

i. Proposal number:# 2001-B202

ii. Short proposal title .# Arundo donax: Survey and Eradication*

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#D, E***

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 project will help protect-restore functional habitats (Goal D) by seeing how native plant species respond to efforts to remove non-native invasive species and consists of mapping and removing stands of the non-native species Arundo donax (Goal E)and evaluating native revegetation in the newly cleared areas. *

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 D Restore Habitats:Objective 2: Restore large expanses of habitats in the Central Valley to support recovery of native species and Goal E Nonnative Invasive Species:

Objective 5: Halt introduction of nonnative plants into the watershed

Objective 7: Limit spread through focused management efforts

This project proposes to remove Arundo from 8 northern California streams. The reestablishment of native vegetation both naturally and in some places with nursery-grown native vegetation will be monitored. Actual stands of Arundo along the streams will be identified as part of the project implementation. The project design, if successful will eliminate these streams as a source for Arundo so although several of these streams are not specifically mentioned for ERP restoration, streams downstream from these areas will indirectly benefit.*

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.# Goal 5 Nonnative Invasive

Species. This project directly addresses an action under non-native Invasive Species, pg. 41, “Focus would be on the eradication of Arundo Donax and Tamarisk in the riparian areas.” This project was designed to complete this action.*

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 project is linked to early implementation action 13: Non-native invasive species management and will contribute directly to the action by implementing a demonstration project to remove a non-native invasive species and hopefully promote recolonization by native plant species*

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.# Through reduction of monoculture stands of an invasive species and the encouragement of the reestablishment of native stands of vegetation, riparian habitat conditions will be more favorable to native animal 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.# This project is directly addressed in the Non-native Invasive Species section of Scientific Uncertainties. It will limit the spread of NIS, increase our understanding of the invasion process and provide additional information on the reestablishment of native vegetation.*

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 project directly responds to both early implementation actions and an identified PSP action by implementing a demonstration project to eradicate *Arundo donax* and promote recolonization by native plant species. The potential of reestablishment of *Arundo donax* in the eradicated areas is not adequately addressed. If monitoring indicates reestablishment on "control sites" will they remove again?*

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).# The project would map and eradicate the non-native and invasive riparian weed, *Arundo donax* from eight tributaries to the Sacramento River in Butte, Glenn and Tehama counties. In addition native riparian habitat and stream morphology would be reestablished and reductions in flooding and bank erosion would be expected. The magnitude and certainty to anadromous production is impossible to estimate. Since most of the tributaries to be treated do not support runs of anadromous fish (exceptions, Big Chico Creek), the primary benefit would be improvement of non-natal rearing habitat in the lower reaches of the upper Sacramento River tributaries for the four races of chinook salmon and steelhead. Immediacy of benefits would occur over several years as native riparian habitat is reestablished. Duration of benefits are uncertain and dependent on reestablishment of *Aundo*.*

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.# Spring-run (threatened), winter-run (endangered), fall and late fall-run (candidate) chinook salmon and steelhead (threatened) would benefit through improved non-natal rearing habitat. In addition, restoration of native riparian habitat and ecological function will benefit riparian dependent fish and wildlife.*

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 remove a monotypic invasive weed to restore native riparian habitat and function. Benefits should include; improved channel stability, water quality, flood capacity, and terrestrial and aquatic habitat 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).# This project does not directly contribute to efforts to

modify CVP operations because these are not CVP controlled streams.*

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 may contribute to CVPIA supporting measures 3406(b)(13), 3406(e)(1), 3406(e)(6) through restoration of riparian habitat.*

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 supports the CVPIA and AFRP objective to improve habitat for all life stages of anadromous fish through improved physical habitat. Specifically, the benefits would be for non-natal rearing habitat for Spring-run (threatened), winter-run (endangered), fall and late fall-run (candidate) chinook salmon and steelhead (threatened). The project would map and eradicate the non-native and invasive riparian weed, *Arundo donax*, from eight tributaries to the Sacramento River in Butte, Glenn and Tehama counties. In addition native riparian habitat and stream morphology would be reestablished and reductions in flooding and bank erosion would be expected. A potential weakness is that the proposal does not address the presence or absence of *Arundo* in tributaries above Red Bluff in Tehama and Shasta counties. Many tributaries in this area above Red Bluff support runs of anadromous fish that might be more directly benefitted by *Arundo* eradication. In addition, removal of these upstream sources of *Arundo* (if present) could prevent reestablishment in the lowest portions of the treated tributaries in the proposal. This project qualifies for funding under 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.#Expands on work recently funded by CALFED (00F11) to coordinate efforts to determine extent of Arundo donax invasion, study control methods and eradicate the species to promote native vegetation and reduce excessive evapotranspiration. Source: Proposal and quarterly reports.*

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.#
96M16-Sacramento River and Major Tributaries Corridor Mapping Project
96M24-Butte Creek-Chinook Salmon and Establish Watershed Conservancy
97N06,98F03,98F24-Butte Creek Acquisition and Riparian Restoration Projects
98B35-Butte Creek Watershed Education Workshops and Field Tour Series
98F01-Butte Creek Watershed
00F11-Arundo Donax Eradication and Coordination*

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):#CSU Chico has several CALFED projects underway, mostly involving the Butte Creek Watershed, and is performing well on those projects. Source: Quarterly progress reports.*

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 was developed with support from local groups, city and county agencies, landowners and interested organizations. Each county has an outreach coordinator identified to work with local landowners. No third party impacts are anticipated.*

ENVIRONMENTAL COMPLIANCE

4d. List any potential environmental compliance or access issues as identified in the PSP checklists. # DFG's 1600 process now requires that CEQA needs to be addressed. As such, a CEQA document would need to be prepared. The applicant states on the Environmental Compliance Check list no. 4 that as a result of work on Deer Creek, we have received the determination that Arundo eradication is considered maintenance and therefore is exempt. This reference to being exempt will need to be clarified as to who made the determination. *

4e. Specifically highlight and comment on any regulatory issues listed above that may prevent the project from meeting the projected timeline. # No Comment*

COST

5a. Does the proposal include a detailed budget for each year of requested support? Type yes or no. #Yes, but there are errors in calculations. See proposal for corrections.*

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, it is listed as Administrative fees. The state rate is 20% while federal rates vary from 3.3% to 29.7%. Each task in each year contains a different overhead rate.*

5d. Are project management costs clearly identified? Type yes or no. #Yes, line item in Task 1 each year.*

5e. Please provide detailed comments in support of your answers to questions 5a - 5d. #All information requested has been provided by project proponent in a clear, concise, and understandable format.*

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.

6c2. Matching funds: #200,000 California Coastal Conservancy*

6c3. Show percentage that cost sharing is of total amount of funding

requested along with calculation.#Tehama County RCD Coordinator: 7,800 dollars; Landowner participation: 5,000 dollars; Agency participation: 1,000 dollars; Glenn County: 2,500 dollars; Workshops: 2,000; The city of Chico: 5,000 dollars; Tehama County: 10,000 dollars; Little Chico Creek Watershed: 7,000 dollars; and 1,000 dollars for equipment and travel over the life of the grant. Total: 41,300 dollars or 2.6%.*

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.*