an initial study and prepared a Negative Declaration so as to evaluate the potential of this project for adverse environmental impact.
2. When considering the record as a whole, there is no evidence before the County that the project will have a potential for an adverse impact on wildlife resources or the habitat upon which the wildlife depends.
3. The County of Butte has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in Section 753.5 (d), of Title 14, California Code of Regulations, if applicable.
4. The project is hereby found to de Minimus in it's effect on wildlife and exempt from the State Fish and Game filing fees required by Section 711.4 of the Fish and Game Code.

Certification:

I hereby certify that the County of Butte has made the above findings of fact and that based upon the initial study and hearing record the project will not be individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and game Code.

By:


Mike Crump
Director

Lead Agency: County of Butte
Department of Public Works

Date: 2/11/03

APPENDIX G

NEGATIVE DECLARATION REGARDING ENVIRONMENTAL IMPACT

1. **NOTICE IS HEREBY GIVEN** that the project described below has been reviewed pursuant to the provisions of the California Environmental Quality Act of 1970 (Public Resources Code 2110, et. Seq.) and a determination has been made that it will not have a significant effect upon the environment.
2. **DESCRIPTION OF PROJECT:** Ord Ferry Road Bridge across Sacramento River, Butte County Project Number 42071-97-1.
3. **LOCATION OF PROJECT:** Approximately 7 miles south of Hamilton City, and 10 miles west of the City of Chico on Ord Ferry Road at Sacramento River.
4. **NAME AND ADDRESS OF PROJECT APPLICANT:**
County of Butte
Department of Public Works
7 County Center Drive
Oroville, CA 95965
5. **MITIGATION MEASURES:**
See attached
6. A copy of the Initial Study regarding the environmental effect of this project is on file in the Department of Public Works at 7 County Center Drive, Oroville, CA.

This study was:

Adopted as presented.

Adopted with changes. Specific modifications and supporting reasons are attached.

7. A public hearing on this Negative Declaration was held by the decision making body.

Hearing Body: Butte County Board of Supervisors.

Date: January 28, 2003

Determination:

On the basis of the Initial Study of environmental Impact, the information presented at hearings, comments received on the proposal, and our own knowledge and independent research:

We find the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** is hereby adopted.

We find that the project **COULD** have a significant effect on the environment, but will not in this case because of attached mitigation measures described in item 5 above, which are by this reference made conditions of project approval. A conditional **NEGATIVE DECLARATION** is hereby adopted.



Signature

Chair, Butte County Board of Supervisors
Title

JAN 28 2003

Date:

MITIGATION MEASURES

AIR QUALITY

To reduce potential temporary increases in nonattainment pollutants, the following mitigation measure is required:

Mitigation Measure 1:

A Water Pollution Control Plan shall be prepared in accordance with the Contract Plans and Specifications and include an erosion control plan that involves limiting speeds of trucks on unpaved roads in the construction area, watering, and other feasible methods of dust control that do not result in sediment being deposited in the river. Construction activities shall utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. All construction equipment shall be properly maintained and operated.

The following mitigation measures are designed to reduce impacts to the Chinook Salmon, Central Valley Steelhead, River Lamprey and Green Sturgeon; the Sacramento splittail; and, the Valley Elderberry Longhorn Beetle (VELB).

BIOLOGICAL RESOURCES

Mitigation Measure 2:

A qualified biological monitor must be hired by the contractor or the County to supervise the construction activities. Two staging areas have been proposed in this document: the old Ord Ferry launch site and ramp area (southwest quadrant) and the bank area on the Butte County side (northeast quadrant). Should an area other than these two sites be used, the biological monitor will assess the area for additional biological impacts. Should there be additional impacts, these must be cleared through the USFWS and NMFS prior to the start of construction.

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A USFWS approved biologist will be present during any activities that may involve the take of a listed species. This includes but is not limited to installation of the cofferdams, all dewatering activities and removal of the cofferdams. Sediment plumes occurring from the proposed work shall be monitored to ensure that the contractor is meeting the regulations set forth by the water quality permits.

Mitigation Measure 4:

During construction of the cofferdams, a monitor, approved by National Marine Fisheries Service (NMFS), must be present during installation to ensure that no fish are trapped in the cofferdam. Methods used to remove fish from the cofferdam must be approved by NMFS. Screens must be placed on pumps used to drain sealed cofferdams and also must conform to NMFS screening standards. The approved biologist will prepare a fish salvage plan prior to the start of construction that will discuss in detail the methods to be used to minimize the take of fish during construction. It is anticipated that seining or electro shock methods will be used to salvage fish from areas that need to be dewatered.

Mitigation Measure 5:

Using native vegetation, primarily consisting of willows the bare slope areas and the areas temporarily disturbed will be replanted. Mitigation of 3:1 for temporary impacts will be completed on site.

Mitigation Measure 6:

Construction work will be limited to the period from May 15 to October 15 within the main channel.

Mitigation Measure 7:

No work will occur in the oxbow slough area, and access to the construction area will not be gained by use of the boat ramp.

Mitigation Measure 8:

Construction will utilize Best Management Practices (BMP) to control silt and erosion of exposed soils. These practices consist of application of permanent and temporary construction treatments for controlling stormwater runoff and preventing discharges of excessively turbid water from the job site. BMPs include treatment controls, soil stabilization practices, mitigation measures, scheduling, and contract Standard Special Provisions (SSP). No concrete washings or water from concrete will be allowed to flow into the river. No concrete will be poured within flowing water in the river.

The following measures will also be incorporated:

- Butte County will Obtain and 401 water quality permit and a DFG 1601 Streambed Alteration Agreement. Both of these permits require procedures to minimize impacts to the live stream.
- All stockpiled material and equipment will be placed away from the river to prevent erosion.
- Access points will be limited to the two locations, discussed previously, in order to minimize extensive erosion into the river.
- Temporary measures including straw bales, silt fencing, and filter fabric will be used to prevent erosion between work periods.
- For permanent erosion control, seeding and revegetation will be conducted the fall directly following the end of construction to coincide with the rain.
- All materials and fluids that may be harmful to the aquatic system will be stored in the staging areas which are more than 25 feet away from the river.
- The contractor will have on hand absorbent material to be used in case of accidental spills.
- All construction equipment must be in good working order and clean of significant fuel and lubrication and is not to have leaks

Mitigation Measure 9:

The County will contract with Wildlands, Inc. to mitigate for take of VELB habitat. Because the County may have no plants to transplant, due to previous damage, they will follow a 1.25 ratio suggested by USFWS. The 1.25 was suggested to compensate for not transplanting an existing healthy bush. The total of seedlings to be mitigated will be 42.5 or 43, which is 8.6 conservation areas (basins) equal to 15300 sq ft or 0.35 acres. If complete basins are purchased from a mitigation bank, it will be an allotment of 9 basins.

Mitigation Measure 10:

An approved biologist will conduct a pre-construction survey 24-hours prior to the start of construction. If a giant garter snake is located at the site, construction will not begin until the snake is captured and relocated or removes itself from the Project area. All results of these activities will be reported to the USFWS. No grading or excavating will take place within 30 feet of GGS habitat between October 1 and May 1. All on-site construction personnel shall be notified of the potential presence of the GGS and that all snakes found are to be left unharmed. During construction, all surface debris shall be carefully removed to avoid contact with, or disturbance to, GGS.

The following mitigation measure is recommended to ensure compliance with provisions of the federal Clean Water Act and to ensure a less-than-significant impact:

Mitigation Measure #11:

The Regional Water Quality Control Board (RWQCB) shall be contacted for a Water Quality Certification Waiver following review and concurrence of the Project from the U.S. Army Corps of Engineers.

Impact to movement of these migratory species is considered significant without the incorporation of mitigation measures, specified below:

Mitigation Measure #12:

The Contractor shall be made aware of the presence of Cliff Swallows which nest under the bridge and their subsequent protection under the Federal Migratory Bird Treaty Act of 1918. Measures shall be taken to insure compliance with this law. These measures may include netting or sheeting hung from the bridge deck to below the bridge deck to completely exclude birds from nesting. If implemented, these measures must be in place March 1. Removal of nests, where necessary, shall occur if and only if it is taken down prior to the completion of the nest and prior to any egg laying activity.

Mitigation Measure #13:

The area within the cofferdam (minus the area of the existing pier dimensions) shall be calculated and mitigated at a ratio of 6:1. This calculation results in 0.36 acres of Sacramento splittail habitat. Caltrans has directed this Ord Ferry Bridge project mitigation be included as part of the Caltrans Butte City Bridge Project. This project is located on State Route 162 on the Sacramento River, approximately 15 miles south of the Ord Ferry Bridge.

The mitigation proposed at the Butte City Bridge involves the acquisition of property that contains riverbank adjacent to riverbed. The agreement is that the property can never be stabilized, protected, or improved. Over time, this area will erode naturally and create debris catches and eddies that are valuable habitat for species like the Sacramento splittail.

CULTURAL RESOURCES

It is possible that there are heretofore undiscovered resources that could be encountered during site development activities. Accordingly, the following mitigation measure is proposed to mitigate potential impacts to a less-than-significant level:

Mitigation Measure #14:

Should grading activities reveal the presence of prehistoric or historic cultural resources (i.e., artifact concentrations, including arrowheads and other stone tools or chipping debris, cans, glass, etc.; structural remains; human skeletal remains), work within 50 feet of the find shall cease immediately until a qualified professional archaeologist can be consulted to evaluate the remains and implement appropriate mitigation procedures. Should human skeletal remains be encountered, State law requires immediate notification of the County Coroner. Should the County Coroner determine that such remains are in an archaeological context, the Native American Heritage Commission in Sacramento shall be notified immediately, pursuant to State law, to arrange for Native American participation in determining the disposition of such remains.

NOISE

The following mitigation measures are recommended to minimize noise impacts on the rural environment:

Mitigation Measure #15:

The use of pile driving and any necessary blasting equipment shall be limited to daylight hours, between 7:00 A.M. and 9:00 P.M.

Mitigation Measure #16:

Blasting shall only be conducted under the supervision of a qualified technician authorized by the County Public Works Department.