

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: Cecilia Reed Phon: EIP
 e: (530) 543-2761 #: 10184
 SNPLMA Project
 #: _____

Identify estimated costs of eligible reimbursement expenses:

<p>1. Planning, Environmental Assessment and Research Costs (specialist surveys, reports, monitoring, data collection, analysis, NEPA, etc.)</p>	\$ <u>6,000</u>	<u>5</u> %
<p>2. Direct Labor (Payroll) to Perform the Project</p>	\$ <u>95,000</u>	<u>76</u> %
<p>3. Project Equipment (tools, software, specialized equipment, etc.)</p>	\$ <u>3,000</u>	<u>2.5</u> %
<p>4. Travel (including per diem where official travel status required to carry out project, such as serve as COR, experts to review reports, etc.)</p>	\$ <u>3,000</u>	<u>2.5</u> %
<p>5. Official Vehicle Use (pro rata cost for use of Official Vehicles when required to carry out project)</p>	\$ <u>4,000</u>	<u>3</u> %
<p>6. Cost of Contracts, Grants and/or Agreements to Perform the Project</p>	\$ _____	_____ %
<p>7. Other Direct Costs (direct labor for agency personnel to do education and outreach)</p>	\$ <u>2,680</u>	<u>2</u> %
<p>8. Indirect Costs</p>	\$ <u>10,600</u>	<u>9</u> %
TOTAL:	\$ <u>125,000</u>	<u>100</u> %

Estimated Key Milestone Dates:

Milestones/Deliverables:	Date:
Hiring and program preparation	March through May 2008
Weed control, mapping, and treatment	June through September 2008
Public education and outreach	Throughout project
Final Completion Date:	September 2008

COMMENTS:

Lake Tahoe Basin Management Unit Noxious Weed Sites

Legend

2005_ltbmu_weed_sites

◆ <all other values>

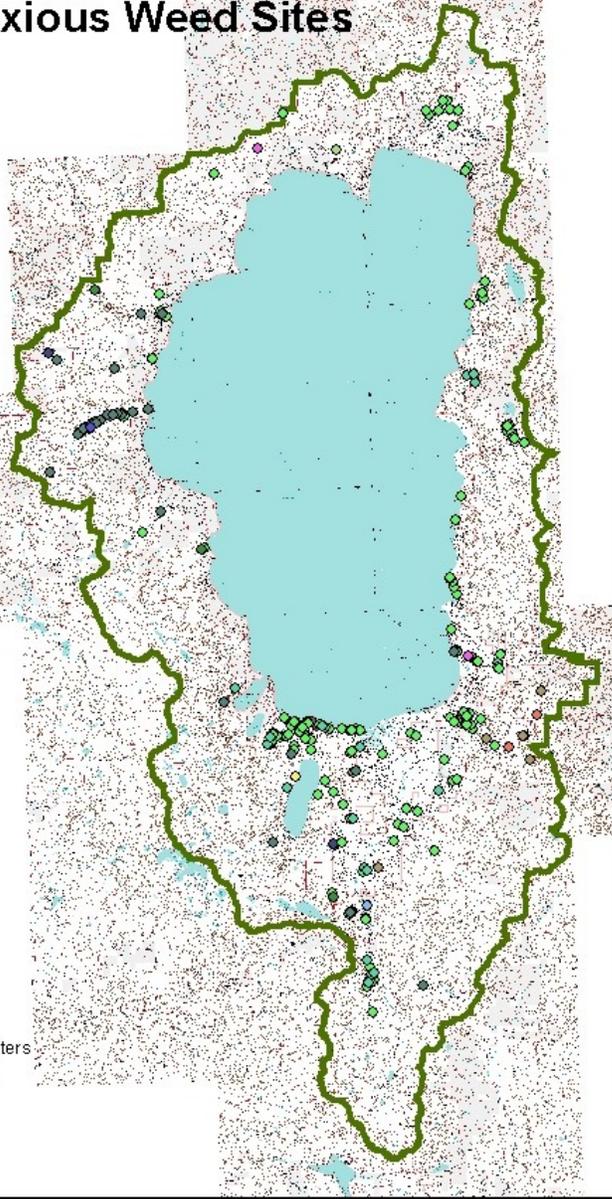
COMMON_NAM

- ◆ Bull thistle
- ◆ Canada thistle
- ◆ Canary reedgrass
- ◆ Dalmation toadfl
- ◆ Dalmation toadflax
- ◆ Diffuse knapweed
- ◆ Eurasian waterm
- ◆ Musk Thistle
- ◆ Oxeye Daisy
- ◆ Scotch broom
- ◆ Spotted knapweed
- ◆ St. Johnswort
- ◆ Sulphur cinquef
- ◆ Sulphur cinquefoil
- ◆ Tall whitetop
- ◆ Yellow toadflax
- ▭ ltbmu_bnd polygon



0 3,950 7,900 15,800 Meters

Created 12/07/2006



APPENDIX I

LAKE TAHOE CAPITAL PROJECT PROPOSAL

Project Name: Manual Control Efforts for Noxious Weeds	Capital Focus Area: WR/HI-15 WR/HI-16	EIP #: 10184
Lead Agency: Lake Tahoe Basin Management Unit		Contact: Cecilia Reed
Threshold: Vegetation		Phone Number: (530) 543-2761
Threshold Standard: v-1 and v-2		Email Address: ccreed@fs.fed.us
Is this a multi-year Project? Yes		Total Project Cost: N/A
	Funding Request in this Round:	\$125,000

Project Summary (maximum 200 words):

Since 2002, the Lake Tahoe Basin Management Unit has been inventorying, monitoring, and treating noxious weed infestations on Forest Service land. All of the infestations are treated manually, either by clipping, digging, or pulling. Each site is visited at least once during the summer season, with the objective of visiting all sites a second time to provide follow-up treatment. At each weed site, data such as infestation size and percent cover are recorded. This information is entered into two national databases, which allows for accomplishments to be reported and changes in infestation size to be tracked and monitored over time. All weed sites are mapped using a GPS unit and entered into GIS to create a distribution map of known weed sites in the Basin.

Detailed Project Description:

Noxious weeds have recently been identified as the second greatest threat to the conservation of Forest Service lands. They pose a serious threat to biological diversity because of their ability to displace native species, alter nutrient and fire cycles, decrease the availability of forage for wildlife, and degrade soil structure. Noxious weeds spread rapidly because they are often unchecked by natural predators that control native plant populations. They negatively impact native plants through direct competition for nutrients, light, and water, which can lead to a decrease in species diversity within native plant communities, as well as the wildlife species that depend on them. Noxious weeds have also been shown to increase rates of erosion due to changes in root structure, which affects the water quality of Lake Tahoe because of increased rates of sediment input.

The invasive weed program on the Lake Tahoe Basin Management Unit (LTBMU) was initiated in 2003. Each year, a full-time employee has coordinated the weed program and two seasonal employees have been hired to conduct the “on the ground” work, which consists of treatments and monitoring. To date, all treatments have been mechanical and consisted of pulling, clipping, and digging.

Meetings with the Lake Tahoe Basin Coordinated Weed Group, which has representation from agencies, land managers, and residents in the Basin, are held throughout the year to

coordinate weed control efforts in the Basin. In addition, the LTBMU weed coordinator conducts a number of educational outreach activities, some of which have included: staffing a table at Earth Day to provide noxious weed information; handing out various noxious weed brochures to summer home residents and making them available to visitors; posting Eurasian watermilfoil signs at all Forest Service Marinas; and organizing a “Weed Warrior” training for Forest Service employees.

Since 2003 the weed coordinator on the LTBMU has been conducting invasive weed surveys of the gravel pits that import fill into the Basin. These surveys have been successful in raising awareness of noxious weed issues, as well as making the gravel pit companies accountable for controlling noxious weeds on their land. These surveys will continue to be an integral part of the Basin’s noxious weed program

Data collected at infestations are entered into NRIS Terra (a national Forest Service database), an Excel spreadsheet, and the national FACTS database. Changes in infestation size over time are monitored to determine the success or failure of control efforts. GPS units are used to map weed locations and points are entered into GIS to create a distribution map of known weed sites in the Basin.

Surveys conducted in 2006 documented 70 new weed sites on the LTBMU, for a total of **378 weed sites** on Basin lands. Of these sites, 48 are located on urban lots and 330 are located on general Forest Service land. Monitoring in 2006 documented a total of **82.6 gross acres** and **4.6 infested acres** of noxious weeds. The number of “infested” acres takes into account the percent cover of the weed species within the occurrence boundary (i.e. “gross” area). In 2005, the total number of gross acres was **123.06** and infested acres were **7.35**. These monitoring results show a decrease in both gross (by **40.46** acres) and infested area (by **2.75** acres). This decrease suggests that control methods employed over the past four years have been successful; the percent cover of weeds within treatment sites is lower than in previous years.

Describe the goals and objectives of the project:

- Decrease the acreage of noxious weed infestations on Forest Service land.
- Locate new infestations early on and apply manual treatments to prevent and/or control spread.
- Monitor infestations to determine changes in size, density, and distribution over time.
- Adaptively manage weed treatments by varying the treatment approach, timing, or application frequency, based on monitoring data.
- Work cooperatively with other agencies and landowners to coordinate weed control efforts.
- Increase public and staff awareness of invasive weeds.

Describe the anticipated project accomplishments:

Continued treatment of noxious weed occurrences on the LTBMU will decrease both the size and number of infestations. New infestations will be detected early, which will increase the effectiveness of eradication efforts. Public awareness will continue to increase as a result of outreach and education efforts. Weed sites will continue to be inventoried, monitored, and mapped and data will be entered into the appropriate

databases.

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

Lake Tahoe Basin Management Unit has inventoried, monitored, and treated noxious weeds on National Forest Service lands in the Basin since 2003. The proposed project is a continuation of these efforts; therefore it is ready to proceed and does not require environmental documentation.

Describe partnerships for this project. (Include documentation):

In partnership with the Lake Tahoe Basin Weed Coordinating Group, LTBMU botany staff coordinates efforts to control noxious weeds in the Lake Tahoe Basin by meeting quarterly to discuss our programs. These discussions include, but are not limited to, control efforts, new noxious weed sites, progress on containment, interagency site mapping, threshold standards, and action plans. In addition to external partnerships, the Noxious Weed Group partners with the LTBMU Urban Lots Program in efforts to control noxious weeds on National Forest System Lands in the Lake Tahoe Basin.

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 questions the weed monitoring program has been designed to answer are:

- 1) What is the status of noxious weed infestations throughout the LTBMU? For example, are the gross and infested acres of weed infestations reduced over time in response to manual control treatments?
- 2) Are the manual control treatments effective? If not, what would a more effective control strategy be?

To answer these questions status and trend monitoring of known noxious weed locations along roads, trails and the wildland/ urban interface is conducted focusing on areas that have been treated. Each weed infestation is visited at least once a year. The length and width of the infestation is recorded, as well as the percent cover of the weed within the infestation. The weed occurrence is mapped with a GPS unit to document its exact location. If monitoring demonstrates that the infestation is decreasing in size, manual treatment will continue until the weed is eradicated. If monitoring shows that the infestation is increasing in size, then a different treatment approach may be evaluated and employed. These treatment methods may include altering the timing or frequency of manual control efforts or utilizing a different method (i.e. chemical or biocontrol). Past monitoring efforts have demonstrated that some weed infestations are not effectively controlled with manual treatments; therefore a separate SNPLMA proposal for herbicide use is also being submitted. This program is part of LTBMU Forest Plan monitoring program, as described in LTBMU 5 Year Plan, 2006.

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

Results/accomplishments summarized in Annual Forest Monitoring Program Report, as well as project-specific monitoring reports. Project-specific monitoring reports will be produced one to five years after project implementation, depending on the variables being monitored and the questions to be answered.

Educational outreach will continue to occur at Earth Day and other public events. Posters will be submitted to local symposia, complete with monitoring results. An annual LTBMU weed report will continue to be prepared and made available upon request. The LTBMU will continue to work with the Lake Tahoe Basin Weed Group, which develops weed brochures, newspaper articles, and other information to alert the public of the problems that noxious weeds create.

Include an 8 ½ X 11 map depicting the project.