

**i. Proposal number.#** 2001-E207\*

**ii. Short proposal title.#** Delta Tule Restoration Assessment\*

**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\***

**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 is primarily to evaluate tules in the Delta. Tules probably provide a major role in providing cover in many types of Delta aquatic environments and may be a significant structural component of shallow water habitat. This proposal can make an important contribution to better understanding the role and limitation of tules in the Delta and how species of concern may benefit from increased patches of Delta tules. For example, the ERP recommends the restoration of 30,000 to 45,000 acres of fresh emergent wetlands in the Delta. In many areas, tules may constitute the primary vegetation in the restored emergent wetlands. This proposal will provide the information to determine how this type of restoration will fit into the longer term restoration program.\*

**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 4, Objective 1. Better knowledge of tule propagation requirements would enhance the ecological value of restored shallow water habitats throughout the Delta.\*

**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 will help resolve uncertainties related to the complexity of wetland habitats and may help identify indicator species for suitable wetland conditions.\*

**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 would be a Stage 1

action as it addresses the restoration of the vegetative component of a variety of shallow water habitats that include fresh emergent wetland (tidal and non-tidal), mid-channel islands, and Delta slough habitat.\*

**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 indirectly related to the MSCS through the creation of a type of vegetative cover that provides for both aquatic and terrestrial species.

This proposal is most closely linked to the NCCP habitats: tidal freshwater emergent, non-tidal freshwater permanent emergent, and probably natural seasonal wetlands and managed seasonal wetlands.\*

**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 models, hypotheses, and monitoring aspects are all designed to be information rich and contribute to the adaptive management framework. The proposal is well organized.\*

**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.#**

Certainly, the role of tules in providing habitat has been understated in the ERP. This proposal will be an important step in quantifying the factors limiting the abundance and establishment of tules throughout the Delta. Because the ERP stresses the restoration of ecological processes and habitats, the manner in which tule regeneration and growth are influenced by processes and substrate is key to designing and improving the restoration program.\*

## **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).#** There is potential that all anadromous fishes will benefit from project. The project will investigate the use of tules by salmonids and other native fish and macro-invertebrates. This is important to help assess the importance of tule habitat for salmonid rearing. However, the project is limited to a general assessment of use relative to landscape location and spatial configuration of tule stands. Even though the project may find young salmonids use tule habitat for rearing, based on the relatively low potential to restore extensive delta tule habitat due to extensive rip-rapped levees the magnitude of contribution to natural production to all species and races of anadromous salmonids is low. Increased magnitude of benefit may occur in the Western Delta to Suisun Marsh where limited rip-rap shoreline occurs and if Harts method to establish tules in rip-rap is successful. In addition it is presently unknown the relative importance of Delta salmonid rearing compared to upstream and Bay rearing. The expected benefits are uncertain due to the above. There will not be an immediate contribution but if found beneficial the duration will be long-term if the tule habitat is maintained.\*

**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.#** Steelhead and spring-run salmon are threatened while winter-run are endangered, and fall and late-fall run are candidates for listing. There is some potential for Delta smelt and splittail to benefit from increased tule habitat as it could provide protective cover and increased food production. The tule marsh habitat community is expected to benefit from the project.\*

**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 promotes natural channel and riparian habitat values by establishing pilot tule habitats in the Delta that would enhance ecosystem function, improve water quality, protect levees from erosion, lessen current (wave) energies, and increase sediment accretion. Each of these promote natural processes. The duration of benefits to natural channel and riparian habitat values will be long-term if the restored tule habitat is maintained.\*

**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).**# The project may contribute to modified CVP operations to a limited degree by improved water quality.\*

**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.**# The project does not contribute to supporting measures in the CVPIA.\*

**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.**# The AFRP could fund the proposal as it has potential to gain new information applicable to the value of tule habitat to anadromous species and to determine if tule habitat restoration in the Delta is justified. This proposal relates to the CVPIA goal of improvement of fish and wildlife in the Central Valley. Specifically, this projects support Sacramento-San Joaquin Delta Evaluation 4 in the Revised Draft Restoration Plan. Also the action does have an indirect linkage to modifying CVP operations if this effort is successful on a larger scale and helps to improve Delta water quality. Uncertainties include the role of the Delta for juvenile anadromous salmonid rearing in Delta habitats relative to the role of upstream tributary and the Bay.\*

**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 project builds on several ongoing Delta projects and broadens the experimental design being implemented on the north fork of the Mokelumne River to Steamboat Slough. 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.#**  
97N13 - Tyler Island Levee Protection and Habitat Restoration Pilot Project.  
99N03 - East Delta Habitat Corridor\*

**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 97N13 has completed construction and is now monitoring project success. 99N03 is in final stages of construction. Both are on schedule with significant preliminary results.\***

#### **REQUESTS FOR NOXT-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.# No\***

**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 does not discuss support or opposition to the project.\***

#### **ENVIRONMENTAL COMPLIANCE**

**4d. List any potential environmental compliance or access issues as identified in the PSP checklists.**# Not clear if this is funding for first phase only, which is mapping. No compliance is needed for this. If it includes planting and monitoring, need to comply with CEQA and CESA.\*

**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, for 3 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.**# Yes, overhead is 0%\*

**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.**# 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.**

**6c1. In-kind:**# University of Southern California: 40,000 dollars\*

**6c2. Matching funds:# n/a\***

**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.#** All information requested has been provided by project proponent in a clear, concise, and understandable format\*