

**Lake Tahoe Basin Weed Coordinating Group
Goals and Accomplishments
2002-2005**

Background:

The potential for weed invasion is considered high in the Lake Tahoe Basin due to its bi-state border location, historical escaped ornamental populations and the seasonal influx of tourists. Numerous watershed restoration projects have been implemented to curb further degradation of Lake Tahoe's infamous water quality; however, only recently has the threat of invasive weeds received attention. Invasive weeds are known to accelerate rates of soil erosion, and thus are a major threat to water quality and clarity. Often completely altering plant communities by forming monocultures, invasive weeds threaten the function, composition, and structure of the plant ecosystem at Lake Tahoe. Aggressive foreign plants can spread quickly into natural areas, monopolize resources, and displace native flora and fauna, including endangered species. Recent studies have demonstrated reduced numbers and/or diversity in birds, reptiles, small mammals, and insects in stands of nonnative invasive plant species.

Introduction:

In 1998, after finding only a single perennial pepperweed plant growing in Incline Village, the University of Nevada Cooperative Extension mounted a public education campaign to locate other invasive weed species. By 2001, it was clear that perennial pepperweed was not the only invasive weed species threatening the Tahoe Basin, and at the request of the U.S. Forest Service, a formal group came together as the Lake Tahoe Basin Weed Coordinating Group (LTBWCG). The LTBWCG first met in 2002 to determine the status of weed species in the Basin and identify the most pressing needs. Group participation is diverse and represents land managers, resource specialists, political jurisdictions, residents, and educators. Collectively, the group is dedicated to raising overall awareness of invasive weeds and making sure management is effective and seamless.

During the formation of the LTBWCG, it was clear that the impacts of herbicide use or fines from Lahontan Regional Water Quality Control Board could create a barrier to weed control efforts in the Basin. The group submitted a proposal to the LRWQCB governing the use of three herbicides and was approved and has been applied and renewed since the summer of 2003.

Active partners in the LTBWCG include: University of Nevada Cooperative Extension, El Dorado and Placer County Department of Agriculture, Nevada Department of Agriculture, California State Parks, Nevada State Parks, University of California Cooperative Extension, City of South Lake Tahoe, Lahontan Regional Water Quality Control Board, California Tahoe Conservancy, U.S. Forest Service – Lake Tahoe Basin Management Unit (LTBMU), Douglas County Weed District, Tahoe Resource Conservation District, Nevada Tahoe Conservation District, Natural Resources Conservation Service - Tahoe, Tahoe Regional Planning Agency, and Sierra Pacific Power.

Goals:

The LTBWCG's main goal is to halt further introduction of invasive weed populations into the Lake Tahoe Basin. Each year, the LTBWCG prepares annual action plans with specific actions and responsibilities relating to inventory, control, restoration and education. One of the first priorities identified by the LTBWCG was to find funding for basin-wide surveys and establish a

rapid response mechanism for control. In addition, the LTBWCG regularly revisits the priority weed list, which has grown from 15 in 2002 to 20 today. Obtaining funding from a variety of sources is essential for the LTBWCG to achieve success and meet goals. Numerous grant proposals have secured funding for a variety of activities including mapping and monitoring, control, re-vegetation, and education.

Successful weed management requires a Basin-wide approach since weeds ignore political boundaries. Through development of community partnerships and coordination of management efforts, noxious weed infestations and the ecological and economical impacts associated with them, can be tackled more effectively.

Below is a list of categories that direct the annual goals and priorities:

1. Planning – Provide a forum for coordinating education and weed management projects between all landowners and managers (private, federal, State, and local)
2. Prevention and Exclusion – Prevent introduction and further expansion of invasive weeds
3. Inventory and Monitoring – Compile a comprehensive invasive weed inventory
4. Treatment – Perform eradication and control projects utilizing integrated weed management practices
5. Restoration – Include restoration practices as part of control projects when needed and feasible
6. Education and Awareness – Promote invasive weed education and awareness programs and activities
7. Management Priorities – Develop management strategy for potential, new, and established weed control

Accomplishments:

Over the past 4 years, the LTBWCG has gained a greater understanding of the threat invasive weeds pose in the Lake Tahoe Region. Mapping data indicates that most infestations are small and eradicable, which give land managers an opportunity to manage existing invasive weed populations and prevent the establishment of new ones. This is only possible when consistency is applied to invasive weed management. Lack of management can be devastating, and is evidenced by the national annual expenditure in millions of dollars for the treatment of invasive weeds and the subsequent reduction in land productivity.

In addition to mapping and treatment of high priority invasive weed species, a number of educational campaigns have targeted the sources of weed spread such as gardeners and nurseries, construction activities, erosion control practices, and recreationists. Below is a brief description of the accomplishments made by the LTBWCG from 2002 – 2005.

2002 – 2005 Highlights

2002

- 2250 miles mapped and treated in the Basin, 61 infestations documented

2003

- Developed Weed Identification Guides
- 3690 miles mapped and treated in the Basin. reported 48% decrease in new Spotted knapweed infestations and 16% decrease in Diffuse knapweed and Dalmatian toadflax
- Acquired funding for treatment in areas when funding was not otherwise available

2002-2005 Highlights continued:

2003

- Education and outreach efforts have focused on several specific weed species such as Spotted knapweed, Scotch broom, and Eurasian watermilfoil

2004

- Obtained funding for an Education and Outreach Coordinator
- 1880 miles of mapping and control in El Dorado County in the Basin, documented 94 new and 188 historical infestations
- 263 infestations were mapped on USFS land
- Comprehensive map production began as El Dorado County maintained invasive weed inventory for the Lake Tahoe region.
- Printed and distributed the Weed Identification Guide
- Conducted community events and workshops

2005

- Secured weed control funding for unfunded counties in NV. Every street in Incline Village (Washoe County) was mapped.
- A total of 319 sites, including 56 new sites infested 123 gross acres of USFS land
- Developed education signage at marinas to reduce the spread of aquatic invasive weeds such as Eurasian watermilfoil.
- Continued distribution of previously developed educational material and development of new ones (Homeowner Control brochure and Scotch broom brochure)
- Conducted a campaign to “Sweep Broom Out of Your Yard”, targeting Scotch broom removal in residential neighborhoods. Reaching over 150 residents, we encouraged them to replace invasive ornamental plants, such as Scotch broom, with suitable alternatives
- Initiated training for local divers group to remove aquatic weeds
- Participated in a variety of community events and conducted numerous workshops for local community groups and seasonal employees of the US Forest Service, CTC, TRPA, NTCD, TRCD, State Parks, and the City of South Lake Tahoe