- i. Proposal number.#2001-C209*
- ii. Short proposal title.# Tuolumne River Mining Reach Restoration #3 Warner- Deardorff *

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**# The proposed project has the potential to contribute to Goal 1 (at-risk species--fall-run chinook); Goal 2 (rehabilitate natural processes--sediment routing and floodplain inundation); Goal 3 (maintain harvested species--fall-run chinook); and Goal 4 (protect/restore habitats--restore aquatic and riparian habitat).*
- **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 # 6 pts. The proposed project could possibly make a contribution to restoring fluvial processes (Goal 2) on the Tuolumne River, as well as enhancing aquatic and riparian habitats (Goal 4). However, the proposal fails to describe the proposed project in sufficient detail to evaluate the scope of the contribution. The proposal generally describes the intent of restoration for the entire mining reach, rather than describing the rationale and the benefits of the phase covered by this proposal. Similarly, the scope of contributions to species-oriented goals (Goals 1 and 3) cannot be determined sufficiently because the proposal fails to describe the rationale and benefits of this specific project, as opposed to the whole mining reach.*

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.# 6 pts. The proposed project has the potential to make a significant contribution to Objectives 2-4, 2-5, 2-6, and 2-7 by restoring sediment routing and floodplain inundation. But, again, the proposal does a very poor job of describing the rationale and benefits of this discrete phase of the mining reach restoration. I can suggest that the project might make a significant contribution only because of my personal familiarity with the proposal restoration, and not because of the proposal. Similarly, the proposal has the potential to contribute to Objectives 4-2 by enhancing aquatic spawning habitat and riparian habitat, thereby contributing to

species-oriented objectives (Objectives 1-1, 3-1) by improving spawning and survival of fall-run chinook. Again, all that can be said is the proposed project has the potential to make such contributions, since the proposal does not clearly demonstrate a clear conception of the rationale and benefits of this discrete phase of the mining reach restoration.*

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.# 6 pts. The project does match the description of channel-floodplain reconstruction projects in Section 3.5 of the PSP. However, the proposal only weakly fulfills an important requirement described in the PSP: "proposed channel-floodplain reconstruction projects should clearly articulate a conceptual model explaining how the proposed channel-floodplain geometry will restore ecosystem function within the context of the regulated flow regime . . ." The proposal generally describes the objectives of restoring the entire mining reach rather than describing the underlying conceptual model of this discrete phase of the mining reach restoration. The conceptual model that is offered is more a list of restoration objectives rather than an explanation of how the proposed channel-floodplain modifications will restore processes, habitats and species. The project proponents should be encouraged to revise their conceptual model to focus more specifically on the proposed project, and re-submit the proposal in the next 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.# 8 pts. The proposed project directy addresses a Stage 1 action identified in the Sacramento River, San Joaquin River and Tributaries Bundle of the Implementation Plan: Action 43--Tuolumne River implementation Actions.*

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.# 7 pts. The proposed project has the potential to contribute to enhancing the population of fall-run chinook salmond. The riparian re-vegetation component could also provide benefits to bird and amphibian sensitive 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.# 6 pts. The proposal does not clearly demonstrate the incorpation of an experimental approach. Nevertheless, riparian re-vegetation efforts associated with channel-floodplain reconstruction projects generally offer a golden opportunity incorporate an experimental design in the riparian re-vegetation efforts, to enhance our understanding of the habitats that result from restoration of fluvial geomorphic processes, and biotic responses to both process and habitat restoration. Project proponents should be encouraged or required to convene a panel of expert scientists to review the conceptual designs of the channel-floodplain and riparian re-vegetation plans to incorporate experimental approaches and optimize the project's information yield.*

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.# 6 pts. Considering the scope of funding being requested, the project proponents need to demonstrate and communicate a clearer understanding of the rationale for this project (principally through a more descriptive, project-specific conceptual model) and the ecological benefits of this particular project, rather than the general aim of the mining reach restoration. The propoal needs to be re-written to focus more specifically on the discrete phase of mining reach restoration being proposed in this round of funding. The proposed project likely has enourmous potential to make significant contributions to ERP goals and objectives and to address scientific uncertainties, but the proposal only suggests a potential to make a significant contribution. A better demonstration of the rationale for this project, and better incorporation of an experimental approach, would instill more confidence that the project would deliver on this potential to make significant contributions. Project proponents should also be encouraged to explain why Phase III of mining reach restoration is ripe for funding in the current round, considering the difficulties and delays in implementing Phases I and II.*

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).# Fall-run, late fall-run Chinook salmon and steelhead rainbow trout will benefit from this project.

Upon completion of this project there will be immediate reduction in the number of outmigrants that could be lost to or captured in over-topped off-channel mining pits. The project effectively will nullify the risk of breaching of off-channel mining pits, thereby preventing mortality of outmigrant smolts. Restoration of the riffle and run sequences previously mined from the channel will allow spawning to recur in this reach of the river and improve existing rearing conditions. Based on past riffle restoration actions, the increase in spawning should be observable within 3 years of completion of the project. This project will restore 1.3 miles of the 6.1 mile Mining Reach, providing a 21% increase in usable habitat area in this reach, and an approximately 5% increase in usable habitat within the known spawning area. Smolt survival studies indicate a reduced survival rate when passing through the mined areas. This project is expected to decrease outmigrant smolt mortality. This proposed action is consistent with the 1997 Revised Draft Restoration Plan for the AFRP, Tuolumne River Action 2, to "Improve watershed management and restore and protect instream and riparian habitat, including consideration of restoring and replenishing spawning gravel and performing an integrated evaluation of biological and geomorphic processes. All realized fish benefits should be long-term owed to a built in self maintenance function of the project.*

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.# Candidate species the fall-run chinook salmon will be the primary beneficiary of this project. The threatened Steelhead rainbow trout likely will benefit from this project as well. The project also includes substantial enhancement of riparian and shaded riverine habitats from existing conditions. These enhancements also will benefit western pond turtle, Swainson's hawk, herons and egrets as well as neotropical migrant songbirds. Over time Valley Elderberry Longhorn Beetle and Riparian woodrat may benefit from a completely restored riparian corridor in the mining reach.*

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 primary goal of this project is to enhance salmon habitat by re-creating natural channel and riparian habitat values. The project would restore alternate bar (pool-riffle) morphology and restructure the natural channel geometry scaled to current (impeded) channel forming flows. Floodplain areas will be created and riparian vegetation communities replanted. This restructuring will reduce the potential to breach dikes and connect off-channel mining pits to the

main river. Physical channel benefits will be almost immediate. Riparian habitat benefits will accrue over a 3 to 25 year period as the vegetation establishes and matures. Widening of the floodplain and rescaling of the river morphology will allow the channel to be self-maintaining and durable.*

11. 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 does not modify existing flows. Also it does not preclude future opportunities to modify flows, possibly with assistance from the Water Acquisition Program (b)(3), for the benefit of anadromous fishes and to enhance channel maintenance.*

Im. 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.# Monitoring and evaluations resulting from this project will complement studies undertaken in the CAMP. Restoration of a channel and floodplain that functions under the contemporary hydrology could provide opportunity for additional water acquired pursuant to the Water Acquisition Program for channel and habitat maintenance.*

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 is clearly focused on the objectives of the AFRP and supports Tuolumne River Action 2 in its 1997 Revised Draft Restoration Plan. The intent is to increase natural production of fall-run Chinook salmon by restoring natural characteristics and function of a reach of the Tuolumne River to re-create historic spawning habitat, reduce smolt mortality, enhance rearing potential and restore riparian and shaded riverine habitat. The approach focuses on restoring attributes of a functional riparian ecosystem. The riparian community will be a beneficiary of the project as well. Anadromous salmonid benefits should accrue in the near term and persist over the longterm. The monitoring is well focused to assess functional effectiveness of the project. Past and current mining regulations do not provide protections or reclamation obligations to maintain substantial natural river function, in part because the critical

importance of theses processes was not well understood at the time. This restoration project has significant potential to influence future mining reclamation plans in the San Joaquin River Basin.

The Tuolumne River Technical Advisory Committee, in part responsible for coordination of restoration activities endorses this as a high priority project.*

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 habitat restoration project continues other CALFED and CVPIA funded restoration work (97M09, 98F06, 1448-11332-97-J189, 11332-9-J025) on the Tuolumne River and is the third of four projects in the Mining Reach Project. Additional Projects in the Tuolumne River include 97C11, 97M08, 98C05, 98F07, 99F01, 99F02, DFG Projects and a CVPIA funded sediment management plan. Most of the projects are designed to improve spawning areas and habitat and predation on salmon in the upper reach of the river.*

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 - Restore special run pool reach - 99F01

CALFED/CVPIA - Tuolumne River Setback Levees and Channel Restoration Mining Reach 7/11 segments - 97M09, 98F06, #144811332-97-J189

CALFED/CVPIA - 97M09, 98F06, MJ Ruddy segment 99F02, #11332-9-J025

CALFED/CVPIA - 97M09, 98F06 - SRP 9/10, 97M08, #1448-11332-97-J189*

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):#Proponent has successfully completed or is progressing on earlier projects.*

REQUESTS FOR NOXT-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.#See all projects under 2b. All are part of the overall Restoration Plan.*
- 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):#Work on the earlier Mining Reach Project 1st has finished preconstruction, permitting and expert construction to start summer 2000. 2nd permitting, construction design and acquisitions of easements to start mid 2000 and construct to start June **2000.***

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 applicant appears to have addressed potential third party impacts, and has conducted key outreach activities to garner local support for this project.*

ENVIRONMENTAL COMPLIANCE

4d. List any potential environmental compliance or access issues as identified in the PSP checklists.# Project proponent may need to obtain a Grading Permit for in-channel activities*

4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline.# The Department of Fish and Game should be consulted during the early phase of this project so that concurrence can be achieved with regards to endangered species consultation (CESA).*

COST

5a. Does the proposal include a detailed budget for each year of requested support? Type yes or no.#Yes, the budget in table 6 is divided up quarterly as well as yearly. Funds are requested for four years.*

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.# No mention of overhead*

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**.#Overhead needs to be identified*

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:#n/a*

6c2. Matching funds:#n/a*

- **6c3.** Show percentage that cost sharing is of total amount of funding requested along with calculation.#USFWS-AFRP: 3,376,000 dollars; TID: 40,000 dollars*
- **6d.** Please provide detailed comments in support of your answers to questions **6a 6c3.**#All information requested has been provided by project proponent in a clear, concise, and understandable format*