

i. **Proposal number.**#2001-K212\*

ii. **Short proposal title.**# 2D Hydraulic & Habitat simulation model to assess channel restoration\*

**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, 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.**# This proposal will evaluate a habitat restoration project in the Merced River which is designed to improve spawning conditions for San Joaquin fall-run chinook salmon. The proposal will monitor the fluvial processes and develop habitat simulations. This will contribute to the long term recovery goal for SJ fall-run chinook and provide much needed data on restoration of spawning channels in the SJ basin.\*

**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.**# Goal 1, Objective 1. Achieve, first, recovery and then large self-sustaining population of fall/late-fall-run chinook salmon. The goal of the ERP is to recover San Joaquin fall-run chinook salmon.\*

**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.**# This proposal is a Fishery Monitoring Assessment and Research proposal to improve our understanding of the ecological processes affecting the fishery resources of the Central Valley. This proposal will improve and expand our understanding of channel dynamics and sediment transport resulting from an ongoing project. This would be part of the comprehensive monitoring element for the Robinson Project on the Merced River.\*

**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 proposal is linked through the following Stage 1 action: Complete targeted research and scientific evaluations needed to resolve the high priority issues and uncertainties in the ERP Strategic Plan. This proposal addresses the uncertainties related to channel dynamics, sediment transport, and riparian vegetation.\*

**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.**

# This proposal addresses S.J. fall-run chinook salmon which are a MSCS "recover" species. Related conservation measures include implement applicable management measures identified in the AFRP and the recovery plan for native Delta fishes.\*

**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.**

# This proposal appears to provide a comprehensive approach to examining a restoration project in the Merced River. It has a conceptual model and hypotheses to be tested by the monitoring program. The adaptive approach will provide an assessment of the two-dimensional model and show how it can be applied to other similar projects for the purposes of providing a more standard evaluation.\*

**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 proposal would provide a useful view of a chinook salmon spawning habitat restoration project in the San Joaquin Basin. The cost or cost sharing for the proposal is unclear. If the amount requested is indeed \$11,000, then it would be a very good expenditure.\*

## **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).#** This project is intended to evaluate use of a Two-dimensional hydraulic and habitat simulation model as an alternative method to measure effectiveness of a channel restoration project for fall-run Chinook salmon at the Robinson Reach of the Merced River. The restoration project has received funding under separate requests. This evaluation will complement adult and juvenile fish monitoring, and sediment transport monitoring planned in the program. If successful, this evaluation could provide a more cost-effective means for quantifying production benefits of other channel restoration and physical habitat restoration projects and for assessing if modifications in such restoration activities are needed for future projects. This could indirectly benefit salmon production by improving assessment methods to project benefits provided by channel restoration projects and provide a component that will contribute to adaptive management. Informational benefits will be evaluated through physical and biological validation of modeling predications on habitat conditions AFRP FY2000. Durability of the informational benefits in part rely on the results of the physical and biological validation results of the monitoring effort. This proposal would fund model calibration and collection of post-project data.\*

**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.#** The focus of this evaluation is habitat for fall-run Chinook salmon, which is a Federal Candidate species in the San Joaquin River Basin.\*

**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.#** This evaluation, if successful could provide a means for quantifying the fish habitat benefits of projects which are intended to protect and restore natural channel function. The evaluation can be conducted immediately upon completion of the construction phase, provided appropriate flows are available.\*

**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).# Indirect. This project might only affect CVP operations if the models identified substantial habitat benefits associated with different flows, thus influencing flow recommendations.\***

**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.# Results of the evaluation may assist or complement the Comprehensive Assessment and Monitoring Program.\***

**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.# The proposed evaluation provides direct support for the Anadromous Fish Restoration Program priorities in that it is focused on measurements to evaluate fish benefits that accrue from projects that restore natural channel and riparian habitat values. The proposal complements monitoring evaluations already planned for the Robinson Reach - Merced River Salmon Habitat Enhancement Project. These evaluations combined will give a basis for comparing the relative utility of different monitoring techniques. It is also the next Phase of an on-going project. The first phase is collecting pre-restoration project measurements. Continuity of funding to complete this evaluation of post-restoration project conditions is highly desirable.\***

## **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 a component of a CVPIA funded restoration effort for Robinson Reach. Source: Proposal\***

**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.#CVPIA\***

**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.#In Fiscal Year 2000 AFRP transferred \$26,317 to the FWS Energy and Instream Flow Branch for first phase of this project: Evaluate the use of PHABSIM/2D modeling of spawning and rearing habitat to assess benefits of restoration. No contract number.\***

**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):#After funds awarded, proponent met with the Robinson Restoration Project Team in May 2000 to explain objectives, followed by a site-**

reconnaissance visit in July, to establish specific monitoring locations and to establish contact routines with the landowner. Pre-project work is scheduled to begin August 2000. Source: Participation in Robinson Restoration Project Team and knowledge of work to date.\*

### **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.#**In Fiscal Year 2000 AFRP transferred \$26,317 to the FWS Energy and Instream Flow Branch for first phase of this project: Evaluate the use of PHABSIM/2D modeling of spawning and rearing habitat to assess benefits of restoration. No contract number.\*

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

**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):#**Phase I will be completed by May 2001. The next phase, to be funded by this requests, includes model validation, which could occur immediately when funding becomes available. Source: Staff information.\*

### **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.#** This evaluation is a component of the larger Robinson Reach - Merced River Salmon Habitat Enhancement Project. The proposal appropriately defers to the local involvement plan for the overall project.\*

## **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 requesting**

funding for year 2 of project and tasks to be performed are inseparable. Overhead is quoted at 19%.\*

## **COST SHARING**

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

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

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

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

**6c2. Matching funds:# \$0\***

**6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.# \$0%\***

**6d. Please provide detailed comments in support of your answers to questions 6a - 6c3.# n/a\***