Memorandum

To: Assistant Regional Director, Water and Fishery Resources
Sacramento, California

From: Chief, CVPIA Project Implementation Division,
Sacramento, California

Subject: Finding of No Significant Impact for the Lower Calaveras River Anadromous Fish Barriers Improvement Project (Budisich Flashboard Dam), San Joaquin County, California.

This memorandum transmits a Finding of No Significant Impact for your review and signature. The Fish and Wildlife Service prepared the attached Environmental Assessment (EA) for the purpose of evaluating alternatives associated with granting funds, under the authority of the Central Valley Project Improvement Act's Anadromous Fish Restoration Program (AFRP), to the Stockton East Water District to implement an anadromous fish barrier improvement project in the lower Calaveras River, San Joaquin County, California. The proposal is consistent with recommendations for the Calaveras River in the Final Restoration Plan of the AFRP. The EA examines and evaluates effects of the proposed action on the environment and concludes that the action does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an Environmental Impact Statement is not required.

Attachments:
Finding of No Significant Impact
Notification of Section 106 Compliance
Letter of Concurrence, National Marine Fisheries Service
Intra-Service Section 7 Biological Evaluation Form
FINDING OF NO SIGNIFICANT IMPACT

U.S. Fish and Wildlife Service

Central Valley Project Improvement Act
Anadromous Fish Restoration Program

Lower Calaveras River Anadromous Fish Barriers Improvement Project
(Budiselich Flashboard Dam)
San Joaquin County, California

Lead Federal Agency:
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-2605
Sacramento, California 95825

The Fish and Wildlife Service (Service) proposes to grant funds, under the authority of the Central Valley Project Improvement Act’s (CVPIA) Anadromous Fish Restoration Program (AFRP), to the Stockton East Water District (SEWD) to implement an anadromous fish passage improvement project on the Calaveras River. If approved, $200,000 would be granted to SEWD to complete the design, implementation, and monitoring of a fish passage improvement project at Budiselich flashboard to improve passage for Chinook salmon and Central Valley steelhead in the lower Calaveras River. This will be the first of many projects that will improve passage and provide access to spawning and rearing habitat for naturally reproducing anadromous salmonids of the lower Calaveras River. Sites have been strategically selected based on a 2005 barrier assessment and prioritization of the lower Calaveras River completed by the California Department of Water Resources.

SEWD, the California Environmental Quality Act (CEQA) lead agency for the proposed project, prepared and distributed an Initial Study/Mitigated Negative Declaration in December 2008, for a 30-day public review period. This also served as the early public notification of a proposed action within a floodplain pursuant to Executive Order 11988, section 2(a)(4). To date, no public comments have been received regarding this project.

The proposed action supports objectives of the AFRP, complements other ongoing efforts to improve important passage and aquatic habitats for the benefit of naturally-producing anadromous salmonids in the Central Valley, and may assist in the recovery of federally listed salmonids. The fish passage improvement project is intended to increase access to spawning habitats available to naturally spawning fall-run Chinook salmon and Central Valley steelhead adults and facilitate the successful rearing and outmigration of juveniles of both of these species from the lower Calaveras River.
Alternatives

The EA addresses two alternatives: 1) the No Action alternative whereby the Service would not provide funds for the proposed project, and 2) the Proposed Action alternative that would provide AFRP restoration funds to SEWD to implement a fish passage improvement project at Budiselich Flashboard Dam.

The No Action alternative was not chosen because lack of action would lead to the continued blockage of upstream and downstream migration of salmon and steelhead. This would continue to limit spawning activity, rearing, outmigration, and continue to inhibit recovery of anadromous salmonids in the lower Calaveras River.

The Proposed Action alternative was selected over No Action because implementation of the proposed passage improvement project would increase access to spawning habitats available to naturally spawning fall-run Chinook salmon and Central Valley steelhead adults and facilitate the rearing and outmigration of juveniles of both of these species.

Environmental Impacts

Based upon information contained in the EA, we have determined this Federal action would not significantly affect the quality of the human environment. The basis for a Finding of No Significant Impact is as follows:

1. As a result of informal consultation under the Endangered Species Act and inclusion of conservation measures into the proposed action, no adverse impacts to federally listed or special status species and/or designated critical habitats are expected.

2. Short-term, minor impacts to wildlife may occur from implementing activities related to the habitat improvement. However, avoidance and conservation measures have been incorporated into the proposed action to minimize effects. The intent of this project is to increase access to spawning habitats available to naturally spawning fall-run Chinook salmon and Central Valley steelhead adults and facilitate the successful rearing and outmigration of juveniles of both of these species from the lower Calaveras River.

3 The proposed action is not expected to have long-term adverse effects on wildlife or fisheries, and most effects are expected to be beneficial. The passage improvements are expected to benefit listed and native species and are not expected to increase the impacts of non-native species within the system.

4 Impact avoidance and conservation measures have been incorporated into the proposed action to minimize adverse effects on water quality and aquatic habitat. The proposed action is expected to have no negative impact on flooding potential.
The proposed action is not expected to have adverse effects on wetlands or floodplains pursuant to Executive Orders 11990 and 11988. The proposed action supports the need for unimpeded passage for migratory fish and aquatic species.

Neither short- nor long-term adverse effects on human health or the environment, nor disproportionate adverse effects to low-income or minority populations are expected, pursuant to Executive Order 12898.

The proposed action was determined to be a routine undertaking with little to no potential to affect historic properties under Appendix A of the Cultural Resources Programmatic Agreement between the Service, the California State Historic Preservation Office, and the Advisory Council for Historic Preservation. The project activities can proceed under the stipulation that: if any cultural resources are discovered during the project, work would halt and the Service's Regional Archaeologist shall be contacted.

Therefore, the Service, as lead Federal agency for the proposed AFRP funding of *Lower Calaveras River Anadromous Fish Barriers Improvement Project*, has determined that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environmental Policy Act of 1969 (as amended). As such, an Environmental Impact Statement is not required. An Environmental Assessment has been prepared in support of this finding and is available upon request to the U.S. Fish and Wildlife Service, Stockton Fish and Wildlife Office, 4001 North Wilson Way, Stockton, California 95205.

[Signature]
Assistant Regional Director, Water and Fishery Resources

[Date]
July 9, 2010
To: Donnie Ratcliff  
FWS Program - Fisheries  
Funding - CVPIA/NFPP  

From: Virginia Parks  
R1 Cultural Resource Specialist,  
on behalf of Anan Raymond, Regional Historic Preservation Officer  

Subject: Notification of Compliance with Section 106 of the National Historic Preservation Act (NHPA)  

9/29/2009

Thank you for submitting the RCRC form for the below listed project. We have reviewed the form and applied the terms of the Fish and Wildlife Service (FWS) Programmatic Agreement (PA)*, with the state of: California

Based on the location and nature of the activities, "Appendix A" applies to the following project as described:

   Lower Calaveras River Anadromous Fish Barriers Improvement Project – Budiselich Flashboard Dam

An Appendix A determination indicates that the FWS has evaluated the potential impact of the proposed project on cultural resources at the location listed above, and we do not anticipate that the project would affect or impact cultural resources.

No further cultural resource identification effort is necessary for the project. However, the existence of cultural resources can never be predicted with certainty. Please be aware that cultural resources are protected by all applicable federal and state laws. In the event that cultural resources are discovered during project implementation, any ground disturbing activity should be halted and the FWS Regional Archaeologist should be notified at the above address. If the planned activities change, please let us know.

Please note that, in compliance with the terms of the PA, the project will be reported to the State Historic Preservation Office in the annual report, prepared and submitted after the end of the current fiscal year. Thank you for considering cultural resources.

*Programmatic Agreement Among the U.S. Fish and Wildlife Service Region 1, the Advisory Council on Historic Preservation, and the State Historic Preservation Officer Regarding the Administration of Routine Undertakings in the State of California
Note: Section 106 compliance assistance is being provided solely for the activities as defined in the request for cultural resource compliance submitted to the CRT for the project. Changes to the planned activities and any future projects in this area may be subject to additional Section 106 compliance efforts.
**PROJECT NAME:** Lower Calaveras River Anadromous Fish Barriers Improvement Project

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<th>LOCATION INFORMATION:</th>
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<th>Stockton FWO</th>
<th>USGS Topo</th>
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**Note:** Section 106 compliance assistance is being provided solely for the activities as defined in the request for cultural resource compliance submitted to the CRT for the project. Changes to the planned activities and any future projects in this area may be subject to additional Section 106 compliance efforts.
**LOCATION INFORMATION:**

**County:** San Joaquin  
**State:** California  
**FWS Unit:** Stockton FWO  
**USGS Topo:** Stockton East  

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**Program:** Fisheries  
**Field Contact:** Ratcliff, D

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**EXISTING CONDITIONS**

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**Engineered Streambed Material and Bankline Layout**

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**NOTES:**

- California Department of Water Resources
- Fish Passage Improvement Program

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**PROJECT DRAWN:** June 17, 2009

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**DRAWN BY:** DWR

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**DESCRIPTION:**

- Beamline Rock
- Flood Wall
- ESM
- Dam Foundation
- Levee Crown
- Abutment

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**DATE:** June 17, 2009

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**PROJECT:** Budiselich Fishboard Dam Fish Passage Improvement Project - Stockton Channel

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**DESIGN CONCEPT:** Roughened Channel Design

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**DRAWN BY:** DWR

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**NOTES:**

- Beamline Rock
- Flood Wall
- ESM
- Dam Foundation
- Levee Crown
- Abutment
William Guthrie
Senior Project Manager
U.S. Army Corps of Engineers
1325 J Street, Room 1480
Sacramento, California 95814-2922

Dear Mr. Guthrie:

This letter is in response to your letter of November 4, 2009, requesting initiation of consultation under section 7 of the Endangered Species Act (ESA) and requesting concurrence from NOAA’s National Fisheries Service (NMFS) that the issuance of a Department of the Army permit for the proposed Budiselich Dam Fish Barrier Removal Project (SPK-2009-01333) may affect, but is not likely to adversely affect, Federally threatened Central Valley steelhead (Oncorhynchus mykiss) or the designated critical habitat for this species. In addition, the U.S. Army Corps of Engineers (Corps) has also determined that the proposed project may affect Essential Fish Habitat (EFH) for Pacific salmon, pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). This letter also serves as consultation under the authority of, and in accordance with, the provisions of the Fish and Wildlife Coordination Act of 1934 (FWCA), as amended.

Consultation History

NMFS received the Corps’ initiation letter on November 4, 2009. Enclosures furnished with the consultation package included a Nationwide Permit Pre-Construction Notification Application and structure design figures. NMFS reviewed this package on November 25, 2009. On November 30, 2009, NMFS requested a copy of the Stormwater Pollution and Prevention Plan (SWPPP), the California Department of Fish and Game (CDFG) Streambed Alteration Permit, and the Environmental Assessment/Initial Study (EA/IS) from Donnie Ratcliff of the U.S. Fish and Wildlife Service, Anadromous Fish Restoration Program, via email. John Green, Assistant General Manager of Stockton East Water District provided the CDFG Streambed Alteration Permit by email on December 7, 2009, and the EA/IS and SWPPP by postal mail, which was received by NMFS on December 9, 2009.

Action Area

The proposed project is located on the Stockton Diverting Canal which is in the lower section of the Calaveras River watershed, connecting Mormon Slough with the Old Calaveras River
channel. The lower Calaveras River watershed is included in the Central Valley steelhead Distinct Population Segment and is designated as critical habitat for steelhead. Fall-run Chinook salmon (*O. tshawytscha*), a Federal Species of Concern, occupy the Calaveras River. The Cosumnes River watershed is designated as EFH for Pacific Salmon. The action area is used by both steelhead and Chinook salmon as a migration corridor to and from spawning grounds upstream.

**Proposed Project**

The project's primary purpose is to improve migration impediments at Budiselich Dam which will increase opportunities for steelhead and salmon to access the quality spawning and rearing habitat upstream. This project would initiate the first of several structural improvement projects that will be implemented in upcoming years as part of the Lower Calaveras River Anadromous Fish Barriers Improvement Project.

The project consists of constructing a “fish-way” roughened channel with seven boulder weir drop structures just downstream of the existing Budiselich Flashboard Dam foundation. The weirs would consist of 3- to 4-foot diameter boulders trenched in to the existing channel with a 1-foot vertical drop between weirs and a 33-foot distance between weirs, creating a new channel with a 3 percent slope. Each weir will have a 10-foot wide, 1-foot deep low-flow notch. Construction will occur when flows are non-existent or very low in the area and the Calaveras River will not be hydrologically connected to the San Joaquin River.

Boulders will be backfilled with an engineered streambed material mix 2- to 3-feet thick, consisting of a range of different sized particles, from 9-inch cobbles to sand and silt. The larger particles are sized to be stable at the expected velocities in the channel and the fine grain material will keep low flows from flowing subsurface. Excavating the trenches for the weirs will result in the removal of approximately 1,500 cubic yards of native material. Excavating for placement of the native bed material would require removal of approximately 1,800 cubic yards of native material and 150 cubic yards of existing riprap from the channel. Approximately 1,400 cubic yards of streambed material will be placed along with 200 cubic yards of engineered material for the bankline stabilization.

No vegetation will be removed or disturbed. No plantings will occur in the construction area as the Stockton Diverting Channel is a flood control channel.

**ESA Section 7 Consultation**

Upon review of the project description, NMFS finds that the proposed project designs and the incorporation of conservation measures reduces the previously mentioned potential impacts to a discountable or insignificant level. In particular, NMFS finds:

1) The timing of the weir fishway construction would occur between November 1 and December 31 when the Stockton Diverting Canal would be completely dry and salmonids would not occur within the action area.
2) Implementation of Best Management Practices (i.e. straw waddles, hay cover, hydroseeding) during construction and post-construction will minimize current and future erosion potential at the project site.

3) It is unlikely that steelhead would occur within the immediate action area unless significant rainfall connects the Calaveras River with the San Joaquin River stimulating the migration of adult steelhead.

4) If migrating Chinook salmon or steelhead enter the action area due to a freshet or flood control release, provisions will be made to allow migrating salmonids to bypass the construction work area.

5) Equipment will utilize existing levee roads for site access; refueling and storage of any hazardous and/or construction materials will occur away from the watercourse.

Therefore, NMFS concurs that the Budiselic Dam Fish Barrier Removal project is not likely to adversely affect Central Valley steelhead or their designated critical habitat. This determination is based on the following information:

1) Information included with the initiation package.

2) The CDFG Streambed Alteration Permit, and the EA/IS and SWPPP received on December 7 and 9, 2009, respectively.

This concludes informal consultation for the proposed project. This concurrence does not provide incidental take authorization pursuant to section 7(b)(4) and section 7(a)(2) of the ESA, as amended. Reinitiation of consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law), and if:

1) New information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered.

2) The action is subsequently modified in a manner that that causes an effect to the listed species or critical habitat not considered.

3) Or a new species is listed or critical habitat designated that may be affected by the action.

**Essential Fish Habitat (EFH)**

With regards to EFH consultation, the action area has been identified as EFH for Central Valley fall/late fall-run Chinook salmon (*O. tshawytscha*) in Amendment 14 of the Pacific Salmon Fishery Management Plan pursuant to the MSA. Federal action agencies are mandated by the MSA (section 305[b] [2]) to consult with NMFS on all actions that may adversely affect EFH, and NMFS must provide EFH conservation recommendations to those agencies (section 305[b] [4] [A]). Because the proposed project includes conservation measures designed to avoid impacts to salmonid habitat, NMFS has determined that the proposed project will not adversely
affect EFH. Therefore, EFH conservation recommendations are not being provided at this time; however, if there is substantial revision to the project description, the lead Federal agency will need to reinitiate EFH consultation.

Fish and Wildlife Coordination Act (FWCA)

The purpose of the FWCA is to ensure that wildlife conservation receives equal consideration, and is coordinated with other aspects of water resources development [16 U.S.C. 661]. The FWCA establishes a consultation requirement for Federal agencies that undertake any action that proposes to modify any stream or other body of water for any purpose, including navigation and drainage [16 U.S.C. 662(a)]. Consistent with this consultation requirement, NMFS provides recommendations and comments to Federal action agencies for conserving fish and wildlife resources. The FWCA provides the opportunity to offer recommendations for the conservation of species and habitats beyond those currently managed under ESA and MSA. Because the proposed project is designed to avoid environmental impacts to aquatic habitat within the action area, NMFS has no additional FWCA comments to provide.

Please contact Ms. Erin Strange at (916) 930-3638, or via email at Erin.Strange@noaa.gov, if you have questions regarding this project or require additional information.

Sincerely,

Rodney R. McInnis
Regional Administrator

cc: NMFS-PRD, Long Beach, CA
    Bryant Chesney, NMFS, Long Beach, CA
    Copy to file: ARN151422SWR2009SA00548
INTRA-SERVICE SECTION 7 BIOLOGICAL EVALUATION FORM

Lower Calaveras River Anadromous Fish Barriers Improvement Project –
Budiselich Flashboard Dam

Originating Person: Donald Ratcliff
Anadromous Fish Restoration Program
Telephone Number: (209) 334-2968 x409
Date: March 30, 2010

I. Region: Region 8

II. Service Activity (Program) Anadromous Fish Restoration Program under the Central Valley Project Improvement Act program

III. Pertinent Species and Habitats:

A. Listed species and/or their critical habitat within the action area:

- Central Valley steelhead (Oncorhynchus mykiss) (T) (Consultation with NOAA Fisheries completed, Letter of Concurrence attached – Attachment 1)

B. Proposed species and/or proposed critical habitat within the action area:

C. Candidate species within the action area:

Additional species identified on the species list (Attachment 2) provided by the SFWO database for project-associated quadrangles included vernal pool fairy shrimp (Branchinecta lynchi) (T), valley elderberry longhorn beetle (Desmocerus californicus dimorphus) (T), vernal pool tadpole shrimp (Lepidurus packardi) (E), green sturgeon (Acipenser medirostris) (T; NMFS), delta smelt (Hypomesus transpacificus) (T), Central Valley spring-run Chinook salmon (Oncorhynchus tshawytscha) (T; NMFS), winter-run Chinook salmon (Oncorhynchus tshawytscha) (E; NMFS), California tiger salamander (Ambystoma californiense) (T), California red-legged frog (Rana aurora draytonii) (T), giant garter snake (Thamnophis gigas), and riparian brush rabbit (Sylvilagus bachmani riparius) (E). It was determined that the current ranges or habitats of these species do not occur near the project area; therefore, these species are not addressed further in this analysis.

D. Include species/habitat occurrence on a map.

- Central Valley steelhead are limited to the Calaveras River/Stockton Diverting Canal shown in Attachment 3.
IV. Geographic area or station name and action:
The Lower Calaveras Anadromous Fish Barrier Improvement Project Proposed Action consists of replacing or retrofitting up to 37 instream structures identified as passage impediments to salmon and steelhead trout in the lower Calaveras River below Bellota Weir. High quality spawning and rearing habitat has been identified above Bellota Weir and it is expected that salmonid population numbers will increase once passage opportunities are improved. Four high priority barriers have been initially identified and assessed for removal/retrofit. Final designs have been completed for the Budiselich Flashboard Dam and it is anticipated that this structure will be retrofitted beginning October-November of 2010.

V. Location

A. County and State: San Joaquin, California

B. Section(s): 31
Township: T2N
Range: R7E
(or latitude and longitude):

C. Distance (miles) and direction to nearest town:
Site is within the city limits of Stockton, CA. Site is directly upstream of the Highway 99 – Stockton Diverting Canal intersection (Attachment 3).

VI. Description of proposed action (attach additional pages as needed):

Site work at the Budiselich Flashboard Dam will consist of constructing a roughened channel with seven boulder weir drop structures just downstream of the existing flashboard dam foundation. Roughened channels, sometimes referred to as nature-like fishways, are constructed channels stabilized with an immobile framework of large rock mixed with smaller material, providing fish passage by controlling the channel profile and adding roughness and structure to it (CDFG 2009). The weirs within the roughened channel will consist of 3' to 4' boulders (approximately 600 cubic yards total) trenched into the existing channel with a 1' vertical drop between weirs (DFG and NMFS criterion for adult anadromous salmonids) and a 33' distance between weirs, giving the new channel a 3% slope. Excavating the trenches for the weirs will result in the removal of approximately 1500 cubic yards of native material from the existing channel. Each weir will have an approximately 10' wide, 1' deep low-flow notch, and the 1' drop between weirs will spread the currently existing, steep, 6' drop, out over approximately 200'.

The top of the most downstream weir will be set at the elevation of the existing channel invert. The dimensions of the construction portion of the project will be 275' in length, 140' in width just below the dam foundation, and 40' in width at the most downstream end of the project (a total area of about 25,000 square feet or 0.58 acres). The fill between the weirs (the "roughened" part) will be an engineered streambed material mix 2' to 3' thick, and will consist of a range of different sized particles, from 9" cobbles down to sand and silt. The larger particles are sized to be stable at the expected velocities in the channel and the fine grained material will keep low
flows from flowing subsurface. Excavation for the installation of the engineered streambed material will result in the removal of approximately 1800 cubic yards of native material and 150 cubic yards of existing riprap from the channel. The amount of engineered streambed material installed for the project will be approximately 1400 cubic yards (approximately 250 cubic yards of the excavated native material can be used). In addition, bankline rock, 200 cubic yards of an engineered material mix consisting of a range of different sized particles from 15" boulders down to sand and silt, will be placed in roughly a 2' thick layer at the toe and lower portions of the banks to keep them stable (25 cubic yards of existing riprap can be used). The upper portions of the banks will be revegetated with native plants. This project will not inundate any new areas; rather it will increase the wetted area for longer time periods and create a series of passable wiers for migrating salmonids.

Proposed Conservation Measures

Neither Central Valley steelhead nor Central Valley fall-run Chinook salmon are expected to occur in the action area during the project work window due to the likelihood that the channel will be de-watered. The following conservation measures built into the proposed project are expected to avoid or minimize the potential for adverse effects on Central Valley steelhead, steelhead critical habitat, and EFH for Central Valley fall-run Chinook salmon.

- Construction activities associated with replacement or retrofit of artificial instream structures would be conducted between October 15 and December 31 when the channel is “dry” (i.e., reach is dewatered and there is no connection between confluence and reach above Bellota Weir). Migrating Chinook salmon and steelhead would only be able to enter the project area if flood control releases or freshet flows occur, and these are expected to be unlikely. Provisions will be made to allow migrating salmonids to bypass construction work areas in the channel in the event that unanticipated flood control releases or freshets occur.
- Artificial instream structure improvements shall be designed according to criteria in Design of Fish Passage Solutions (CDWR [In Press]).
- Turbidity will be monitored to meet exceedence thresholds established by the project’s water quality waiver agreement with the Regional Water Quality Control Board, as applicable.
- Prepare and implement an erosion control plan and Stormwater Pollution Prevention Plan (SWPPP).
- Hazardous materials would not be drained onto the ground, recharge cells, the instream channel, or into drainage areas. All waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, would be removed to a disposal facility permitted to accept such materials.
- Construction materials would not be stockpiled or deposited near the project sites where they could be washed away by high water or storm runoff or can encroach, in any way, upon the watercourse.
- Fueling, cleaning, and maintenance of equipment would not be allowed except in designated areas located as far from the instream channels as possible.
• Spill equipment would be present and easily accessible when refueling the diesel engine for the pump.
• Grading activities would implement erosion and sediment control measures.
• Any vehicles used during operation and maintenance would drive on existing levees.
• In construction areas where ground disturbance is substantial or where recontouring is required, surface restoration would occur.
• On completion of the work, disturbed areas left in a condition that would facilitate natural or appropriate vegetation, provide for proper drainage, and prevent erosion.
• A Spill Prevention, Control, and Countermeasures Plan (SPCC) will be developed prior to the initiation of construction activities. The SPCC will be maintained and implemented onsite by a construction monitor that will be onsite during all construction activities. If a spill is reportable (as defined in 40 CFR 110), the construction monitor will notify the Central Valley Regional Water Quality Control Board (RWQCB), CDFG, USFWS, and NMFS, and be responsible for ensuring that the SPCC is followed. In addition, if a spill contains hazardous materials, the Department of Toxic Substances Control (DTSC) will be notified.

VII. Determination of effects:

A. Explanation of effects of the action on species and critical habitats in items III. A, B, and C. (Attach additional pages as needed.):

Neither Central Valley steelhead nor Central Valley fall-run Chinook salmon are expected to occur in the action area during the project work window due to the likelihood that the channel will be de-watered.

The project site, access route, and staging areas were surveyed for elderberry shrubs, the host plant for valley elderberry longhorn beetles. No elderberry shrubs were found. If elderberry shrubs are encountered, they will be avoided by flagging and/or fencing. Additionally, project activities would be altered to ensure there would be no damage to individual plants.

B. Explanation of actions to be implemented to reduce adverse effects:

Neither Central Valley steelhead nor Central Valley fall-run Chinook salmon are expected to occur in the action area during the project work window due to the likelihood that the channel will be de-watered. The following conservation measures built into the proposed project are expected to avoid or minimize the potential for adverse effects on Central Valley steelhead, steelhead critical habitat, and EFH for Central Valley fall-run Chinook salmon.

• To minimize potential impacts on the anadromous fish of the Calaveras River, instream activities will be limited to the low flow period or roughly October 15 to December 31.
• If flow is present during construction it will be rerouted through an existing
bypass channel which reconnects to the main channel directly downstream of the project area. This channel is routinely used to dewater the river for dam maintenance and would isolate the project area from the river, minimizing the potential for turbidity-related impacts. Upon completion of project activities, the bypass would be closed and flow would be restored to the project area.

- Heavy equipment and vehicular movement will be limited to existing access roads and predetermined staging areas. Access agreements have been established with landowners as needed. Access to project sites will be clearly marked to avoid accidental trespass or damage to land cover.

- In-water construction activities will be completed by hand and no machinery will enter the water.

- Existing access points will be used in order to avoid sensitive locations. Established sites will be used for parking, storage, staging, and access. These sites will be well marked and if any new disturbance occurs as a result of project activities, the area will be restored following construction.

- All contractors and equipment operators will be given instructions to avoid impacts and be made aware of the ecological values of the site.
VIII. Effect determination and response requested:

A. Listed Species/designated critical habitat:

Determination

No effect/no adverse modification
species: Conservancy fairy shrimp, vernal pool fairy shrimp, valley elderberry longhorn beetle, vernal pool tadpole shrimp, delta smelt, California tiger salamander, California red-legged frog, giant garter snake, lone Manzanita, lone buckwheat, Irish Hill buckwheat, Sacramento Orcutt grass

Response requested

X Concurrence

May affect, but is not likely to adversely affect/adversely modify critical habitat:
species: none

Concurrence

May affect, and is likely to adversely affect species/adversely modify critical habitat
species: none

Formal Consultation

R. Proposed species/proposed critical habitat:

Determination

No effect on proposed species/no adverse modification of proposed critical habitat
species: n/a

Concurrence

C. Candidate species:

Determination

no effect
species: n/a

Concurrence

is likely to jeopardize candidate species
species:

[Signature]

[Project Leader]

Stockton Fish and Wildlife Office

[Date]
Listed Species

**Invertebrates**
*Branchinecta lynchii*, vernal pool fairy shrimp (T)
*Desmocerus californicus dimorphus*, valley elderberry longhorn beetle (T)
*Lepidurus packardi*, vernal pool tadpole shrimp (E)

**Fish**
*Acipenser medirostris*, green sturgeon (T) (NMFS)
*Hypomesus transpacificus*, delta smelt (T)
  Critical habitat, delta smelt (X)
*Oncorhynchus mykiss*, Central Valley steelhead (T) (NMFS)
  Critical habitat, Central Valley steelhead (X) (NMFS)
*Oncorhynchus tshawytscha*, Central Valley spring-run chinook salmon (T) (NMFS)
*Oncorhynchus tshawytscha*, winter-run chinook salmon, Sacramento River (E) (NMFS)

**Amphibians**
*Ambystoma californiense*, California tiger salamander, central population (T)
*Rana aurora draytonii*, California red-legged frog (T)

**Reptiles**
*Thamnophis gigas*, giant garter snake (T)
Mammals
Sylvilagus bachmani riparius, riparian brush rabbit (E)

Key:

- (E) Endangered - Listed as being in danger of extinction.
- (T) Threatened - Listed as likely to become endangered within the foreseeable future.
- (P) Proposed - Officially proposed in the Federal Register for listing as endangered or threatened.
- (NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
- Critical Habitat - Area essential to the conservation of a species.
- (PX) Proposed Critical Habitat - The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate - Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species