

Lake Tahoe Aquatic Invasive Species Working Group 2008 Annual Report

Protecting the Lake Tahoe Basin from aquatic invasive species by education, research, prevention, early detection, rapid response, and control.

Background

In January 2007 quagga mussels were discovered in Lake Havasu, Lake Mead, and the Colorado River Basin, prompting statewide responses in California and other western states. A comprehensive outreach campaign is underway to educate boaters, anglers, kayakers, and recreational users. Outreach materials with a consistent brand and slogan are now being used by LTAISWG partners to educate about aquatic hitchhikers, smart boater practices, and watercraft inspections. This year, TRCD launched the Watercraft Inspection Program to educate boaters and to prevent the spread of zebra/quagga mussels to the Tahoe Basin. LTAISWG partners are currently researching aquatic invasive species (AIS) in Lake Tahoe to better support resource management decisions in the Tahoe Basin. Successful collaboration and coordination by LTAISWG partners has enhanced the group's ability to:

- gather and share resources and information
- standardize methods for treatment and data collection
- coordinate and enhance early detection, control and eradication efforts

2008 Accomplishments

OUTREACH

- 6,000+ AIS brochures were distributed at kiosks, visitor centers, boat launches, campgrounds, day use areas, resorts and recreation residencies, including 1.2 million CDFG quagga/zebra cards sent to registered California boaters. More than 500,000 additional cards are in circulation and placement at a variety of locations (CDFG, Cal State Parks, USFS, TRCD).
- A TV commercial about the threat of quagga mussels was filmed and aired 7,200 times in North and South Lake Tahoe, Carson City, and Reno on major networks like FOX News, Lifetime, MSN, Animal Planet, Travel, TNT and more.
- A billboard alerting Tahoe boaters about inspections was designed and displayed on Highway 50.
- 30+ multiple newspaper stories, ads, and press releases about quagga mussels and watercraft inspections were published in the Tahoe Basin, Sacramento, and Reno regions.
- The LTAISWG Public Outreach Subcommittee was formed to create and design pamphlets, press releases, billboard designs and web-based information.

RESEARCH

- TRPA, UNR and UC Davis collaborated to take calcium samples from around the near shore of Lake Tahoe as part of a risk assessment for quagga mussel invasion.
- TRPA, USFWS, TERC, UNR, TRCD and Lahontan worked to develop a pilot project to test removal methods for Asian clams in Lake Tahoe.
- USFS led the Tahoe Keys AIS Subcommittee where partner agencies initiated planning for aquatic weed and warm-water fish pilot removal treatments.

2008 Accomplishments

AQUATIC WEED REMOVAL & MONITORING

- TRPA, TDC and TRCD staff installed bottom barriers at Emerald Bay and Ski Run Marina. Turbidity and vegetation surveys were performed according to monitoring protocols.
- Remetrix performed hydro-acoustic surveys of Emerald Bay and Ski Run Marina for estimated biomass and biovolume pre-removal activities.
- California State Parks established permanent transects through three Eurasian watermilfoil patches in Emerald Bay and surveyed with point intercept and quadrat methodologies.
- USFS conducted Eurasian watermilfoil and Curlyleaf pondweed monitoring surveys at Fallen Leaf Lake, Zephyr Cove, Meeks Creek, Taylor-Tallac Marsh, Osgood Swamp and Lower Truckee River.



Pictured above: TRPA pontoon boat used for aquatic weed removal and monitoring projects (left); TDC diver installing a bottom barrier in Emerald Bay (right).

New in 2008

Spotlight: Lake Tahoe Watercraft Inspection Program

The **Watercraft Inspection Program (WIP)** began in May with the hiring of 10 seasonal watercraft inspectors. TRCD and TRPA led 5 WIP trainings throughout the year to agency personnel, marina staff and volunteers. The Tahoe basin now has over 60 trained inspectors, 20 of whom are volunteers. TRPA purchased seven portable boat wash units that were deployed to decontaminate vessels before entering Lake Tahoe.

WIP Stats

- Over 8,000 watercraft inspected since May 2008
- 1 vessel found with visible mussels
- 64 decontaminations (high pressure wash or bleach)
- 34% Tahoe only boaters
- 289 (3.5%) high risk boats

Boater Outreach Survey:

Where did you hear about AIS?

- 22% Newspaper ad/story
- 22% Sign at launch
- 15% TV news story
- 6% Billboard or road signs (28% Other)

To address the threat of aquatic invasive species and facilitate the efforts of multiple agencies, TRPA made several changes to the Code of Ordinances prohibiting the introduction of aquatic invasive species, making inspections and decontamination mandatory, and requiring that boat ramps be closed when there is not an aquatic invasive species inspector present.

TRPA staff worked with TRCD and Marina and Boat Launch operators to draft an inspection plan for the Lake Tahoe Basin to provide inspections to every boat that enters the waters of the Region. USFS formulated a modified AIS boat inspection/risk screening program for

small/non-motorized watercraft at USFS boat launches, campgrounds and resorts operated by California Land Management special use permittees. LTSLT helped in raising funds for Quagga prevention and lobbied TRPA for stricter regulations regarding boat inspections.

Pictured below: Billboard design displayed on Highway 50, designed to alert boaters travelling to Lake Tahoe about the Watercraft Inspection Program.

STOP AQUATIC HITCHHIKERS

EXPECT TAHOE BOAT INSPECTIONS

Clean, Drain and Dry Your Boat 888-TAHO-ANS

Plans for 2009

- Develop and implement AIS Basin-wide monitoring
- Warm water fish and aquatic weed control research
- Continue to implement Watercraft Inspection & Decontamination Program
- Develop Asian Clam removal & monitoring protocol and start pilot project
- Continue efforts of aquatic weed removal & monitoring in Emerald Bay and Ski Run Marina
- Continue implementation and enhancement of AIS outreach campaign
- Continue development of an Integrated AIS Management Plan and an Emergency Response Plan for Lake Tahoe
- Prioritize species of concern and potential sites for removal

VOLUNTEERS WANTED!



TRCD is recruiting volunteers to help protect Lake Tahoe this summer against invasive species. If interested, please contact TRCD at (530) 543-1501 ext 113.

For more information or to become a LTAISWG member, please contact Nicole Cartwright, Group Chair, TRCD, 530.543.1501 ext. 111 or check out the AIS webpage at: www.protecttahoe.org

NONNATIVE SPECIES OF CONCERN NOT FOUND IN TAHOE BASIN



Zebra mussels, quagga mussels (left) and New Zealand mudsnails have been found in CA and NV waters. To report a sighting, please call: 1-888-TAHO-ANS

NONNATIVE SPECIES OF CONCERN FOUND IN TAHOE BASIN



Curlyleaf pondweed