

**Truckee River Fund
Request for Proposal Cover Sheet**

Organization Name: Tahoe Resource Conservation District
Type: 501(c)(3) EIN# **Governmental entity? Yes, California
Special District**
Address: 870 Emerald Bay Road, Ste. 108 South Lake Tahoe CA 96150
Project Name: Watercraft Inspection Program for the Truckee River Watershed
Amount requested: **Website: www.tahoercd.org**
Key People:

Director:	Dave Roberts, District Manager	
Board Chair:	Robert Anderson, President	
Project Contact:	Name:	Kim Boyd
	Position:	Program Manager
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Organization Mission: Promote the conservation and improvement of the Lake Tahoe Basin's soil, water and related natural resources by providing leadership, information, programs and technical assistance to all land managers, owners, organizations and residents.

Has your organization received other grants from the Truckee River Fund?
 Yes ___ No X
 (use additional page if necessary)

If yes,

Date awarded:	
Project title:	
Amount of Award:	
Date awarded:	
Project title:	
Amount of Award:	
Date awarded:	
Project title:	
Amount of Award:	

DESCRIPTION OF PROJECT UNDER CONSIDERATION

Indicate the description that best fits the project you are proposing. Mark no more than three categories:

- A. Projects that improve bank or channel stabilization and decrease erosion.
- B. Structural controls or Low Impact Development (LID) projects on tributaries and drainages to the Truckee River where data supports evidence of pollution and/or sediments entering the Truckee River.
- C. Projects that remove pollution from the Truckee River.
- D. Projects that remove or control invasive aquatic species or terrestrial invasive plant species that are adverse to water supply.¹
- E. Other projects that meet the evaluation criteria.

**Resource Conservation Districts
Truckee River Fund
Proposal Narrative**

Project Goals:

- 1) Guide implementation of aquatic invasive species (AIS) prevention measures through interagency, scientific, and stakeholder coordination in the headwaters of the Truckee River Watershed.
- 2) Gather baseline data on current AIS infestations in 3 selected reservoirs.
- 3) Complement and leverage existing Lake Tahoe AIS prevention, control and monitoring efforts to implement program on at-risk waterbodies outside the Basin but within the headwaters of the Truckee River Watershed.
- 4) Combine the best available science with established AIS management to effectively control the proliferation and possible introduction of AIS in the upper Truckee River Watershed.
- 5) Develop multi-agency framework and process to expand watercraft inspection and decontamination stations in such a way to serve all waterbodies in the California portion of the Truckee River Watershed.
- 6) Identify funding strategies to create a self-sustaining, long-term program.
- 7) Develop an effective and comprehensive AIS Education and Outreach Program for the headwaters of the Truckee River Watershed.

Measurable Outcomes:

- 1) Organize and initiate programmatic discussions on regional AIS prevention and control for the headwaters of the Truckee River Watershed.
- 2) Implement pilot level Watercraft Inspection Program.
- 3) Aid in the prevention of future AIS invasions.
- 4) Provide a framework for discussions for possible development of MOUs and/or other necessary agreements between coordinating partners for the purpose of implementing a Watercraft Inspection Program.
- 5) Produce an inventory of currently existing aquatic invasive species in 3 selected reservoirs in the headwaters of the Truckee River Watershed.
- 6) Increase public understanding, perception and awareness of watercraft inspections and AIS and their associated risk to the watershed and surrounding communities.
- 7) Assist in the development of a multi-party funding strategy to sustain prevention and control efforts.

Efforts to prevent the continued spread and introduction of AIS are extremely varied across state, tribal, federal and local jurisdictions. Success will be determined by consistency in coordination, cooperation and effective programmatic management efforts. Quagga (*Dreissena rostriformis bugensis*) zebra mussels (*Dreissena polymorpha*) present a significant threat to local economies and environmental integrity. While the prevention efforts target quagga and zebra mussels, these prevention measures are suitable to detect the presence of additional AIS including, aquatic weeds and other aquatic invertebrates. Following the established Watercraft Inspection Program and Decontamination Protocol developed and implemented by the Tahoe Regional Planning Agency and the Tahoe Resource Conservation District significant headway will be made to the complete establishment of Watercraft Inspection and Decontamination Stations at all waterbodies in the headwaters of the Truckee River Watershed.

2. Project location:

This project will be implemented in the California portion of the Truckee River Watershed. Significant waterbodies in this watershed include, Donner Lake, Independence Lake, Stampede Reservoir, Boca Reservoir, Prosser Lake, Martis Lake and the Truckee River at the Lake Tahoe dam. Upon determination through the planning process, the specific lake/reservoir(s) will be identified. Early detection monitoring

will occur at 3 identified reservoirs. Education and Outreach will occur throughout the Truckee River Watershed.

3. Project description:

Quagga and zebra mussels are among the most devastating aquatic invasive species to invade fresh waters of North America. In January 2007, the first population of Dreissenid mussels west of the 100th Meridian was discovered in Lake Mead. Their ecological legacy in the Eastern U.S., has included competition with native mussels, disruption of food webs, and bioaccumulation of toxins. Other problems associated with these invaders include, clogging water intake and delivery pipes, infesting hydropower infrastructure, adhering to boats and pilings and fouling recreational beaches. It is almost certain that they will pose similar threats in the West, putting the long list of imperiled fish and other aquatic life and water management challenges at an even greater risk.

Invasive mussels have not been detected in the vast majority of Western waters, presenting tremendous opportunities to prevent significant damage if coordinated and extensive action is taken immediately. Without increased action, quagga and zebra mussels will cause irreparable ecological damage and long-term mitigation costs will be in the billions. Actions taken to prevent the spread of these mussels will also complement and enhance general prevention strategies to minimize the spread of other invasive species. If funded and implemented, the collective actions proposed in this project represent the best strategy toward minimizing future impacts of quagga and zebra mussels across the Sierra Nevada region.

The 2007 discovery of the highly invasive quagga mussel in Lake Mead, Lake Havasu and the Colorado River Basin prompted rapid cooperation and action by regional, bi-state, federal agencies and non-governmental organizations in the Lake Tahoe Region. These new threats, coupled with recent studies showing high incidence of boat traffic to the Lake Tahoe Region, emphasize the need for increased prevention and control efforts combined with focused education and outreach campaigns. The importance of coordinated regional management efforts that build on current successes can not be stressed enough.

Prevention is fundamental to AIS management, but this type of funding usually falls behind funding for programs that control existing AIS. The benefits of increased funding and coordination would go far beyond implications to quagga and zebra mussels and would improve all AIS prevention efforts throughout the region and possibly the state. A lack of resources and coordination impedes full implementation of needed prevention efforts. Given the complexity of landownership, jurisdictional authority and geographic location of major waterbodies within the Truckee River Watershed, a considerable amount of planning and multi-party agreements must be formalized. Currently, there is not a well developed framework for such discussions, which severely limits the opportunity to develop regional coordination. Without such a framework, the waterbodies of the region are extremely vulnerable to infestation by uncontrollable aquatic invasive species.

For this reason, the Tahoe Resource Conservation District proposes to initiate a coordinated, multi-party planning effort specifically intended to accelerate regional prevention and control efforts of aquatic invasive species. Specifically the real and advancing threat presented by quagga and zebra mussels that are rapidly spreading across the western United States. Coordination, cooperation and targeted management efforts are crucial to the success of this effort.

Fundamental to this endeavor is the development of a multi-party framework that; addresses key regional management questions, identifies entity roles and responsibilities, and develops various management strategies appropriate for specific waterbodies. The ultimate goal of this project is to develop a comprehensive regional management strategy, particularly for watercraft inspection programs, with the assistance of agencies in the Lake Tahoe Basin that have been successful in developing a similar

program for Lake Tahoe. The implementation of the management strategy and inspection programs, given the limited capacity and jurisdiction of the Tahoe RCD, will require the combined efforts of agencies outside the Tahoe Basin. In particular, the Placer RCD and Nevada RCD are key partners to assume the same role as the Tahoe RCD in implementing a Watercraft Inspection Program.

In 2008, the Tahoe Regional Planning Agency mandated watercraft inspections of all watercraft entering Lake Tahoe. To comply with these new regulations, a full-scale watercraft inspection program was implemented by the Tahoe RCD in 2009. This followed a great deal of planning and coordination between many local, federal, state and regional partners, in addition to a 2008 pilot watercraft inspection project implemented by the Tahoe RCD.

For the purposes of this project, possibilities for a Watercraft Inspection Program would include a pilot project for next summer that, 1) implements a single watercraft inspection station at one reservoir, accounting for all hours of operation and launch sites at the reservoir, or 2) implements watercraft inspections at multiple reservoirs during peak hours, realizing that all hours of operation would not be covered. This approach recognizes the limitations of current funding while simultaneously initiating a program that could become more secure and protective over time once a cooperative multi-party framework has been established. The ultimate goal is to develop a self-sustaining and comprehensive watercraft inspection program for the entire Truckee River Watershed.

The Tahoe RCD is well suited to initiate a project of this type, given our previous experience and logistical knowledge of such an endeavor. The long-term survival of such a program depends on commitment from other partners. Therefore, it will be imperative for partnering agencies to accept some responsibility for ensuring the success of this regional effort. Fortunately, there is tremendous interest and support, by a number of entities, for such a program in the Truckee River Watershed. Some entities are currently exploring programs at preliminary levels and it would benefit the efforts of all to formalize a planning process for this development. To support current efforts, this proposal seeks to comprehensively organize and synthesize these efforts.

The Tahoe RCD proposes to hire a project coordinator to oversee planning, coordination and facilitation of the pilot project. In addition, 6 watercraft inspectors will be hired and trained for the 2010 boating season. Watercraft Inspections will follow guidelines developed by the Tahoe Regional Planning Agency, 100th Meridian Initiative, and recommendations developed from the Lake Tahoe Aquatic Invasive Species Integrated Management Plan. Input will be solicited from lake managers and other key partners to address logistical considerations.

Education and outreach remain critical tools in the fight against AIS such as quagga and zebra mussels. Lack of awareness is a major impediment to preventing the spread and minimizing impacts from invasive mussels. If people do not understand the impacts of invasive mussels, or learn how they can help prevent their spread, it will be difficult to gain their support toward solutions. Education and outreach then becomes the foundation of our efforts and some project funding will be used for this purpose. Watercraft inspections are an important part of the education and outreach element because the spread by humans is often the result of contaminated water from bilges, bait wells or boats, and gear to which juveniles and adults have attached. The common element of all prevention measures is to wash and dry boats, trailers, and gear, and to empty bilges and bait wells of potentially contaminated water. The public should be aware that boats, trailers, and gear should be inspected for any attached mud, vegetation and animals and removed at the lake or riverside. Current outreach strategies include information brochures, stickers, public service announcements, permanent and temporary exhibits and displays, billboards and highway signage, signage at boat access points, websites, presentations, agency training, information booths, and one-on-one outreach to the public. Educational materials developed through the Lake Tahoe Watercraft Inspection Program will be utilized to maintain consistency in messaging.

Early detection monitoring is critical to identify new infestations, prompting a quick response necessary to prevent further spread and impact by maximizing the opportunity for controlling or eradicating an invasion at its earliest stage. The level of effort and techniques utilized for early-detection monitoring for new populations of quagga and zebra mussels varies throughout the West. Early detection monitoring for this project will follow well developed techniques identified in the California Department Fish and Game Monitoring Plan. To be effective, sampling will be employed regularly and consistently between jurisdictions. Specifically, three reservoirs will be sampled 9 times during the year for plankton tows, artificial substrates at the primary boat launch areas and visual surface surveys that are randomized.

4. If future phases of the project will be needed, identify anticipated funding sources:

Future phases are anticipated for this project, as this is considered a pilot project to work out logistics and long-term funding sources. This project will lay the foundation for a watershed scale Watercraft Inspection Program and evaluate potential funding sources.

5. Principles involved in leading or coordinating the project or activity:

In addition to the Tahoe RCD, collaborating partners include, Placer County RCD, Nevada County RCD, Sierra County RCD, the Tahoe Regional Planning Agency, California Department of Fish and Game, University of Nevada, Reno, Truckee River Watershed Council, Truckee Ranger District, the US Bureau of Reclamation, US Forest Service and US Fish and Wildlife Service. This list of collaborating partners is only preliminary and will expand as implementation becomes established.

6. Number of staff positions involved in project: Fulltime 7 Part-time 4

This includes one fulltime coordinator and 6 fulltime, seasonal watercraft inspectors. Part-time positions include Tahoe RCD administrative, financial, District Manager and Program Manager staff. Other positions include contracted staff from Placer and Nevada RCDs.

7. Number of volunteers involved in project and an estimated number of volunteer hours:

We do not anticipate volunteers for this phase of the project.

8. Time line of project:

Project timeline: January 1, 2010 – December 31, 2010

Planning and Coordination*:	January 1, 2010 – December 31, 2010
Watercraft Inspector Training:	April 2010
Pilot Watercraft Inspections:	May 1, 2010 – September 30, 2010

*Planning and Coordination includes prepping for the 2010 boating season and then analyzing program framework to facilitate implementation for the 2011 boating season.

Project Budget – Watercraft Inspection Program, Truckee River Watershed

TRCD Personnel	TRF Request	Match	Project Total
Project Coordinator	\$60,882.00		\$60,882.00
Watercraft Inspector	\$13,303.00		\$13,303.00
Watercraft Inspector	\$13,303.00		\$13,303.00
Watercraft Inspector	\$13,303.00		\$13,303.00
Watercraft Inspector	\$10,803.00	\$2,500.00	\$13,303.00
Watercraft Inspector	\$10,803.00	\$2,500.00	\$13,303.00
TRCD Administrative Coordinator	\$3,183.00		\$3,183.00
TRCD Financial Manager	\$3,840.00		\$3,840.00
TRCD District Manager	\$5,550.00	\$8,200.00	\$13,750.00
TRCD Program Manager	\$3,750.00	\$10,500.00	\$14,250.00
<i>Subtotal</i>	<i>\$152,023.00</i>	<i>\$23,700.00</i>	<i>\$175,725.00</i>
Agency Coordination & Facilitation			
Placer RCD	\$10,800.00		\$10,800.00
Nevada RCD	\$10,800.00		\$10,800.00
Tahoe Regional Planning Agency		\$5,000.00	\$5,000.00
Truckee River Watershed Council		\$8,640.00	\$8,640.00
Travel	\$5,000.00		\$5,000.00
<i>Subtotal</i>	<i>\$26,600.00</i>	<i>\$13,640.00</i>	<i>\$40,240.00</i>
Operating			
Education & Outreach Material (publications, advertisements, brochures, signs etc.)	\$5,000.00	\$3,000.00	\$8,000.00
Watercraft Inspector Supplies (chairs, umbrellas, name tags, phones, inspection mirrors, clipboards etc.)	\$3,500.00	\$3,000.00	\$6,500.00
Portable Decontamination Station		\$20,000.00	\$20,000.00
Laptop Computer	\$1,500.00	\$500.00	\$2,000.00
Office Space		\$6,500.00	\$6,500.00
Office Supplies		\$1,500.00	\$1,500.00
Decontamination Supplies	\$3,500.00		\$3,500.00
Mileage	\$3,000.00		\$3,000.00
<i>Subtotal</i>	<i>\$16,500.00</i>	<i>\$34,500.00</i>	<i>\$51,000.00</i>
Early Detection Monitoring			
Collection & Analysis	\$36,000.00		\$36,000.00
University of Nevada, Reno		\$8,500.00	\$8,500.00
<i>Subtotal</i>	<i>\$36,000.00</i>	<i>\$8,500.00</i>	<i>\$44,500.00</i>
Project Total	\$231,123.00	\$80,340.00	\$311,463.00

Grant Match

Match amount to be provided: \$80,340.00

Match details:

Match is:

Cash	\$
In-kind	\$
Note: Volunteer and in-kind hours may be calculated at a maximum rate of \$20/hour per individual.	
Both	\$5,000 – Cash Match \$75,340.00 – In kind
If both, break out amounts and provide separate description of in-kind and cash match.	

If the match is cash, is the funding already being held by the applicant for this project?
 Yes __ No X

Description of matching funds/in kind donations:

Cash match –

\$5,000 provided by US Bureau of Reclamation for Watercraft Inspector salary

In-kind match –

\$18,700 provided by Tahoe RCD for District Manager and Program Manager staff time to provide coordination and facilitation

\$5,000 provided by Tahoe Regional Planning Agency for coordination and facilitation staff time

\$8,640 provided by Truckee River Watershed Council for coordination and facilitation staff time

\$1,800 provided by Truckee River Watershed Council for education & outreach material

\$1,200 provided by Tahoe RCD for education and outreach material

\$3,000 provided by Tahoe RCD for watercraft inspector supplies

\$500 provided by Tahoe RCD for computer/software

\$6,500 provided by Tahoe RCD for office space

\$1,500 provided by Tahoe RCD for office supplies

\$20,000 provided by Tahoe Regional Planning Agency for use of a portable decontamination station

\$8,500 provided by University of Nevada, Reno for early detection monitoring