Appendix F Draft Environmental Document Comments

STATE OF CALIFORNIA

Governor's Office of Planning and Research

State Clearinghouse and Planning Unit

Arnold Schwarzenegger
Governor

Sean Walsh
Director

November 9, 2006

Christopher Quinsey
California Department of Transportation
1657 Riverside Drive
Redding, CA 96001

Subject: Antler Bridge Replacement Project
SCH#: 2006102048

Dear Christopher Quinsey:

The State Clearinghouse submitted the above named Mitigated Negative Declaration to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on November 8, 2006, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

> "A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Terry Roberts
Director, State Clearinghouse

Enclosures
cc: Resources Agency

1400 TENTH STREET P.O. BOX 3044 SACRAMENTO, CALIFORNIA 95812-3044
TEL (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report
State Clearinghouse Data Base

SCH# 2006102048
Project Title Antler Bridge Replacement Project
Lead Agency Caltrans #2

Type MN Mitigated Negative Declaration
Description D

The proposed project is located on I-5 in Shasta County between post miles R39.0 and R41.2. The project proposes construction of a new bridge adjacent to the existing bridge, removal of the existing bridge, and realignment of a 0.4 mile section of highway south of the bridge to improve safety and operations.

Lead Agency Contact

Name Christopher Quiney
Agency California Department of Transportation
Phone (530) 225-3174 **Fax**
email
Address 1657 Riverside Drive
City Redding **State** CA **Zip** 96001

Project Location

County Shasta
City
Region
Cross Streets Lakeshore Drive Interchange
Parcel No.
Township **Range** **Section** **Base**

Proximity to:

Highways
Airports
Railways UPRR
Waterways Shasta Lake
Schools Canyon ES
Land Use Interstate highway, commercial, residential, and public recreation.

Project Issues Aesthetic/Visual; Air Quality; Archaeologic-Historic; Cumulative Effects; Landuse; Noise; Recreation/Parks; Soil Erosion/Compaction/Grading; Toxic/Hazardous; Vegetation; Water Quality; Wetland/Riparian; Wildlife

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Reviewing Agencies Resources Agency; Regional Water Quality Control Bd., Region 5 (Redding); Department of Parks and Recreation; Native American Heritage Commission; Integrated Waste Management Board; Department of Fish and Game, Region 1; Department of Water Resources; California Highway Patrol; Air Resources Board, Transportation Projects; Department of Toxic Substances Control

---

Date Received 10/10/2006 **Start of Review** 10/10/2006 **End of Review** 11/08/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390
Web Site www.nahc.ca.gov
e-mail: ds_nahc@pacbell.net

RECEIVED
OCT 25 2006
STATE CLEARING HOUSE

Clar 11/8/06 e

October 19, 2006

Mr. Christopher Quiney
City of Victorville
14343 Civic Drive
Victorville, CA 92392

Re: SCH#2006102048; CEQA Notice of Completion/NEPA Environmental Assessment (EA) and Finding of No Significant Impact (FONSI); Mitigated Negative Declaration for Replacement of the Antlers Bridge (Bridge No. 06-0069) on Interstate 5 near Lakehead Community; Shasta County, California

Dear Mr. Quiney:

Thank you for the opportunity to comment on the above-referenced document. The Native American Heritage Commission is the state's Trustee Agency for Native American Cultural Resources. With regard to National Environmental Policy Act (NEPA0 Environmental Assessment, state law does not apply. However, we urge the federal parties involved to consult the Native American tribes and tribal representatives on the attached list.

The California Environmental Quality Act (CEQA) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR per CEQA guidelines § 15064.5(b)(c). In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE)', and if so, to mitigate that effect. To adequately assess the project-related impacts on historical resources, the Commission recommends the following action:

√ Contact the appropriate California Historic Resources Information Center (CHRIS). The record search will determine:

- If a part or the entire APE has been previously surveyed for cultural resources.
- If any known cultural resources have already been recorded in or adjacent to the APE.
- If the probability is low, moderate, or high that cultural resources are located in the APE.
- If a survey is required to determine whether previously unrecorded cultural resources are present.

√ If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
- The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.

√ Contact the Native American Heritage Commission (NAHC) for:

- A Sacred Lands File (SLF) search of the project area and information on tribal contacts in the project vicinity who may have additional cultural resource information. Please provide this office with the following citation format to assist with the Sacred Lands File search request: USGS 7.5-minute quadrangle citation with name, township, range and section: .

- The NAHC advises the use of Native American Monitors to ensure proper identification and care given cultural resources that may be discovered. The NAHC recommends that contact be made with Native American Contacts on the attached list to get their input on potential project impact, particularly the contacts of the on the list.

√ Lack of surface evidence of archeological resources does not preclude their subsurface existence.

- Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
- Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.

√ Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans.

* CEQA Guidelines, Section 15064.5(d) requires the lead agency to work with the Native Americans identified by this Commission if the initial Study identifies the presence or likely presence of Native American human remains within the APE. CEQA Guidelines provide for agreements with Native American, identified by the NAHC, to assure the appropriate and dignified treatment of Native American human remains and any associated grave liens.

√ Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (d) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.

√ Lead agencies should consider avoidance, as defined in § 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Dave Singleton
Program Analyst

Cc: State Clearinghouse
Attachment: List of Native American Contacts

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF TRANSPORTATION
P.O. Box 496073
Redding, CA 96049-6073
TTY Telephone (530)225-2019
FAX (530)225-3019
TELEPHONE (530) 225-3308

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November 21, 2006

Mr. Dave Singleton
Native American Heritage Commission
915 Capital Mall, Room 364
Sacramento, CA 95814

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement
SCH# 2006102048

Dear Mr. Singleton:

Thank you for responding to our request for comments on the draft Initial Study/Environmental Assessment for the proposed Antlers Bridge replacement project on Interstate 5, in Shasta County, near the community of Lakehead. We acknowledge your recommendations to comply with the applicable state and federal regulations and guidelines pertaining to cultural resources and thank you for the information your office has provided during the planning phase of this project.

Further inquiries about the proposed project can be directed to the project's environmental coordinator, Christopher Quincy, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Chief
Environmental Management Office – R1 Branch

COMMENT

FORM

PLEASE USE THE FOLLOWING SECTION FOR YOUR **COMMENTS, SUGGESTIONS AND CONCERNS**

COMMENTS, SUGGESTIONS AND CONCERNS

CUT CURVES TO STRAIGHT LINES TO MANY CURVES ALREADY

SAFETY - LOW LEVEL LIGHTING NEEDED ON THE BRIDGE TO SEE PEOPLE, ACCIDENTS, AND OBJECTS IN THE ROADWAY

THANK YOU FOR THE PROSPECT OF A NEW BRIDGE

THANK YOU

OPTIONAL INFORMATION (PLEASE PRINT CLEARLY)
Names and addresses are not confidential in the event there is a public records request for the information.

Name _____ Organization SELF

Address _____ City REDDING State CA Zip 96003

Caltrans Improves Mobility Across California

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF TRANSPORTATION
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December 8, 2006

Mr. and Mrs.

Redding, CA 96003

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement

Dear Mr. and Mrs.

Thank you for attending the public information meeting for the proposed Antlers Bridge replacement project. We appreciate the time you are taking to participate in the development of this important transportation project.

Following are the comments you provided during the draft environmental document circulation period and our response:

Comments
"Cut curves to straight lines; too many curves already." "Safety – low level lighting is needed on the bridge to see people, accidents, and objects in the roadway."

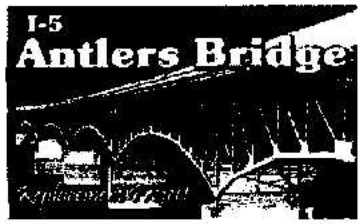
Response
The project proposes to straighten a 0.42 mile section of highway immediately south of the bridge to improve driver site distance and reaction time. In addition, the new bridge will have wider shoulders and an alignment that is straighter than that of the existing bridge.

Safety lighting is typically placed at highway entrance and exit points where traffic maneuvering routinely occurs and potential traffic conflicts exist. Within the limits of the proposed project, there are no entrance or exit points, therefore, safety lighting is not proposed with this project.

If you have any questions or comments or would like additional information regarding this project, please contact the environmental coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Branch Chief
Environmental Management Office - Redding



COMMENT

PLEASE USE THE FOLLOWING SECTION FOR YOUR **COMMENTS, SUGGESTIONS AND CONCERNS**

COMMENTS, SUGGESTIONS AND CONCERNS

1) In the event there is a need for closure of I-5 for movement of heavy equipment, blasting, etc., what provisions are in place for emergency response vehicles? Is there a planned identification program for identification of local traffic ie from Redding to O'Brien or Salt Creek to allow commutes?

2) Current traffic noise is significant. Is there a plan or provision for reduction of traffic noise, such as signage requesting trucks to reduce noise in the residential area?

3) What provisions are planned for cyclist and pedestrian access and safety? There is no other pedestrian route in the area and pedestrian traffic should be addressed.

Thank you

THANK YOU

OPTIONAL INFORMATION (PLEASE PRINT CLEARLY)
Names and addresses are not confidential in the event there is a public records request for the information.

Name [illegible] Organization

Address [illegible] City Lakehead State CA Zip 96051

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ARNOLD SCHWARZENEGGER, *Governor*

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December 8, 2006

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement

Lakehead, CA 96051

Dear Ms.

Thank you for attending the public information meeting for the proposed Antlers Bridge replacement project. We appreciate the time you are taking to participate in the development of this important transportation project.

Following are the written comments you provided during the draft environmental document circulation period and a response to each comment:

Question
"In the event there is a need for closure of I-5 for movement of heavy equipment, blasting, etc., what provisions are in place for emergency response vehicles? Is there a planned identification program for identification of local traffic, i.e., from Redding to O'Brien or Salt Creek to allow commutes?"

Response
It is not anticipated that I-5 would be temporarily closed during construction. In the event of heavy equipment mobilization, blasting, etc., it is likely that temporary detours or rolling closures, performed by the California Highway Patrol, would be used. Caltrans will initiate a public relations campaign during construction, which will provide construction updates via public radio and television stations, newspapers, and electronic signs on the highway. These updates would advise the public in advance of any detours or construction operations that would affect traffic in the vicinity of the construction zone.

Question
"Current traffic noise is significant. Is there a plan or provision for reduction of traffic noise such as signage requesting trucks to reduce noise in the residential area?"

Response
A noise study was conducted by Caltrans, which measured peak hour traffic noise in the vicinity of the Antlers Campground at 56 decibels. It is estimated that the proposed project will result in an increase in peak hour traffic noise to approximately 60 decibels at the campground. Noise levels at the location you refer to may differ, however, federal regulations define a noise impact in a residential area as an increase in the noise level that approaches (within 1 decibel) or exceeds 67 decibels. A substantial noise level increase is defined as a predicted noise level that exceeds the existing noise level by 12 decibels.

Large trucks often use compression brakes, which help slow them down using engine compression. Although the compression brake increases the engine noise level when in use, it is an

important safety feature which assists the standard wheel brakes. It is possible that the proposed highway improvements will help reduce the need for trucks to rely on compression brakes to descend the grade.

If a specific location and associated noise problem were identified, Caltrans could evaluate the problem and offer a more detailed response. Based upon our evaluation of the proposed project and federal regulations pertaining to highway noise, no noise abatement action is planned with the implementation of the project.

Question
"What provisions are planned for cyclist and pedestrian access and safety? There is no other pedestrian route in the area and pedestrian traffic should be addressed."

Response
The following features are proposed for the Antlers Bridge replacement project to improve access and safety for bicyclists:

- The bridge will have paved, 10-foot wide shoulders in both directions
- Bicycle rated grates will cover drainage inlets in appropriate areas
- Rumble strips will be strategically located at the bridge approaches to allow bicyclists to enter and exit the bridge without crossing over rumble strips
- Standard bicycle rated railing will be installed atop both sides of the bridge guard rails

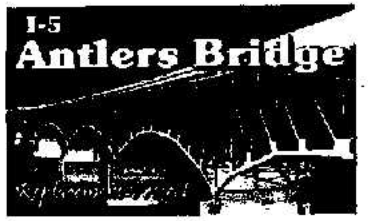
With regard to pedestrians on the Antlers Bridge, pedestrians are prohibited on Interstate 5 due to its interstate designation. Section 21960 of the California Vehicle Code addresses pedestrian and bicycle access to freeways. Essentially, it requires that the local jurisdiction submit a request to Caltrans asking for a section of freeway to be opened to pedestrian access. The jurisdiction should provide support to justify the request. Caltrans then reviews and makes a determination as to whether the request should be granted by means of resolution.

In an emergency situation, the 10-foot wide shoulders on the proposed bridge would provide enough width for emergency parking and a route for a pedestrian to walk to the nearest safe location.

If you have additional questions or would like additional information regarding this project, please contact the project's environmental coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Branch Chief
Environmental Management Office - Redding



COMMENT

FORM

PLEASE

USE THE FOLLOWING

SECTION FOR YOUR

COMMENTS,

SUGGESTIONS

AND CONCERNS

COMMENTS, SUGGESTIONS AND CONCERNS

for public safety - Low Level ROADWAY Lighting is needed, so traffic can see & react to stalled vehicle, crashed vehicle & other roadway hazards

THANK YOU

OPTIONAL INFORMATION (PLEASE PRINT CLEARLY)
Names and addresses are not confidential in the event there is a public records request for the information.

Name Jim HARKAB ✓ Organization Lakehead Fire Dept

Address City Lakehead State CA Zip 96051

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December 8, 2006

Mr.

Lakehead, CA 96051

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement

Dear Mr.

Thank you for attending the public information meeting and for providing comments relative to the proposed Antlers Bridge replacement project. We appreciate the time you are taking to participate in the development of this important transportation project.

Following is the written comment you provided and our reply.

Comment
"For public safety, low level roadway lighting is needed so traffic can see and react to stalled vehicles, crashed vehicles, and other roadway hazards."

Response
The proposed project includes 10-foot wide shoulders on the bridge so that vehicles can pull over safely and standard curves throughout the project limits that will improve driver sight distance and reaction time. Safety lighting is typically placed at highway entrance and exit points where traffic maneuvering routinely occurs and potential traffic conflicts exist. Within the limits of the proposed project, there are no entrance or exit points, therefore, safety lighting is not proposed with this project.

If you have additional questions or comments or would like additional information regarding this project, please contact the environmental coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Branch Chief
Environmental Management Office - Redding

State of California

Memorandum

To: Ms. Cindy Anderson
Attention: Mr. Christopher Quiney
Department of Transportation - District 2
Office of Environmental Management-MS30
Post Office Box 496073
Redding, California 96049-6073

Date: November 7, 2006

From: DONALD B. KOCH
Northern California - North Coast Region
Department of Fish and Game
601 Locust Street
Redding, California 96001

Subject: Antlers Bridge Replacement – Draft Initial Study/Environmental Assessment (IS/EA)

The Department of Fish and Game (DFG) has reviewed the Draft IS/EA and Proposed Mitigated Negative Declaration/Finding of No Significant Impact for the above-referenced project. The project proposes to replace the Antlers Bridge (Bridge No. 06-0089) on Interstate 5 near the community of Lakehead in Shasta County. In addition to replacing the bridge, approximately 0.42 mile of the freeway will be realigned to improve safety at the southern approach to the bridge. DFG provided initial comments on the administrative draft IS/EA via E-mail on July 20, 2006. We offer the following comments on the project as currently proposed in our role as both a trustee and responsible agency.

Fisheries and Aquatic Resources

Construction of the new bridge will require pile driving to install various types of piles, including permanent 13.1 foot diameter steel pile casings, temporary H piles and sheet piling. Blasting may also be required to remove the pier foundations of the existing bridge. According to the Draft IS/EA and the analysis of potential airborne and underwater noise prepared for the project (Reyff *et al.*, 2006), unattenuated peak sound pressure levels from driving the 13.1 foot piles would range from 210-220 dB at distances of 50m and 10m respectively. Sound exposure levels (SEL) are projected at 184-194 dB for these same distances.

DFG believes that the sound pressure levels generated by pile driving, particularly the larger piles, are very likely to result in injury or direct mortality to fish that are in close proximity to the pile. In view of these potential impacts, we support the use of bubble curtains to reduce underwater sound pressure levels when driving piles for this project. Bubble curtains may also be effective at attenuating sound pressure levels from demolition blasting and should be included in the development of detailed blasting plans for the project.

There are many factors that make it difficult to predict the sound pressure levels that will actually be generated by the project. These include the size and type of the pile, size of the pile-driving hammer, resistance of the substrate, and the water depth (Reyff *et al.*, 2006). Effects on fish are also difficult to quantify due to a number of different

variables, including fish species, position in the water column, differences in avoidance behavior, and the accumulation of effects resulting from multiple pile strikes (Popper *et al.*, 2006). For these reasons, DFG recommends that Caltrans develop a monitoring program that includes: 1) hydroacoustic monitoring to document actual peak sound levels and sound exposure levels (SEL) produced during pile driving activities and 2) biological monitoring to document any injury or mortality to fish that may result from specific sound pressure levels. The project may also provide an opportunity to address some of the research needs identified by Popper *et al.*, (2006), such as cumulative effects of sound exposure on fish. DFG staff can assist you in designing an appropriate monitoring program.

Notwithstanding, measures to reduce the effects of percussive pile driving, DFG believes the project will result in local, short term adverse effects to fisheries and recreational angling opportunities during the 3 year construction period. These effects can be mitigated through a program to expand recreational angling opportunities by supplemental production and stocking of fish over a 3 year period. DFG is willing to oversee this program in partnership with Caltrans. DFG fisheries biologists are currently developing a scope and budget for this work.

Several project features will result in modification of the bed and bank of Shasta Lake. These include construction of temporary docks or ramps to provide access to the lakeshore, construction of bridge abutments, percussive pile driving for piers and sheet piling, as well as demolition and removal of the existing bridge. A Lake or Streambed Alteration Agreement will be required for the project pursuant to Fish and Game Code §1602. Upon notification by Caltrans, DFG will recommend measures to avoid or minimize adverse effects to fish and wildlife resources that may result from construction activities in or adjacent to the lake.

Nesting Raptors

The Draft IS/EA correctly identifies potential impacts to nesting bald eagles and osprey in Section 2.9 (pages 35-40). In addition to being Federally listed as threatened, the southern bald eagle is also State listed as endangered under the California Endangered Species Act (CESA). It is also designated as a "fully protected" species pursuant to Fish and Game Code §3511. As a fully protected species, take or possession of bald eagles is prohibited. Destruction of the nest or eggs of birds-of-prey (including bald eagles and osprey) is further prohibited by Fish and Game Code §3503.5.

In order to avoid potential adverse effects on nesting bald eagles at the Gregory Creek Campground, Caltrans proposes the following measures:

- Percussive pile driving and demolition blasting will be prohibited between January 15 and August 15.

- Construction activities at the proposed northwest staging area will begin between August 15 and December 1 to acclimate the birds to construction prior to nesting.
- Tree removal will be limited to the period August 15 to December 31 to avoid the nesting period.
- No potential raptor nest or perch trees will be removed for the new highway alignment.

In addition, Caltrans proposes to provide $71,500 to the Shasta-Trinity National Forest to conduct the following activities relative to the bald eagle:

- Monitor the nest at the Gregory Creek Campground during the 3 year construction period.
- Construct a nesting platform to encourage the eagle to occupy a site outside of the campground.
- Enhance foraging opportunities during construction by placing live fish in an open-top pen within the eagles' normal foraging area.

During the informal consultation process, the US Fish and Wildlife Service found that the project was not likely to adversely affect the bald eagle. Although we are not optimistic that the eagles at Gregory Creek will occupy an artificial nesting platform, DFG agrees that the project, as conditioned, is unlikely to result in take of bald eagles either directly or through the destruction of the nest or eggs of the Gregory Creek pair. A memo summarizing the CESA consultation for the project was provided on September 22, 2006.

The conservation measures to protect bald eagles should also provide a degree of protection for nesting osprey. However, ospreys nest in much closer proximity to the construction site. An active nest is located on a utility pole within approximately 500 feet of the northwest staging area. While this nest is in a location already subject to disturbance by train traffic, vehicles and pedestrians, the proposed project represents a substantial increase in human activity in close proximity to the nest. For this reason, DFG supports the installation of construction fencing and designation of the nest site as an Environmentally Sensitive Area (ESA) as outlined in the Draft IS/EA. The ESA fence at the western boundary of the staging area should be placed to maintain as much vegetative screening as possible between the work site and the nest.

DFG recommends the following mitigation measure be included in the Draft IS/EA to minimize the potential for nest failure and the subsequent loss of eggs or young due to construction activities:

- If the nest is occupied in any year during the project construction period, a qualified wildlife biologist will monitor the behavior of the birds until either: 1) the young have fledged or 2) the monitor determines (in consultation with DFG) that the nest has failed.

- If the birds exhibit agitation or other indications of stress in response to a construction activity, that activity in the vicinity of the nest shall immediately cease pending consultation with DFG. DFG, in consultation with the Caltrans resident engineer and environmental branch, shall recommend measures to minimize disturbing the birds before construction activity resumes.

Wildlife Movement

Interstate 5 (I-5) in the Sacramento River Canyon presents a substantial barrier to wildlife movement over a distance of more than 30 miles. DFG supports efforts to provide wildlife crossing systems within this portion of the I-5 corridor. The proposed undercrossing and deer fencing at the southern bridge abutment should facilitate wildlife movement across the highway corridor and reduce wildlife-vehicle collisions in this segment of the freeway.

The effectiveness of deer fencing systems depends heavily on maintaining the integrity of the fence fabric and one-way gates. It is our understanding that the fencing for the project segment south of the bridge will be placed at the top of the cut slopes and at the toe of the fill slopes. Because of the large cuts and fills required in this area, the fences will be located at considerable distance from the roadway, making regular inspection difficult. In this setting, DFG recommends that the fence be constructed using round steel posts set in concrete with a more durable fabric such as chain link. This should also help the fence better withstand damage from snow loads as well as falling branches and tree limbs that are likely given the heavy tree and brush cover of the site.

As indicated in our comments on the administrative draft document, DFG recommends that wildlife mortality be monitored following construction to determine whether road kill has been reduced or simply shifted to the end of the fencing system. In the latter instance we recommend that Caltrans consult with DFG to determine the need for additional fencing. It would also be appropriate to monitor animal movement beneath the new bridge abutment to determine the numbers and species of wildlife that are using the system. DFG wildlife biologists can help you design a low-intensity monitoring effort for this purpose.

Thank you for the opportunity to provide comments on this project. For questions or additional information, contact Staff Environmental Scientist Craig Martz at (530) 225-2281 or via E-mail at cmartz@dfg.ca.gov.

Literature Cited

Popper, A.N., T.J. Carlson, A.D. Hawkins, B.L. Southall, and R.L. Gentry, 06. *Interim Criteria* for Injury to Fish Exposed to Pile Driving Operations: A White Paper, May 13, 2005. 15p.

Reyff, J., D. Lodico, and K. Pomerenck, 2006. ANTLERS BRIDGE REPLACEMENT PROJECT: Analysis of Potential Airborne and Underwater Construction Noise. Unpublished report by Illingworth & Rodkin, Inc., March 23, 2006. Contract 43A0140 Task Order No. 11. 16 p.

cc: Messrs. Eric Haney, Pete Figura, Scott Hill
Steve Baumgartner and Monty Currier
Department of Fish and Game
601 Locust Street
Redding, California 96001

Mr. Joe Zustak
Shasta-Trinity National Forest
Shasta Lake Ranger Station
14225 Holiday Road
Redding, California 96003

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December 11, 2006

Mr. Donald B. Koch
California Department of Fish and Game
601 Locust Street
Redding, CA 96001

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement

Dear Mr. Koch:

Thank you for your memorandum of November 7, 2006, which provides comments on the draft environmental document for the proposed Antlers Bridge replacement project on Interstate 5, in Shasta County, near the community of Lakehead. The following responses are offered to address your comments:

Fisheries and aquatic resources
To reduce adverse effects the project may have upon aquatic resources, Caltrans proposes use of a bubble curtain system to attenuate sound pressure resulting from percussive driving of piles, four feet in diameter and larger, and for underwater demolition blasting. A bubble curtain system is not proposed for percussive driving of piles smaller than four feet in diameter.

Caltrans is evaluating opportunities to conduct hydro-acoustic monitoring during construction. Caltrans biological staff will extend an invitation to appropriate Department of Fish and Game staff to observe bubble curtain installation and pile driving operations.

Upon project approval, a Lake/Streambed Alteration Agreement Notification will be submitted to your department pursuant to Section 1602 of the Fish and Game Code.

Nesting raptors
Regarding the existing osprey nest in proximity of the proposed northwest construction staging area, the staging area has been reduced in size, providing an increased vegetated buffer zone between the nest and the western boundary of the construction staging area. A temporary environmentally sensitive area (ESA) fence is proposed on the western boundary of the staging area to prevent entry by construction equipment and personnel into the vegetated buffer zone.

Caltrans does not consider monitoring the osprey nest, as recommended in your memorandum, to be a viable option due to the lack of a defined plan of action in the event the osprey exhibit signs of distress. We are willing to discuss further with your department options to avoid disturbance of the nesting osprey.

Wildlife movement

The proposed deer fence system will include chain link fencing, seven feet in height, supported by steel posts. The proposed fence system exceeds typical deer fence design standards. Adherence to Caltrans' standard plans for chain link fences over six feet in height will ensure a solid, maintenance-free fence.

Post-construction monitoring of deer activity or deer mortality, as recommended in your memorandum, is not proposed because we do not have the baseline monitoring data necessary to develop a meaningful assessment of the effectiveness of the animal crossing system. We are willing to discuss possible monitoring activities at the southern bridge abutment, including the use of motion activated wildlife cameras.

Thank you for reviewing the draft environmental document and for providing input relative to fish and wildlife resources. If you have additional questions or comments regarding this project, please contact the environmental coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Branch Chief
Environmental Management Office - Redding

NOV 1 3 2006

USDA United States Department of Agriculture
Forest Service

Shasta-Trinity National Recreation Area
Shasta Lake Unit

14225 Holiday Road
Redding, CA 96003
(530) 275-1587
(530) 242-5526 – TDD
www.fs.fed.us/r5/shastatrinity

File Code: 2710/1950
Date: November 8, 2006

Ms Cindy Anderson
Environmental Branch Chief
California Dept of Transportation
PO Box 496973
Redding, CA 96049-6073

Dear Ms Anderson:

Thank you for the opportunity to review the Environmental Assessment for the Antlers Bridge project. My staff has worked with your agency throughout the process and will continue to do so during finalization and construction.

Based upon input from district staff and forest specialists, I have the following comments:

Regarding the aesthetic impacts of the new bridge in relation to the use of the National Recreation Area, the Forest Landscape Architect and the Special Uses Administrator have continued to work with the Caltrans team during finalization of the bridge design. The latest representation shows some artistic elements (stylized fish) and other touches that will help to improve the look of the bridge. There are thousands of visitors annually who will view the bridge from the National Forest lands and waters adjacent and below the new bridge. Looks are important. As we have discussed with your staff, the railing atop the bridge should be galvanized rather than painted unless a color is selected to blend rather than contrast with the surrounding environment.

Concerning the Antlers Campground which is easterly of the construction site, I believe that the noise levels during the day time construction operations may impact the use of the campground. Mitigations in Appendix E of the document will reduce impacts due to noise between the hours of 9p.m. and 6a.m. However, the campground is occupied both day and night and the high noise level may be enough to cause campers to seek other, less impacted locations. It is difficult to imagine a pleasant camping experience while listening to construction noise equivalent to a "gas lawn mower at 1m". This could reduce the number of usable campsites on Shasta Lake during the high-use summer months and directly impact the private concessionaire by reducing income from site reservations.

If you have any questions relating to this letter, please contact Special Uses Administrator Kathy Valenzuela at (530) 242-5533.

Sincerely,

KRISTY COTTINI
District Ranger

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*

DEPARTMENT OF TRANSPORTATION
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TELEPHONE (530) 225-3174

Flex your power!
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December 8, 2006

Kristy Cottini
District Ranger
Shasta-Trinity National Recreation Area
14225 Holiday Road
Redding, CA 96003

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement

Dear Ms. Cottini:

Thank you for your letter dated November 8, 2006, which provides comments on the draft environmental document for the proposed Antlers Bridge replacement project on Interstate 5, in Shasta County, near the community of Lakehead. We offer the following in response:

Caltrans is pleased to offer a bridge design that is aesthetically compatible with this popular recreation area. As indicated in your letter, the proposed bridge rail finish is unpainted, galvanized metal.

As noted in the draft environmental document, it is estimated that percussive driving of large diameter piles (13.1 feet in diameter) may generate noise levels in the range of 92-95 dBA. The proposed bridge will be supported by twelve large diameter piles, which will extend approximately 140 feet beneath the lakebed. The piles will be installed using a template as a guide. Installation of smaller piles, up to approximately four feet in diameter, would be used to secure the templates and may also generate high noise levels if driven with a percussive pile driver. It is anticipated that the large diameter pile shells will be seated in the lakebed utilizing a percussive pile driver. The remainder of the required pile depth may be attained with a combination of some method of pile driving and auguring within the pile shell. The initial pile seating may take place over the course of several hours or several days. When it is necessary to weld a new segment of pile atop the previous segment, driving and/or auguring will cease until the welding operation is complete. The welding process could take several days. Therefore, noise associated with pile installation will be intermittent. In the event that percussive driving of large diameter piles causes a problem for campers, Caltrans will work with your agency to develop a solution. It is possible that percussive driving of large diameter piles could be done over the course of a few weekdays, thereby avoiding weekends. The schedule, method, and duration of pile driving will not be known however until the contract is awarded and the contractor is able to assess the environmental and physical conditions at the project site.

Caltrans is committed to working with its neighbors and partners to implement a successful project. We will continue to work with you throughout the project design and construction processes to ensure that every effort is made to minimize and avoid impacts to public facilities such as the Antlers Boat Ramp and the Antlers Campground.

If you have additional questions or would like to discuss any aspect of the proposed project, please contact the project's environmental coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Branch Chief
Environmental Management Office - Redding

DEC 05 2006

United States Department of the Interior

BUREAU OF RECLAMATION
Northern California Area Office
16349 Shasta Dam Boulevard
Shasta Lake, California 96019-8400

IN REPLY REFER TO:

DEC - 5 2006

NC-300
ENV-6.00

Ms. Cindy Anderson
Environmental Branch Chief
California Department of Transportation
Office of Environmental Management, MS30
P.O. Box 496973
Redding, California 96049-6073

Subject: Comments on Draft Initial Study/Environmental Assessment for Antlers Bridge (Bridge No. 06-0089)

Dear Ms. Anderson:

Thank you for the opportunity to comment on your draft Initial Study/Environmental Assessment for your proposed Antlers Bridge project (October 6, 2006, letter from Cindy Anderson, California Department of Transportation, to Brian Person, Bureau of Reclamation).

Reclamation would like to submit the following comments:

Page 8, 4th paragraph under A) states that *"the material used to create the access ramp would be removed from the lake following construction...."*

Reclamation appreciates the fact that you will remove all of the approximate 119,000 cubic yards of material from the reservoir to assure that available storage is not reduced by that volume. We would also be open to a cut-and-fill operation below the high water line that would change the shape of the reservoir without altering its currently available storage volume, if that would be more cost effective.

Page 10, 1st paragraph states that *"drill cuttings will either be deposited on the lakebed or removed and disposed of at an upland location."*

Reclamation prefers that the drill cuttings be disposed of at an upland location and not deposited on the lake bed.

Page 11, 2nd paragraph after the title "**1.7 Demolition of Existing Bridge**" states *"following removal of the superstructure, the concrete abutments and piers will be removed."*

This will result in approximately 4,063 cubic yards of rubble. We would appreciate a characterization of the concrete rubble so that we may offer a meaningful comment. If the demolition process is likely to result in uniformly small rubble (less than 12 inches as measured on the major dimension), we would prefer that the rubble be removed for the reasons stated above. If, however, the demolition methods will produce a majority of larger rubble (greater that 12 inches as measured on the major dimension), the rubble would likely serve to enhance fish habitat. In this latter case, we would consider such a benefit, when coupled with the presumed project cost reduction as compared to removal, to offset the minor reduction in available storage volume.

Page 14, 2nd paragraph states that *"the proposed bridge would accommodate an increase in the full pool elevation of Shasta Lake up to 18.5 feet as proposed by the Bureau of Reclamation."*

Reclamation appreciates the anticipation of the potential dam modification.

Reclamation periodically receives requests to approve projects that result in some type of deposition within reservoirs. Cumulatively, these projects would result in a significant amount of reduced capacity and have long-term impacts on operations, i.e., cold-water fish enhancement, along with water supply and power generation loss. Our concern is mitigated by your intention to limit the amount of debris entering Shasta Lake on a permanent basis.

We look forward to continuing our cooperation on the Antlers Bridge project. If you have any questions, please contact Don Reck, Chief, Environmental and Natural Resources Division, Northern California Area Office, at 276-2045 or by e-mail at dreck@mp.usbr.gov.

Sincerely,

FOR Donald Reck

Brian Person
Area Manager

cc: Mr. Christopher Quiney
California Department of Transportation
P.O. Box 496973
Redding, California 96049-6073

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING ARNOLD SCHWARZENEGGER, *Governor*

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Flex your power!
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December 12, 2006

Mr. Brian Person
United States Department of the Interior
Bureau of Reclamation
16349 Shasta Dam Blvd.
Shasta Lake, CA 96019-8400

03-172-02-378900
SHA-5-PM R39.0/R41.2
Antlers Bridge Replacement

Dear Mr. Person:

Thank you for your letter of December 5, 2006, providing comments on the draft environmental document for the proposed Antlers Bridge replacement project on Interstate 5, in Shasta County, near the community of Lakehead.

With regard to actions that may result in the deposition of fill within Shasta Lake, the Department of Transportation (Caltrans) would attempt to minimize discharges to Shasta Lake that may result from implementation of the proposed bridge replacement project. We are currently evaluating alternative construction methods in an effort to reduce construction costs and minimize environmental impacts. As discussed in the draft environmental document, certain project actions may introduce fill into Shasta Lake. Caltrans plans to submit to the Bureau of Reclamation an application for Right of Use Authorization. The application will include a detailed project description and cost-benefit analysis of different construction options under consideration.

We appreciate the input you have provided and look forward to working with you on this transportation project. If you have additional questions or comments regarding the project, please contact the project's environmental coordinator, Christopher Quiney, at (530) 225-3174.

Sincerely,

CINDY ANDERSON, Branch Chief
Environmental Management Office - Redding