

## Appendix B-8

### LAKE TAHOE RESTORATION PROJECTS ESTIMATED DIRECT COSTS & KEY MILESTONE DATES

Project Name: Manual Control of Noxious Weeds Agency: U.S. Forest Service, LTBMU  
 Prepared by: Beth Brenneman Phone: (530) 543-2767 EIP #: 10184  
 SNPLMA Project #: \_\_\_\_\_

**Identify estimated costs of eligible reimbursement expenses:**

<b>1. Planning, Environmental Assessment and Research Costs</b> (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)	\$ <u>6,000</u>	<u>5</u> %
<b>2. Direct Labor (Payroll) to Perform the Project</b>	\$ <u>90,280</u>	<u>75</u> %
<b>3. Project Equipment</b> (tools, software, specialized equipment, etc.)	\$ <u>3,000</u>	<u>3</u> %
<b>4. Travel</b> (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)	\$ <u>3,000</u>	<u>3</u> %
<b>5. Official Vehicle Use</b> (pro rata cost for use of Official Vehicles when required to carry out project)	\$ <u>4,000</u>	<u>3</u> %
<b>6. Cost of Contracts, Grants and/or Agreements to Perform the Project</b>	\$ _____	_____ %
<b>7. Other Direct Costs</b> (direct labor for agency personnel to do education and outreach)	\$ <u>2,120</u>	<u>2</u> %
<b>8. Indirect Costs</b>	\$ <u>10,600</u>	<u>9</u> %
<b>TOTAL:</b>	\$ <u>119,720</u>	<u>100</u> %

**Estimated Key Milestone Dates:**

Milestones/Deliverables:	Date:
Data entry, report writing, and training	October through December 2006
Hiring and program preparation	March through May 2007
Weed control, mapping, and treatment	June through September 2007
Public education and outreach	Throughout project
Final Completion Date:	September 2007

**COMMENTS:**

## APPENDIX I

### LAKE TAHOE CAPITAL PROJECT PROPOSAL

**Project Name:** Manual Control Efforts for Noxious Weeds

**Capital Focus Area:** Watershed Restoration and Habitat Improvement (Objectives 15 and 16)

**EIP #:** 10184

**Lead Agency:** U.S. Forest Service, Lake Tahoe Basin Management Unit

**Contact:** Beth Brenneman

**Threshold:** Vegetation

**Phone Number:** (530) 543-2767

**Threshold Standard:** V-1 Maintain Species Diversity and Richness; V-2, Uncommon Plant Communities

**Email Address:** [bbrenneman@fs.fed.us](mailto:bbrenneman@fs.fed.us)

**Is this a Multi-year**

**Project? (If "Yes", describe in the Detailed Project Description below number of years or phases and which year the requested funding will cover)**  
Yes

**Total Project Cost:** \$850,000 (7 years)

**Funding Request in this Round:** \$119,720

#### **Project Summary (maximum 200 words):**

Since 2002, the Lake Tahoe Basin Management Unit (LTBMU) has been inventorying, monitoring, and treating noxious weed infestations on National Forest System lands. All of the known infestations are treated either by clipping, digging, or manually pulling the weeds. At each weed site, data such as infestation size and percent cover is recorded. This information is then entered into two national databases for the purposes of reporting accomplishments and documenting change over time. All noxious weed sites are mapped using global positioning system technology and entered into a geographic information system database to create maps of weed sites for use in monitoring and project planning. Because the Forest Service is not currently authorized to use chemical treatments for noxious weeds in the Basin, it is imperative that the manual control efforts continue to be funded and that these treatments continue until an integrated program (manual and chemical control) can be approved and implemented.

#### **Detailed Project Description:**

Noxious weeds have been identified as the second greatest threat to the conservation of National Forest System lands. They spread rapidly because they are unchecked by the natural predators that control native plant populations and out compete natives by more readily obtaining precious moisture, sunlight, and nutrients. Noxious weed infestations lead to a decrease in the biodiversity of plants and the wildlife species that depend upon them. Noxious weeds also increase rates of erosion due to changes in root structure and soil stability, which affects the water quality of Lake Tahoe through increased sediment input.

On the LTBMU, a full-time employee has coordinated the noxious weed program since 2002, and with the help of seasonal employees, repeated manual control efforts, mapping, and monitoring have been conducted. Meetings with the Lake Tahoe Basin Weed

Coordinating Group, with representation from federal, state, and county agencies and residents of the Basin, are held regularly, and the coordination of weed control efforts in the Basin continue to be successful.

Educational outreach by the LTBMU noxious weed coordinator has included participation at Earth Day events to provide information on noxious weeds to the public; a bull thistle (*Cirsium vulgare*) brochure was created and distributed to summer home residents; and “Weed Warrior” training was organized for Forest Service employees.

For the past three years, the LTBMU noxious weed coordinator has conducted invasive and noxious weed surveys of the gravel pits that are used for fill that is imported into the Basin. These surveys are necessary to ensure that soils contaminated with noxious weed propagules are not used for projects on National Forest System lands in the Basin. Eight gravel pits were surveyed in 2005. A report was written on the findings, and copies were distributed to facility managers and all employees on the LTBMU that deal with fill importation on projects. The surveys have been successful in raising awareness of noxious weed issues and making the gravel pit operators accountable for controlling noxious weeds on their lands.

All data that were collected at each infestation during the 2005 field season will be entered into two national Forest Service databases (NRIS Terra and FACTS) and the LTBMU databases by the end of November 2005. Changes in the size of each infestation over time will be monitored to determine program success or failure. All noxious weed sites are mapped using global positioning system technology and entered into a geographic information system database to create maps of weed sites for use in monitoring and project planning.

There were 56 new sites found in 2005, for a total of **319 weed sites** on National Forest System lands in the Basin. Thirty-seven of these sites were found within the urban core. Results of the monitoring showed that there were a total of **123.06** gross acres infested with noxious weeds, and **7.35** infested acres in 2005. (Infested acres take the canopy cover of the weed into account.) In 2004, the total gross acres were **112.25** and infested acres were **8.99**. While gross area has grown by 10.81 acres, infested area has actually been reduced by 1.64 acres. The increase in gross acres is likely a result of new sites that were found. As more and more people become aware of noxious weeds, more infestations are found and reported. The decrease in infested acres may mean that treatments in the past three years have been successful and the canopy cover of weeds on existing sites is less than previous years.

#### **Describe the goals and objectives of the project:**

- Eradicate or decrease the acreage of noxious weed infestations on National Forest System lands.
- Locate and treat (remove) new infestations early, in order to prevent establishment or spread.
- Monitor each weed infestation to document change over time.
- Work cooperatively with other agencies and landowners to coordinate weed control efforts.
- Increase public and staff awareness of noxious weeds and their effects on the ecosystems that occur in the Basin.

**Describe the anticipated project accomplishments:**

Continued manual treatment of noxious weeds will eradicate or significantly decrease the size and number of invasive weed infestations. New infestations will be discovered early and will therefore be more easily eradicated. Public awareness will continue to increase as a result of public education efforts. Weed sites will continue to be inventoried and mapped and the data will be entered into the appropriate databases.

**Describe the “readiness” of this project to move forward (Environmental documentation, etc.):**

The field season of 2005 marked the fourth year that LTBMU has inventoried, monitored, and treated noxious weeds on National Forest System lands in the Basin. The program has been established and is ready to proceed as in previous years. The project does not require environmental documentation.

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

Lake Tahoe Basin Weed Coordinating Group

**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 in to a larger monitoring or research program**

The monitoring program that will continue to be implemented as part of the manual control component of noxious weed treatments has been designed to answer the following questions:

- 1) Are the gross and infested number of acres occupied by weed infestations decreasing over time?
- 2) Are the manual treatments working?

The monitoring program will continue to implement the following: Each weed infestation is visited at least once each year. The length and width of the infestation is recorded on each visit as is the percent cover of the weed within that area. The weed infestation is also recorded using a global positioning system unit in order to pinpoint its exact location. If it is found that the infestation is decreasing in size, then the manual treatment will continue until the weed is eradicated.

If it is found that the infestation is increasing in size, then a different treatment approach may be required. The site may need to be visited more often or an integrated weed management approach may be appropriate (chemical or biocontrol). Some of the weed species are not effectively treated with manual control; therefore, a separate SNPLMA proposal for chemical treatment is being submitted.

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

Educational outreach will continue to occur at Earth Day and other public events. Posters will be submitted to local symposiums complete with monitoring results. The LTBMU noxious weed coordinator will continue to prepare an annual monitoring and activities report that is available upon request. The LTBMU will continue to work with the Lake Tahoe Basin Weed Coordinating Group which develops weed brochures, newspaper articles, and other information to alert the public of the threats to the environment posed by noxious weeds. Further, the Interpretive Services staff will conduct public outreach at various locations (e.g., visitor centers, schools, public agencies) and during various events to educate the public concerning the principles, practices, and products of this project; an amount equal to two percent (2%) of the project costs is dedicated to this effort.

**Include an 8 ½ X 11 map depicting the project.**

See next page.

Noxious Weeds on the Lake Tahoe Basin Management Unit

