

i. Proposal number.# 2001-K-209*

ii. Short proposal title.# Estimating the Abundance of Sacramento River Juvenile Winter Chinook Salmon with Comparisons to Adult Escapement*

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.# This proposal will reduce the uncertainty associated with the winter-run juvenile production estimate. This estimate can affect the operation of the Delta pumps through incidental take. The production estimate is also a more "real time" measure to indicate juvenile abundance. This proposal will increase the accuracy and precision of winter-run chinook population estimates.*

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 winter-run chinook salmon. The goal of the ERP is to recover winter-run.*

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. The PSP specifically requests actions to better define correlation and relationships and proposals to develop and implement standardized census methods for adult and juvenile salmonids. This proposal addresses both items requested in 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 action is primarily a monitoring/research proposal and is not a Stage 1 action.*

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.# Winter-run chinook are classified in the MSCS as a "recover" species. This proposal is consistent with the winter-run conservation measure which specifies effort to implement elements of the winter-run recovery plan. This proposal is also consistent with the recovery plan.*

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 provides hypotheses and conceptual models and monitoring to test the hypotheses. The study will greatly reduce the uncertainty regarding adult estimation methodology and the juvenile production estimate.*

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 will greatly help in better understanding the limitations of the existing adult estimation methodologies by comparison with estimates of juvenile production. A critical question is whether or not winter-run chinook are on a recovery trajectory. This cannot be determined in the absence of an accurate population estimation procedure. This study will develop a robust juvenile population estimate which can be used to calibrate or test the accuracy of adult estimation techniques. This is a good thing.*

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 monitoring project will obtain juvenile production indices for winter-run chinook salmon through screw-traps at the Red Bluff Diversion Dam. These indices will be correlated with adult escapement from adult counts at RBDD and carcass surveys. This data will be used to produce more accurate winter-run juvenile production estimates (JPE) to determine allowed incidental take in the Delta by the CVP and SWP (current allowed take is two percent of the JPE). Current methods of developing JPE is only moderately correlated to actual production. In years where JPE is significantly overestimated, more take is allowed at the Delta. This project will benefit winter-run production by producing more accurate JPEs. The benefits are certain and will be immediate upon implementation of the monitoring.*

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.# Winter-run (endangered) chinook salmon would benefit in years where current JPE are overestimated.*

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 will not lead to restoration of natural channel and habitat values because it is a monitoring program.*

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 would contribute to efforts to modify CVP operations by more accurately estimating the juvenile production of winter-run chinook of which two percent take is allowed in the Delta pumping plants.*

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 supports the CVPIA and CAMP for monitoring and the AFRP goal to collect information to support future restoration efforts. Supporting measures include, 3406(b)(16) and possibly 3406(e)(2).*

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 monitoring project will obtain juvenile production indices for winter-run chinook salmon through screw-traps at the Red Bluff Diversion Dam. These indices will be correlated with adult escapement from adult counts at RBDD and carcass surveys. This data will be used to produce more accurate winter-run juvenile production estimates (JPE) to determine allowed incidental take in the Delta by the CVP and SWP (current allowed take is two percent of the JPE) and could lead to modification of CVP operations. Current methods of developing JPE is only moderately correlated to actual production. In years where JPE is significantly overestimated, more take is allowed at the Delta. This project will benefit winter-run production by producing more accurate JPEs. The project qualifies for funding under CAMP and 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. # Abundance estimates for winter-run chinook salmon in the Sacramento River provides information on effects of restoration efforts by CALFED on populations of winter-run chinook salmon. 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.#
CVPIA - Expanded juvenile salmon and steelhead monitoring at Red Bluff Diversion Dam*

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): #

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 project will coordinate activities with students from the Sacramento River Discovery Center and local schools.*

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

that task 1 (performed in each of the three years for a total of 950,357) is severable from task 2.

Task 2 cannot be funded alone. Overhead is quoted at 3%.*

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.# 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*

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.# Applicant is taking

exception to state performance retention (10% withholding) standard language which could be a limiting factor on the source of funding provided.*