

**i. Proposal number.#2001-L205\***

**ii. Short proposal title.# Lower Butte Creek Project: Phase III Facilitation/Coordination and Construction of Three Fish Passage Modifications to Sutter Bypass West Side Water Control Structures\***

**APPLICABILITY TO CALFED ERP GOALS AND IMPLEMENTATION PLAN**

**1a1. Link to ERP Strategic Goals: What Strategic Goal(s) is /are addressed by this proposal? List the letter(s) of all that apply.**

- A. At-risk species**
- B. Rehabilitate natural processes**
- C. Maintain harvested species**
- D. Protect-restore functional habitats**
- E. Prevent non-native species and reduce impacts**
- F. Improve and maintain water quality# A,B and D\***

**1a2. Describe the degree to which the proposal will contribute to the relevant goal. Quantify your assessment and identify the contribution to ERP targets, when possible.#** Project addresses needs of at-risk species (spring-run and winter-run chinook salmon, steelhead trout, splittail) (Goal A) by reducing or eliminating delay and injury to Butte Creek adult fish by improving passage conditions (fish ladders) and reducing entrainment in diversions (fish screens). Proposal states that project addresses Ecosystem Processes and Biotic Communities (Goal B) by supporting a reliable streamflow. Proposal states that project addresses Habitats (Goal D) by increasing fish passage to spawning and rearing habitat.\*

**1b. Objectives: What Strategic Objective(s) is/are addressed by this proposal? List Objective (from the table of 32 objectives) and describe potential contribution to ERP Goals. Quantify your assessment, when possible.#** This proposal addresses objective 1 - recovery of "R" at-risk species (winter- and spring-run salmon, steelhead, and splittail). Although goals B and D are also cited, it will not contribute significantly to habitat improvement.\*

**1c. Restoration Actions: Does the proposal address a Restoration Action identified in Section 3.5 of the PSP? Identify the action and describe how well the proposed action relates to the identified Restoration Action.#** Fish screens are identified in section 3.5, including an emphasis on the upper Sacramento River and its tributaries.\*

**1d. Stage 1 Actions: Is the proposal linked directly, indirectly or not linked to proposed**

**Stage 1 Actions? If linked, describe how the proposal will contribute to ERP actions during**

**Stage 1.**# This project is linked to Butte Creek Stage 1 Actions, Action 1, Improve fish passage at diversion dams by upgrading fish ladders and screen diversions.\*

**1e. MSCS: Describe how the proposal is linked to the Multi-Species Conservation Strategy and if it's consistent with the MSCS Conservation measures. Identify the species addressed and whether the proposal will**

**"recover", "contribute to recovery" or "maintain" each species.**# The ERP and MSCS have identified fish screens and improved fish passage as contributing to recovery of at-risk species ("R") as well as harvestable species. This project targets chinook salmon, steelhead, and splittail.\*

**1f. Information Richness/Adaptive Probing related to the proposal: Describe the degree to which the proposal provides information to resolve one of the 12 scientific uncertainties (Section 3.3 of the PSP), and whether the proposal offers a prudent approach to answer these uncertainties.**#

Unscreened diversions are not covered in the twelve uncertainties.\*

**1g. Summarize comments from section 1a through 1f related to applicability to CALFED goals and priorities. Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.**#

This project is a next-phase funding project for implementing the construction of fish ladders and fish screens on three major water control structures located on lower Butte Creek. This project is linked to Butte Creek Stage 1 Actions, Action 1, Improve fish passage at diversion dams by upgrading fish ladders and screen diversions.\*

**APPLICABILITY TO CVPIA PRIORITIES**

**1i. Describe the expected contribution to natural production of anadromous fish. Specifically identify the species and races of anadromous fish that are expected to benefit from the project, the expected magnitude of the contribution to natural production for each species and race of anadromous fish, the certainty of the expected benefits, and the immediacy and duration of the expected contribution. Provide quantitative support where available (for example, expected increases in population indices, cohort replacement**

**rates, or reductions in mortality rates).**# The Sutter Bypass from its intersection with the Sacramento River near Verona, including the east and west channels is the lower reach of Butte Creek, and is therefore critical to the survival of populations of anadromous fish in Butte Creek. Anadromous species/races in Butte Creek include spring, fall and late-fall chinook salmon and steelhead. Additionally, the Sutter Bypass is the primary flood overflow for the Sacramento River above the Feather River. All Sacramento River flows in excess of approximately 25,000 cfs are routed into and through the Sutter Bypass at various overflow weirs between Chico and Knights Landing. Since the Sacramento River overflows into the bypass in most years, and at times of anadromous fish migration, all upper Sacramento River anadromous fish populations are potentially exposed to stressors in the Sutter Bypass. These species/races include Sacramento River winter run chinook salmon, all upper Sacramento River mainstem and tributary populations of spring, fall, and late fall chinook salmon, and steelhead. Additionally included are green and white sturgeon. This project will modify three structures within the Sutter Bypass which impact passage of anadromous fish and will provide immediate and long term benefit to all affected anadromous fish and support AFRP Butte Creek Evaluations 2, 6, 7, 10 and 11. The magnitude of these benefits is expected be significant.\*

**1j. List the threatened or endangered species that are expected to benefit from the project. Specifically identify the status of the species and races of anadromous fish that are expected to benefit from the project, any other special-status species that are expected to benefit, and the ecological community or multiple-species benefits that are expected to occur as a result of implementing the project.**#

Special status species which are benefited by this project include the state/federally listed winter (endangered) and spring run chinook salmon (threatened) and steelhead (threatened). Additionally the federally listed splittail (threatened) and federal candidate fall and late-fall chinook salmon are also benefited. Also benefited is the state species of concern green sturgeon, and CVPIA target species including white sturgeon, striped bass and shad. Additionally, the Sutter Bypass includes major wetland areas as well as the Sutter National Wildlife Refuge. The wetlands and Refuge support the state or federally listed giant garter snake, willow fly catcher, western yellow-billed cuckoo, greater sandhill crane and the valley elderberry longhorn beetle. Additionally, federal and state species of on concern include the western pond turtle, white-faced ibis, long-billed curlew, double crested cormorant, and tri-colored blackbird. Each of the fish and terrestrial species is impacted by the structures included in this project, either as a barrier or the role these structure serve in water distribution to the wetlands areas and refuge\*.

**1k. Identify if and describe how the project protects and restores natural channel and riparian habitat values. Specifically address whether the project protects and restores natural channel and riparian habitat values, whether the project promotes natural processes, and the immediacy and duration of benefits to natural channel and riparian habitat values.**#

The three structures included in this proposal are critical to water control distribution within the Sutter Bypass and directly affect flows supporting the riparian zone of the east and west channels, as well as maintaining the various wetland areas within the bypass. Improved water control will have immediate and long-term benefit to the

riparian and wetland areas.\*

**1l. Identify if and how the project contributes to efforts to modify CVP operations. Identify the effort(s) to modify CVP operations to which the proposed project would contribute, if applicable. Efforts to modify CVP operations include modifications to provide flows of suitable quality, quantity, and timing to protect all life stages of anadromous fish as directed by Section 3406 (b)(1)(B) of the CVPIA, including flows provided through management of water dedicated under Section 3406(b)(2) and water acquired pursuant to Section 3406(b)(3).#** This project will directly affect and control Butte Creek flows acquired for instream fish and wildlife values, which involve a U.S. Bureau of Reclamation CVP water exchange. Additionally, the Sutter National Refuge water supply, including potentially the delivery of the Level IV supply are directly benefited/ affected by implementation of this project.\*

**1m. Identify if and how the project contributes to implementation of the supporting measures in the CVPIA. Identify the supporting measure(s) to which the proposed project would contribute, if applicable. Supporting measures include the Water Acquisition Program, the Comprehensive Assessment and Monitoring Program, the Anadromous Fish Screen Program, and others.#** This project contributes to the implementation of the CVPIA Anadromous Fish Screen Program, Water Acquisition Program, Refuge Water Supply Program, and the Waterfowl Incentives Program. Benefits accrue to each of the programs either as the result of improved fish passage and/or water control.\*

**1n. Summarize comments from section 1i through 1m related to applicability to CVPIA priorities (if applicable, identify the CVPIA program appropriate to consider as the source of CVPIA funding [for example, the Anadromous Fish Restoration Program, Habitat Restoration Program, Water Acquisition Program, Tracy Pumping Plant Mitigation Program, Clear Creek Restoration Program, Comprehensive Assessment and Monitoring Program, and Anadromous Fish Screen Program]). Identify the strengths and weaknesses of the proposal, highlighting the applicability of the proposed project to CALFED and CVPIA goals and priorities. Focus on aspects of the proposal that may be important to later stages in the project review and selection process.#** This project will implement structural modifications to improve fish passage and water control at three weirs located within the Sutter Bypass Reach of Butte Creek. Included is the East-West diversion weir at the top of the Sutter Bypass, and Weirs 3 and 5 in the west channel of the Sutter Bypass. Each of the structures has been identified as an impediment to the passage of CVPIA priority species, which include the federal/state listed winter and spring run chinook salmon, steelhead, and splittail. Additionally, green and white sturgeon, striped bass and shad will also benefit. This project implements AFRP Butte Creek Evaluations 2, 6, 7, 10, and 11. Since Butte Creek harbors the largest remaining population of spring run chinook

salmon, significant fishery related watershed restoration efforts have been completed in the upper watershed which include the modification of four barrier dams with fish ladders and fish screens, one barrier with a fish ladder, and the removal of five additional barrier dams. Private wetlands and the Sutter National Refuge water supplies are also affected and controlled by these structures. Additionally, in the Butte Creek reach between the upper end of the Butte Sink and lower end of the Sutter Bypass, multiple projects are in various stages of development. Since each of the previous projects completed within the Butte Creek watershed is interdependent, overall restoration and fish and wildlife benefit requires completion of all Butte Creek projects, including the three in this proposal. Appropriate sources of funding for this project include the CVPIA Anadromous Fish Restoration Program, and Anadromous Fish Screen Program. Because of the magnitude of the funds needed and the multi-species benefits, other cost-share funding sources are also appropriate. In addition to the structural projects implemented by this proposal, an equally important component has been the applicants coordination role. All previous projects, including several in development have only been initiated through participation of all affected stakeholders. Additionally, the long-term durability and function of all actions is dependent upon stakeholder buy-in and ownership. \*

## **RELATIONSHIP TO OTHER ECOSYSTEM RESTORATION PROJECTS**

**2a. Did the applicant explain how the proposed project relates to other past and future ecosystem restoration projects, as required on page 57 in the PSP? Type in yes or no.#yes.\***

**2b. Based on the information presented in the proposal and on other information on restoration projects available to CALFED and CVPIA staff, describe how the proposed project complements other ecosystem restoration projects, including CALFED and CVPIA. Identify projects or types of projects that the proposed project would complement, now or in the future. Identify source of information.#**

This project is an integral part of the overall ecosystem restoration program for the Butte Creek Watershed (see project list under 3a2). Implementing the fish screen and fish ladders on three significant lower Butte Creek diversions will contribute to overall ecosystem health and abundance. Source: Proposal, quarterly reports.\*

## **RESULTS AND PROGRESS ON PREVIOUSLY FUNDED CALFED AND CVPIA PROJECTS, INCLUDING REQUESTS FOR NEXT-PHASE FUNDING**

**3a1. Based on the information presented in the proposal and on project reports and data available to CALFED and CVPIA staff, has the applicant previously received CALFED or CVPIA funding? Type CALFED, CVPIA, both, or none.#both\***

**3a2. If the answer is yes, list the project number(s), project name(s) and whether CALFED or CVPIA funding. If the answer is none, move on to item 4.# CALFED**

99B02 - Lower Butte Creek Project:Phase II-Preliminary Design/Environmental Analysis for Butte Sink Structural Modifications  
96M22 - Gorrill Dam Fish Screen  
95M05 - M&T/Parrott, Pumping Station and Fish Screen  
96M21 - Rancho Esquon/Adams Dam Fish Screen  
97N18 - San Pablo Bay NWR, Cullinan Ranch

97N19 - San Pablo Bay NWR, Tolay Creek  
CVPIA

1448-11332-9J006 - Lower Butte Creek Project, Phase III-Butte Creek,  
Drumheller exclusion Barrier engineering, permitting and construction

113329-9J135 - Lower Butte Creek Project, Phase II, Butte Creek, Butte  
Sink/Sutter Bypass Stakeholder Coordination/Facilitation

113329-9-J135 - Lower Butte Creek Project, Phase II, Butte Creek, Sutter  
Bypass East-West Diversion Dam Preliminary Engineering and Environmental  
Review

11332 - J122 - Lower Butte Creek Project, Phase II, Butte Creek, Sutter  
Bypass Weir #5 Preliminary Engineering and Environmental Review

113329-9-J136 - Lower Butte Creek Project, Phase II - Butte Creek, Sutter  
Bypass Weir #3 Preliminary Engineering and Environmental Review\*

**3b1. Based on the information presented in the proposal and on project reports available to CALFED and CVPIA staff, did the applicant accurately state the current status of the project(s) and the progress and accomplishments of the project(s) to date? Type yes or no.#yes.\***

**3b2. If the answer is no, identify the inaccuracies:#**

**3c1. Has the progress to date been satisfactory? Type yes or no.#yes.\***

**3c2. Please provide detailed comments in support of your answer, including source of information (proposal or other source):#**Nine major technical and environmental evaluations completed and three in progress in the Watershed. Ultimate success and effectiveness is dependent on completion of projects in the lower watershed. Source: Proposal, quarterly reports, documents.\*

#### **REQUESTS FOR NEXT-PHASE FUNDING**

**3d1. Is the applicant requesting next-phase funding? Type yes or no.#yes.\***

**3d2. If the answer is yes, list previous-phase project number(s) here. If the answer is no, move on to item 4.#**1448-11332-9J006,113329-9-J135, 113329-9-J122, 11332-9-3122, 113329-9-J136.\*

**3e1. Does the proposal contain a 2-page summary, as required on pages 57 and 58 of the PSP? Type yes or no.#yes.\***

**3e2. Based on the information presented in the summary and on project reports available to CALFED and CVPIA staff, is the project ready for next-phase funding? Type yes or no.#yes.\***

**3e3. Please provide detailed comments in support of your answers, including source of information (proposal or other source):#**Project results to date were shown in the proposal. Previous projects are at or near completion and are ready for next phase. Source: Proposal, project documents.\*

## **LOCAL INVOLVEMENT**

**4a. Does the proposal describe a plan for public outreach, as required on page 61 of the PSP? Type yes or no.# Yes\***

**4b. Based on the information in the proposal, highlight outstanding issues related to support or opposition for the project by local entities including watershed groups and local governments, and the expected magnitude of any potential third party impacts.#** The only outstanding issue, is a component of project implementation that requires an operations and management agreement with the owner/operator of each of the structures and there do not seem to be any other local third party concerns or impact.\*

## **ENVIRONMENTAL COMPLIANCE**

**4d. List any potential environmental compliance or access issues as identified in the PSP checklists.# None\***

**4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline.# None\***

## **COST**

**5a. Does the proposal include a detailed budget for each year of requested support? Type yes or no.# yes\***

**5b. Does the proposal include a detailed budget for each task identified? Type yes or no.# yes\***

**5c. Is the overhead clearly identified? Type yes or no.# yes\***

**5d. Are project management costs clearly identified? Type yes or no.# yes\***

**5e. Please provide detailed comments in support of your answers to questions**

**5a - 5d.#** Applicant is offering a federally approved (DOA) indirect rate of 13.555%. Task 5 includes costs for applying for future CALFED grants. Tasks 1-3 are construction of the three weirs and no further detail than

lump-sum service contract amounts have been provided. Applicant indicates there is a cost savings accrued (no amount provided) by pursuing all three weir construction efforts concurrently. Calculations on Attachment E are off by a minor amount- maybe due to rounding?\*

### **COST SHARING**

**6a. Does the proposal contain cost-sharing? Type yes or no.# yes\***

**6b. Are applicants specifically requesting either state or federal cost share dollars? Type state, federal, or doesn't matter.# \$0 proposed\***

**6c. List cost share given in proposal and note whether listed cost share is identified (in hand) or proposed.**

**6c1. In-kind:# \$0 proposed\***

**6c2. Matching funds:# \$200,000 in hand\***

**6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.# 4% or  $200,000/4,783,719=.041808475$ \***

**6d. Please provide detailed comments in support of your answers to questions**

**6a - 6c3.#** Applicant requesting \$4,783,719 in funding from CALFED. \$200,000 committed by the Packard Foundation that brings the total project to \$4,983,719. Applicant indicates Butte Slough Irrigation Co. will contribute \$63,000 to LT O&M..\*