

Appendix B-8

**ROUND 8 LAKE TAHOE RESTORATION PROJECTS
ESTIMATED NECESSARY EXPENSES & KEY MILESTONE DATES**

Aquatic

Project Name: Invasive Species Mgmt. Plan_ Agency: U.S. Army Corps of Engineers
 Prepared by: Philip Brozek Phone: 916-557-7630 EIP#: 10172
 SNPLMA Project#: _____

Identify estimated costs of eligible reimbursement expenses:

1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ _____	_____ %
2. FWS Consultation – Endangered Species Act	_____	_____ %
3. Direct Labor (Payroll) to Perform the Project	\$ <u>22,500</u>	<u>5</u> %
4. Project Equipment (tools, software, specialized equipment, etc.)	\$ _____	_____ %
5. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ <u>1,800</u>	<u>0.4</u> %
6. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)	\$ <u>450</u>	<u>0.1</u> %
7. Cost of Contracts, Grants and/or Agreements to Perform the Project	\$ <u>380,250</u>	<u>84.5</u> %
8. Other Direct and Contracted Labor: Agency payroll for the Contracting Officer to do project procurement, COR, Project Inspector, Sec. 106 Consultation if required, NEPA Lead, Project Manager, Project Supervisor, and subject experts to review contracted surveys, designs/drawings, plans, reports, etc.; Also covered is the cost to contract for a Project Manager and/or Project Supervisor if contracted separately from other project contracts)	\$ <u>45,000</u>	<u>10</u> %
9. Other Necessary Expenses (See Appendix B-9)	_____	_____ %
TOTAL:	\$ <u>450,000</u>	<u>100</u> %

Estimated Milestone Dates:

Milestones/Deliverables	Date:
Begin project	December 2007
Task 1 - Literature Search management measure and mapping databases	Mar 2008
Task 2 – Evaluation/Development of Management Measures	July 2008
Task 3 – Evaluation of Disposal Options	August 2008
Task 4 – Development of Monitoring Methodologies	August 2008
Task 5 – Integrated Best Management Strategies Recommendations	December 2008
Final Completion Date:	December 2008

APPENDIX I

ROUND 8 LAKE TAHOE CAPITAL PROJECT PROPOSAL

Project Name: Aquatic Invasive Species Mgmt Plan

Capital Focus Area: Watershed and Habitat Improvement – Habitat Improvement
EIP #10172

Lead Agency: U.S. Army Corps of Engineers **Contact:** Phil Brozek

Threshold: Vegetation **Phone Number:** 916-557-7630

Threshold Standard: V-1 Common Plant Communities

Email Address: Phillip.F.Brozek@usace.army.mil

Is this a multi-year Project? No **Total Project Cost:** \$450,000

Funding Request in this Round: \$450,000

Project Summary (maximum 200 words):

A representative of the California State Lands Commission recently cited Lake Tahoe as becoming the location of the most serious infestation of Eurasian watermilfoil in the State of California. This weed, and the Curlyleaf pondweed, threatens native aquatic vegetation species and water clarity. Agencies have embarked on a program of spot eradication by hand picking. This method alone does not stand up to the rigors required for success. Due to the multijurisdictional and open water nature of the problem, there is need for a strategic management plan, but so far there is no such strategy. This project would be a first attempt to remedy this.

This project would include a literature search, evaluation of current and proposed management methods, development of a database of management measures, identification of three alternative management strategies composed of multiple management measures. These alternative management strategies would be evaluated with respect to efficacy in managing the population, economic considerations, and other potential environmental impacts or considerations.

Detailed Project Description:

This project consists of five main tasks.

Task 1 would be to a literature search to identify the existing research and data for Eurasian watermilfoil and Curlyleaf pondweed, including habitat information and existing control measures.

Task 2 would be to evaluate the various management measures identified in the literature search. Factors that would be considered to conduct this evaluation include

but are not limited to technical, societal, economic, regulatory and environmental constraints and impacts. Methods for prevention and eradication will be evaluated. Task 3 will consider the feasibility of various disposal methods for the aquatic weeds, including composting, animal feed, landfill disposal, and other potential disposal options. Task 4 will identify monitoring program criteria for an invasive aquatic weeds management program in the Basin, and determine recommendations for a invasive aquatic weeds monitoring program.

In Task 5, based on the findings of Task 2, Task 3, and Task 4, the contractor will develop three comprehensive management strategy alternatives and a no practice alternative for Curlyleaf pondweed and Eurasian watermilfoil. The proposed comprehensive management strategy alternatives would be evaluated based on successful invasive aquatic weed management measures that are being employed both inside and outside of the Basin. During this phase the management strategy alternatives will be provided for review to the Tahoe Science Consortium and two formal stakeholder meetings will be held to discuss the study findings and get public feedback and advice on the presented alternatives. Based upon input from stakeholder meeting and agency review, the three management strategies will be revised as necessary and a preferred alternative selected. The selected alternative shall be based upon professional judgment supported by the Study results. This recommendation is not a consensus document of stakeholder input. The recommended alternative will be presented and defended to agencies with a regulatory role in the Basin at five meetings that would be held in the Basin and arranged by the PCT.

This project is directly related to HIP-S1 (Implement habitat restoration and protection provisions contained within current and future management plans) and HIP-S2 (Treat 100% of the locations of noxious and invasive weeds on the Tahoe Basin Weed Watch list) of the Habitat Improvement Program of the Federal Vision Watershed and Habitat Improvement Focus Area. Both Curlyleaf pondweed and Eurasian watermilfoil are aquatic invasive weeds that can displace native species, reduce diversity, and impact wildlife habitat areas. Eurasian watermilfoil is on the priority Tahoe Basin Weed Watch list.

Describe the goals and objectives of the project:

The goal of this project is to develop a defensible, preferred comprehensive management strategy to control and eradicate the invasive aquatic weeds Curlyleaf pondweed and Eurasian watermilfoil in Lake Tahoe.

Describe the anticipated project accomplishments:

Deliverables of this project would include a GIS mapping database that delineates current locations and potential locations of invasive aquatic weeds in Lake Tahoe and a management measures database that would summarize the literature search and evaluation of management measures. In addition, there will be documentation of the aquatic invasives disposal options and monitoring methodology evaluation. Three comprehensive management strategies for Curlyleaf pondweed and Eurasian watermilfoil will be developed and independently reviewed, and then presented for

educational value and feedback to stakeholders. After the review and stakeholder feedback, a management strategy will be recommended and presented to agencies with a regulatory role in the Basin.

Describe the “readiness” of this project to move forward (urgency, capacity, capability, Environmental documentation etc.): This project is of an urgent nature. A representative of the California State Lands Commission recently cited Lake Tahoe as becoming the location of the most serious infestation of Eurasian watermilfoil in the State of California. A contract proposal scope has already been completed in preparation for the contract award process.

Describe partnerships for this project. (Include documentation):**

This project shall include contractor preparation of materials presenting the top three comprehensive management strategy alternatives to the Tahoe Science Consortium for independent review. In addition, the Tahoe Aquatic Weeds Group will act as a technical advisory committee to the project.

Describe the project monitoring that will be implemented as part of this project including:

- 1) **The questions the monitoring program is designed to answer**
- 2) **The monitoring approach**
- 3) **Whether this project monitoring fits into a larger monitoring or research program?**

This is not a capital project with land or water disturbance, so no physical monitoring will be occurring. However, this project will identify monitoring program criteria for an invasive aquatic weeds management program in the Basin. The monitoring program shall include a recommended schedule for monitoring and would identify the data sets that would be collected and the method of analysis. The monitoring program would be capable of identifying and delineating the invasive aquatic weed populations. It would also be used to monitor increases and decreases of the invasive aquatic weeds. Based upon the known habitat characteristics of the invasive aquatic weeds, the monitoring methods would be assessed with respect to cost, and the efficacy of the method of monitoring.

Describe how the project results will be communicated and made-available to the public.

The management strategy alternatives identified in the project will be provided for review to the Tahoe Science Consortium and two formal stakeholder meetings will be held to discuss the study findings and get public feedback and advice on the presented alternatives. Based upon input from stakeholder meeting and agency review, the three management strategies will be revised as necessary and a preferred alternative selected. The selected alternative shall be based upon professional judgment supported by the Study results. This recommendation is not a consensus document of stakeholder input. The recommended alternative will be presented and defended to agencies with a regulatory role in the Basin at five meetings that would be held in the Basin and arranged by the PCT.

Include an 8 1/2 X 11 map depicting the project.

