

**i. Proposal number:#2001-J202\***

**ii. Short proposal title #Propagation of Special Status Species\***

**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. B. 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.#** Will fully contribute to meeting Goal A for the targeted plant species. All species were evaluated in the MSCS and ERP with 4 of the 5 high priority species.

Moderate contribution to goals B & D through the study of existing tidal freshwater emergent (TFE) habitat where these plant species occur and the determination of actions necessary to restore TFE habitat for establishment of target species populations. \*

**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.#** Proposal addresses all 3 objectives under Goal A, completely. Addresses objective 1 under goal B - moderately; addresses objective 3 under goal D - loosely. By surveying for target plant species populations and determining habitat requirements, justification for protecting unprotected habitat could be provided. Initial research and implementation will take place on lands currently owned by the State. \*

**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.#** Shallow water, tidal and freshwater marsh habitat. The habitat requirements part of this proposal will directly link to the requirement to test life history and species needs relative to the various regimes of TFE habitat (see pg. 43 - Wetland restoration). \*

**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.**# Indirectly linked to Stage 1 actions 8 & 9. Though knowledge of life history requirements may not be one of the 12 critical uncertainties addressed in the PSP, gaining information on life cycles, habitat requirements, propagation techniques and distribution are of critical importance in recovering many of our native Delta dependent 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.**# Strongly linked. Mason's lilaeopsis and Suisun marsh aster are "R" species; delta tule pea and delta mudwort are "r" species. Focused research on plant species in order to re-establish populations in historic habitat is a high priority. \*

**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.**# See 1d. yes, although I am not a botanist, it appears prudent to me. \*

**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.**# Information gained through the funding of this phase and subsequent phases of this proposal will assist CALFED and the CALFED agencies in restoring many of our declining plant species into their historic habitat. Habitat requirements and propagation techniques necessary to re-establish special status plant species is lacking for many of the MSCS priority plants. \*

## **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 expected contribution from this project to the natural production of anadromous fish is unknown. This proposal is directed at improving propagation techniques for five special status plant species that occur in tidal emergent freshwater marshes and to identify, and subsequently implement, habitat requirements intended to improve the natural production of the plants. The proposal suggests that by restoring tidal freshwater emergent marsh habitat there will be an increase in overall biologic diversity and a reestablishment of ecosystem functions and processes necessary for the recovery of fish species. This presumes the listed species which use the habitat which will have had an increase in species diversity will survive at a greater rate. No tangible evidence is presented in the proposal to substantiate this claim. The expected magnitude of the contribution to natural production of anadromous fish, the certainty of the expected benefits, and the duration of the expected contribution cannot be determined. This proposal, which covers Phase 1 of a four-phased project, identifies for study five native plant species that occur in the tidal freshwater emergent habitat type. (Subsequent phases involve additional species and conclude in Phase 4 with introduction of special status plant species into areas where their habitat has been successfully restored.) This proposal is scheduled to be completed in three years. Therefore, the immediacy of the benefits to the natural channel values will not be realized for at least several years after that, when the techniques identified in the reports would have been implemented through phase 4.\*

**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.#**

Listed species and special status species expected to benefit from the implementation of the project include Mason's lilaeopsis (*Lilaeopsis masoni*), Delta tule pea (*Lathyrus jepsonii*), Suisun marsh aster (*Aster lentus*) and Delta mudwort (*Limosella subulata*). Potential benefits to anadromous fish are indirect and nonspecific and would be expected to occur through benefits associated with increased species diversity in the ecosystem.\*

**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 protects and restores natural channel values and promotes natural processes. This proposal, which covers Phase 1 of a four-phased project, identifies for study five native plant species that occur in the tidal freshwater emergent habitat type. (Subsequent phases involve additional species and conclude in Phase 4 with introduction of

special status plant species into areas where their habitat has been successfully restored.) The objectives of the proposal are to develop an understanding of the seed physiology and germination requirements for each target species, to develop efficient methods for propagating each target species, to develop efficient methods for establishing plants in the field, and to conduct research regarding community structure and function of the required habitat for each target species. The products of the proposal are a plant propagation manual, a specification handbook and a detailed report describing the community composition and structure for each target species. The products of the study would be available for future phases to recreate tidal freshwater habitat for special status plant species. By restoring tidal freshwater emergent marsh habitat there will be an increase in overall biologic diversity and the reestablishment of ecosystem functions necessary for the recovery of a variety of species, including fishes. This proposal is scheduled to be completed in three years. Therefore, the immediacy of the benefits to the natural channel values will not be realized for at least several years after that, when the techniques identified in the reports would have been implemented through phase 4. The duration of the benefits to natural channel and habitat values is not identified but should be long- term.\*

**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).# No evidence is presented to indicate whether/how the project would contribute to efforts to modify CVP operations. No such relationship is apparent.\***

**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 implementation of the 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.** This project is appropriate for funding support from the Anadromous Fish Restoration Program. The project could contribute to meeting the goal of the Anadromous Fish Restoration Program to increase the natural production of anadromous fish by increasing the amount and quality of available tidal freshwater emergent habitat in the Delta, thereby providing additional high-quality favorable habitat for juvenile salmonids as they migrate through the Delta. A basic premise of this proposal is that listed fish species will benefit from the creation of additional tidal freshwater emergent marsh habitat. This proposal, which covers Phase 1 of a four-phased project, identifies for study five native plant species that occur in the tidal freshwater emergent habitat type. (Subsequent phases involve additional species and conclude in Phase 4 with introduction of special status plant species into areas where their habitat has been successfully restored.) The objectives of the proposal are to develop an understanding of the seed physiology and germination requirements for each target species, to develop efficient methods for propagating each target species, to develop efficient methods for establishing plants in the field, and to conduct research regarding community structure and function of the required habitat for each target species. The products of the proposal are a plant propagation manual, a specification handbook and a detailed report describing the community composition and structure for each target species. The products of the study would be available for future phases to recreate tidal freshwater habitat for special status plant species. This project is consistent with Sacramento-San Joaquin Delta Evaluation No. 6 (Evaluate benefits of and opportunities for additional tidal shallow-water habitat as rearing habitat for anadromous fish in the Delta) in the Revised Draft Restoration Plan for the Anadromous Fish Restoration Program, May 30, 1997; they are both identified as a high priority in the draft plan. The strength of the proposal is that the results of the 4-phased program will be used to promote natural production of special status plant species. The weakness of the proposal is that it only addresses the work to be accomplished in the first phase of a multi-phased project; there is no guarantee if/when funding of the work in the subsequent phases will be secured. Also, the proposal does not identify costs, schedules, or time frames for any of the work in phases 2-4. \*

## **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 will develop recovery techniques for special status plant species in support of many habitat restoration projects for CALFED. Proposal coordinated with Phase 2 of 98F09, Rhode Island Floodplain Management and Habitat Restoration (Phase I) and is similar to but more cost effective than 99N05, reintroduction of endangered soft bird's beak to restored habitat. 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.#none.\*

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.#

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.#

3b2. If the answer is no, identify the inaccuracies:##

3c1. Has the progress to date been satisfactory? Type yes or no.#

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.# 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 issues and proponents/opponents described in the report follow:

Pass - Cosumnes River Preserve staff are too busy ; Solano County Farmland and Open Space Foundation "are not interested in working with us at this time.

Oppose - California Native Plant Society (CNPS) is against propagation experiments with California State protected species or CNPS-listed species.

Support: - Fish and Wildlife Service (FWS), Department of Fish and Game (DFG) and Department of Water Resources (DWR) seem supportive of this proposal at this time.\*

## **ENVIRONMENTAL COMPLIANCE**

**4d. List any potential environmental compliance or access issues as identified in the PSP checklists.**# May need to consult with DPC and BCDC. CESA compliance is not checked off, but states in proposal they are applying for a take permit for Mason's lilaeopsis.\*

**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.**# Overhead is quoted at

58.2% with numerous components. Proposal contains calculation errors within budget table that do not effect overall cost. Applicant requesting funding for Phase I of three phases. Phases II and III costs are not provided since funding is not sought.\*

## **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.# n/a\***