

i. Proposal number.#2001-L201*

ii. Short proposal title.# Sacramento River Fish Screen Program Vertical River Pump Diversions*

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***

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.# The ERP discusses the importance of screening diversions on the Sacramento River for protection of anadromous fish. The proposal states that the program would reduce entrainment, especially for at-risk species such as chinook, steelhead and splittail. There is no quantification provided for this statement.*

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 would address Objective 1 - recover the Big R species. Again, no quantification provided.*

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.# The proposal directly addresses Section 3.5 regarding testing of alternatives in technology and demonstrating retrievable screen technology.*

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.# A Stage 1 action is to evaluate the need to screen all diversions smaller than 100cfs on the mainstem Sacramento. The project is continuation of actually screening some of these small 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.# Assuming that screening diversions assists at-risk species, then the proposal may assist in recovering those species listed in 1a.*

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 proposal does not directly address an uncertainty in Section 3.3. However, it does describe the uncertainties for the program and how those will be addressed. It also discusses the type of information that will be developed, different alternatives that will be evaluated, and how findings will be reported and incorporated into future decision making*.

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 is an ongoing program which addresses an important Stage 1 action for screening small diversions on the Sacramento. The proposal proposes to implement a program that evaluates alternatives and provides information for future fish screen projects. It was responsive to the PSP and to suggestions for fish screens in Section 3.5.*

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).# Small unscreened diversions within the Chico to Verona reach of the Sacramento River have the potential to detrimentally impact all upper Sacramento River anadromous

salmonids, including fall, late-fall, winter and spring run chinook salmon, and steelhead. Additionally, splittail, green and white sturgeon, striped bass and shad are potentially impacted. Although the magnitude of impacts is dependent upon a variety of factors, including pump size, time of use and location, the general approach has been to screen the larger diversions first, with the basic assumption that fish impacts are proportional to diversion size.*

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 potentially impacted by small unscreened vertical pump diversions in the project area include the listed winter run (federal/state endangered) and spring run (federal/state threatened) chinook salmon, steelhead (federal threatened), and splittail (federal threatened) and the federal candidate species fall and late-fall run chinook salmon. Additionally green sturgeon, a state species of concern would be benefited.*

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.# Project does not restore or protect natural riparian habitat values, however if screens are not properly sited could have negative impact upon these values*

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).# Project does not affect CVP ops.*

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 is applicable to the Anadromous Fish Screen 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.

This project is a continuation of a pilot program implemented by the Natural Resource

Conservation Service in partnership with the Family Water Alliance. The initial pilot program was for the development and installation of positive barrier fish screens on small slant-pump diversions along the upper Sacramento River and tributaries between Chico and Verona. The initial program has experienced a significant number of failures and has not yet developed an acceptable or workable technology. Applicant is proposing a similar program to address vertical-pump diversions, of which there are over two hundred in the project area. All upper Sacramento River anadromous fish are exposed to these unscreened diversions including fall, late-fall, winter and spring-run chinook salmon, and steelhead. Also exposed are splittail, green and white sturgeon, striped bass and shad. Potential funding for this project is within the scope of the CVPIA Anadromous Fish Screen Program.

A previously funded project by applicants developed an effective local communication network, however screen failures have significantly diminished that effort. While applicant is appropriately proposing to develop and implement fish screen technology for small vertical pumps, the failures associated with the previous project bring into question the current approach. In coordination with the Anadromous Fish Screen Program, applicant might consider implementing research under more controlled conditions to develop technologies specifically addressing conditions unique to the Sacramento River.*

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.

#The small screen program will complement CALFED efforts to reduce entrainment of endangered species along the Sacramento River and enhance other agency efforts including CDFG Unscreened Diversion Program, AFRP, and the NRCS Fish Screen Program. Benefits restoration efforts on Deer, Mill, Battle, and Butte Creeks. 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.#CALFED.*

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.#98R01,00R01 - NRCS Grant small diversion fish screen program.*

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):#Project proponents accurately described the problems encountered with off the shelf technology and are using adaptive management to revise the work. Have completed most of their first phase. Source: Proposal, contract information*

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.#98R01, 00R01*

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 proponents accurately described the problems encountered with off the shelf technology and are now planning on redirecting current and new efforts toward identifying problems, redesign, and pre-post-construction monitoring. They should be ready for the next phase in 2001, but should consider increasing the amount of post construction effectiveness monitoring. Source: Proposal, contract 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.# While the Natural Resources Conservation Service and Family Water Alliance have developed an excellent communication network, the previous screen failures have significantly diminished their efforts. The result has been a generally negative image of the program that is affecting general restoration efforts involving small pump fish screens.*

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 indicates tasks are non-severable and will be accomplished of a 5 year period with potential to screen up to 10 vertical pump diversions.*

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:# # \$232,000 proposed*

6c2. Matching funds:# \$100,000 proposed*

6c3. Show percentage that cost sharing is of total amount of funding requested along with calculation.#

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

6a - 6c3.# Applicant estimates

that 25% cost share will be secured of which \$100,000 from EQIP Program and \$232,000 of in-kind services are proposed at this time. FWA would attempt to secure the balance. \$200,000 indicated as available from CDFG on the Cover Sheet is not elaborated upon in the body of the proposal.*