**i. Proposal number.#** 2001-K216*

**ii. Short proposal title.#** Cosumnes River Comparative Rearing Research Project*

**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 research proposal will address the use of seasonal and permanent habitats by juvenile chinook salmon, specifically densities and growth rates among and between the mainstem Cosumnes River, its floodplains, and secondary channel and non-natal tributary habitats. This will contribute to the understanding of chinook salmon life history requirements and the relationship of several types of habitat to the overall goal of recovering chinook salmon.*

**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; and Goal 4, Objective 2, restore large expanses of all major aquatic, wetland, and riparian habitats, and sufficient connectivity among habitats in the Central Valley and its rivers to support recovery and restoration of native species and biotic communities and rehabilitation of ecological processes.*

**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 directly in response to the Fishery Monitoring Assessment, and Research section of the PSP.*

**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 to
Stage 1 actions that address the early restoration of the Mokelumne/Cosumnes habitat corridor. The link is indirect, but the type of evaluations proposed will assist in evaluating the consequences of restoration in the Cosumnes River.*

**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 is directed at monitoring fall-run chinook salmon which are a MSCS "recover" species.*

**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.#** The conceptual model is weak and does not portray the relationship of the various types of habitats (riverine, floodplain, channel) and the utilization by chinook salmon. It does not address any of the scientific uncertainties identified in the PSP even though the monitoring will occur in restored floodplain areas. The hypotheses are straight forward and the proposed monitoring program will likely collect the data needed to test the hypotheses. There was little discussion of how the data would be handled in an adaptive management framework, how it would be used to confirm or redesign restoration approach for the Cosumnes River, and whether or not the data and recommendations would be transferable to nearby watersheds.*

**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.#** The study will assess chinook salmon densities, comparative fitness, stranding, and predation at a variety of habitats in the Cosumnes basin. The proposal could have been improved by a better conceptual model and by adding splittail and their spawning and rearing habitat as additional elements to be monitored. *

**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).#** Project would benefit fall run chinook salmon. The magnitude of the project's contribution to natural production is potentially high because it would provide information useful in designing floodplain or side channel restoration projects. The certainty of the project's benefits is also high in that it will lead to improved understanding of how habitat conditions affect juvenile salmon growth and survival. The expected benefits would depend in part on the findings of the study and the degree to which its recommendations are confirmed with field-scale adaptive management experiments, but could be immediate and of infinite duration given that the Cosumnes River has no major impoundments. Thus, restoration strategies or design features adopted on the basis of this study's results would be operating within a system that is not dependent on management of reservoir outflows and would be benefiting a self-sustaining salmon population.*

**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 project would benefit Central Valley fall and possibly late fall run chinook salmon, which are candidates for federal listing. Although this project is focused on Cosumnes River populations, benefits could apply Central Valley-wide.*

**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 project would compare relative abundance, growth rate, susceptibility to stranding and other measures of rearing habitat quality between natural floodplain or side channel reaches of the Cosumnes to heavily channeled or otherwise modified reaches. This information could be used immediately to adapt management strategies or habitat restoration project designs for the Cosumnes and other rivers.*

**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).#** Results of this study could lead to changes in disposition of b(2) releases from Folsom Dam (via Folsom South Canal) or to b(3) acquisitions from willing sellers in the Cosumnes catchment.*

**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.#** Project would contribute substantially to 3406(g) ecosystem modeling effort and to CAMP.*

**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 study would address issues of fundamental relevance to habitat restoration focused on all AFRP target species. Specifically, it would test hypotheses of critical importance in designing and evaluating restoration actions focused on improving rearing habitat for chinook salmon. It directly addresses a high priority Delta-focused evaluation need (Evaluation 6) identified in the 1997 Revised Draft Restoration Plan of the Anadromous Fish Restoration Program (AFRP) and would be appropriate for funding consideration under the AFRP.*

**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.#**Linked to and compatible with other juvenile salmon restoration projects in the Central Valley and previously funded work in the watershed by CALFED, other agencies, and The Nature Conservancy. Complements 99C01 Cosumnes River Feasibility Study. 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.#**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 98B25 - Cosumnes River Salmonid Barrier Improvement Project
CVPIA 114200J033 - Juvenile Salmon Distribution in the Stanislaus River
CVPIA Cooperative Agreement 11332-9-J013, Assess chinook salmon and steelhead distribution, habitat use, and food habits in the Cosumnes River floodplain*

**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):#**98B25 project is ongoing, currently in construction phase. CVPIA project 11332-9-J013 completed on time and within budget. Final report and raw data are on

file at the AFRP office of the US Fish and Wildlife Service in Stockton. Source: Proposal, contract information*

**REQUESTS FOR NEXT-PHASE FUNDING**
**3d1. Is the applicant requesting next-phase funding? Type yes or no.#**no*

**3d2. If the answer is yes, list previous-phase project number(s) here. If the answer is no, move on to item 4.#**

**3e1. Does the proposal contain a 2-page summary, as required on pages 57 and 58 of the PSP? Type yes or 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.#**

**3e3. Please provide detailed comments in support of your answers, including source of information (proposal or other source):#**

**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 proposed project enjoys local support, no opposition, and would have no third party
impacts.*

**ENVIRONMENTAL COMPLIANCE**
**4d. List any potential environmental compliance or access issues as identified in the PSP checklists.#** The project proponent will need to initiate with both CESA and ESA compliance. In addition, the proponent will need to obtain a Scientific Collection Permit for any activities associated with sampling fish.*

**4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline.#** Since the project proponent mentioned that both steelhead and splittail could be caught by the project. Consultation will need to be initiated with both the USFWS and NMFS.*

**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 indicates that tasks 1,5 and 6 are inseparable and tasks 2,3 and 4 can be funded separately. Administrative overhead is quoted at 9% and additional overhead is a component of the project managers salary.*

**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.#** doesn't matter*

**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:#** $8,795 proposed*

**6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.#** 8% or 8,795/112,500=.084807868*

**6d. Please provide detailed comments in support of your answers to questions 6a - 6c3.#** Matching cost share
funds are a pro-rated value of equipment necessary to undertake the study.*