

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

RESOLUTION NO. R6T-2009-0028

**REQUEST FOR CLEANUP AND ABATEMENT ACCOUNT FUNDS TO
DETERMINE EXTENT OF ASIAN CLAM INFESTATION IN LAKE TAHOE**

WHEREAS, the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board), finds:

1. The primary responsibility for the protection of water quality in California rests with the State Water Resources Control Board and the nine Regional Water Quality Control Boards.
2. It is the responsibility of the Lahontan Water Board to regulate the activities and factors that affect or may affect the quality of waters of the region in order to achieve the highest water quality consistent with the maximum benefit to the people of the State.
3. The Water Quality Control Plan for the Lahontan Region (Basin Plan) was adopted in 1995. The Basin Plan identified the need to protect the surface and groundwaters of the Lake Tahoe Hydrologic Unit.
4. The non-native Asian clam (*Corbicula fluminea*) was detected in Lake Tahoe in 2002 and since then has expanded its infestation. The complete geographic extent of the Asian clam infestation in Lake Tahoe is unknown.
5. The clam poses a threat to water quality and beneficial uses through transformation, concentration and excretion of high levels of bio-available nitrogen and phosphorus into the water column and sediment substrate. Clam colonies on the south east portion of Lake Tahoe contributed to blooms of filamentous algae in summer 2008. These algal blooms negatively affected the aesthetic enjoyment of Lake Tahoe. Additionally, decomposition of Asian clam shells increases localized calcium concentrations in the water column, creating a suitable habitat for potential establishment of aggressive Zebra and Quagga mussels.
6. Lahontan Water Board staff, as a participant in the Lake Tahoe Aquatic Invasive Species Coordinating Committee and the Asian Clam Working Group, supported a report, *Development of Asian Clam Control and Monitoring Plan Strategies for Lake Tahoe*. The report, written fall 2008, includes a four part management plan: I) Field testing of removal options and identification of science needs, II) Evaluation of a recommended

strategy for Asian clam control, III) Implementation of the control strategy, and IV) Long-term monitoring to evaluate success.

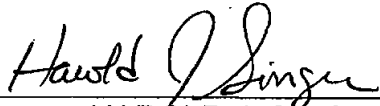
7. On March 9, 2009, the State Water Resources Control Board authorized an urgency request of \$100,000 in Cleanup and Abatement Account funds to supplement funds from other agencies to implement an Asian clam removal pilot project in Lake Tahoe. The Asian clam removal pilot project is Part I.a. of the four part management plan. California's Tahoe Resource Conservation District administers the pilot project.
8. The lakewide survey will determine the extent of the Asian clam infestation and confirm the association between clam beds and algal blooms. The survey crew will use an autonomous underwater vehicle (AUV) to record visual evidence of clams on the lake bottom and associated chlorophyll concentrations in the water column to detect filamentous green algal blooms. The survey will be performed during the summer algal bloom. The survey project includes collecting and analyzing lake bottom sediment samples to confirm the Asian clam locations and quantify the clam density. The entire survey will cost \$100,000. The survey is scheduled to take place at the end of July through the beginning of August 2009, and findings will be available in October 2009. The project will be administered by UC Davis Tahoe Environmental Research Center (TERC). Work will be conducted by researchers from UC Davis TERC and the University of British Columbia.
9. The pilot clam removal project and the lakewide Asian clam survey are both included in Part I of the Asian clam management plan. Findings from the pilot project and survey are necessary to conduct Part II of the clam management plan. Actions taken in Part III and Part IV of this plan are contingent on findings from Parts I and II given efficacy, timing and costs associated with pilot projects and internal and external reviews.
10. The Lahontan Water Board requests \$100,000 to fund the Lake Tahoe Asian clam survey project. Requested funds are in addition to the \$100,000 approved by the State Board for the Asian clam removal pilot project, for a total of \$200,000 in CAA funding for Part I of the Asian clam management plan. Additional funding for Part I has been contributed by Nevada State Lands (\$150,000), US Bureau of Reclamation (\$8,000), and US Fish and Wildlife Service (\$145,248).
11. Under Water Code section 13442, upon application by a public agency, such as the Lahontan Water Board, with authority to clean up a waste or abate the effects thereof, the State Water Resources Control Board may order moneys to be paid from the account of the public agency to assist it in cleaning up the waste or abating its effects on waters of the state.

12. The Lahontan Water Board considered all comments received at its regular meeting held on May 13, 2009, in South Lake Tahoe, California.

THEREFORE BE IT RESOLVED:

The Lahontan Water Board requests the State Water Resources Control Board allocate funds from the Cleanup and Abatement Account to the Lahontan Water Board in the amount of \$100,000. These emergency funds will be used to conduct a survey of Lake Tahoe to determine the complete extent of the Asian clam infestation.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Lahontan Region, on May 13, 2009.



HAROLD J. SINGER
EXECUTIVE OFFICER

Attachment A – *Development of Asian Clam Control and Monitoring Plan
Strategies for Lake Tahoe*

Attachment B – AUV report: survey technology, feasibility, survey plan, budget