The Lake Tahoe Basin Weed Coordinating Group
http://tahoeinvasiveweeds.org/

The Lake Tahoe Basin Weed Coordinating Group (LTBWCG) group is dedicated to ensuring that invasive weed detection, control and education is effective and seamless across the five county, bi-state region. Since its inception in 2002, the 25 member group has annually identified specific actions and responsibilities relating to four areas of collaborative work including: 1) detection and inventory of new and historical infestations; 2) treatment and eradication of known sites; 3) restoration as needed and 4) education and outreach.

Successful invasive weed management requires a basin-wide approach since weeds ignore geographical and political boundaries. Through development of community partnerships and coordination of management efforts, invasive weed infestations and the ecological and economic impacts associated with them, can be tackled more effectively. The LTBWCG focuses on a technique called "early detection, rapid response" to find and eradicate plants before they become large and more expensive problems. The educational efforts focus on prevention methods and best management practices to stop new introductions and spread of invasives in the area.

2010 Efforts in Review

During 2010, detection surveys were conducted on over 5500 acres of public and private lands. Monitoring and treatment of priority weed species was completed at a total of 746 sites. Site sizes ranged from one plant to 2 gross acres. Net acres treated on the California-side of the Basin (excluding USFS properties) increase by .66 net acres over 2009. This increase was due to newly detected perennial pepperweed sites plus a general increase in populations, most likely due to significant increases in moisture. The number of sites requiring treatment on the Nevada-side of Lake Tahoe decreased by 27% from 2009, to a total of 35 sites in 2010.

Notable successes in early detection and rapid response efforts include a concerned citizen's reporting of purple loosestrife (*Lythrum salicaria* L.), detected for the first time in 2010. This landscape planting was treated and will be monitored over the next several years. Yellow starthistle, first detected in 2007, has been successfully eradicated, with no plants detected at one historical site in the past three years.

Educational efforts included reaching 6566 community members and land managers via trainings, presentations, website visits, distribution of brochures, newspaper articles and workshops. On-site consultations with landowners by the Tahoe Resource Conservation District totaled 260 visits as part of the Backyard Conservation Program.

Project Highlight: Flammable Invasive Weeds Surveyed

Deforestation and erosion due to wildfire are major concerns to land managers and community members in the Tahoe Basin concerned with preserving Lake Tahoe's famous clarity. Additionally, the threat of wildfire to private, public and commercial properties could be elevated if a vegetation component of flammable invasive weeds

were to establish itself in the Basin. In 2010, the LTBWCG supported the work of Tahoe Resource Conservation District to map three invasive weed species that pose a fire risk: medusahead (*Taeniatherum caput-medusae*), cheatgrass (*Bromus tectorum*) and broom (*Cytisus*) species. An educational handout "Flammable Invasive Weeds" was produced to assist with educational work. It should be noted that both cheatgrass and Broom species have been historically found in the Tahoe Basin; medusahead has yet to be documented in this area.

The focus of the surveys were "high priority" areas— areas within the Tahoe Basin that have been deemed at risk of invasion (e.g. meadows) and locations at the urban/wildland interface. In 2010 this study was limited to the South Shore region of the Tahoe Basin (South Lake, Myers and Stateline, NV), with plans to expand Basin wide in the future. Mapping in the area affected by the 2007 Angora Fire is also of high priority to this study. Weed infestation in this disturbed area will undermine revegetation efforts and potentially set the stage for an elevated wildfire risk.

Surveys show burgeoning infestations of cheatgrass in urban and disturbed areas. Roadways, especially high traffic thoroughfares, showed the highest levels of *Bromus* infestation. Two of the six meadows surveyed a high level of infestation (20+ infestations greater than 20 ft^2). In these areas, cheatgrass had often displaced the native forbs and grass species, especially in areas where the soil had been disturbed. The surveys found no populations of Medusahead (*Taeniatherum caput-medusae)* in any of our study sites. Incidences of Broom species (*Cytisus*) were localized and often restricted to residential sites. Further monitoring of these plants should be conducted, as their close proximity to residential areas could pose a fire risk in years to come.