## Quest to increase Tahoe's clarity begins with TMDL

By Kathryn Reed

KINGS BEACH — With fine sediment being the major pollutant clouding the pristine waters of Lake Tahoe, that load of dirt is going to be scrutinized even more in the coming years.

Today the Lahontan Regional Water Control Board expects to release its plan to increase clarity, goals for how far a Secchi disk should be seen, and a credit program for those responsible for the pollution.



Increasing the clarity of Lake Tahoe is what the TMDL is all about. Photos/Kathryn Reed

Called total maximum daily load, this is something agencies that oversee water bodies throughout the country must pay attention to under the Clean Water Act, which is regulated by the Environmental Protection Agency.

"A total maximum daily load, or TMDL, is a calculation of the maximum amount of a pollutant that a water body can receive and still safely meet water quality standards," the EPA says.

Lahontan staff is proposing fine sediment particles be reduced by 32 percent in 15 years. This should allow the disk, which resembles a white dinner plate, to be seen 77 to 80 feet below the surface. (Right now it's at 70 feet.) If the new level of clarity can be sustained for five years, scientists would consider the decline of Lake Tahoe's clarity to be halted.

Robert Larsen, an environmental scientist with Lahontan, engaged the board in a nearly



Near shore clarity is not addressed in the TMDL.

three-hour workshop on June 9 at the North Tahoe Event Center in Kings Beach. It was October 2008 that the board last had a thorough TMDL presentation.

"This TMDL is about deep water transparency. We've lost 30 feet of clarity in the last 40 years," Larsen said.

Although aquatic invasive species and near shore degradation are concerns of Lahontan's, they are not part of the TMDL. Larsen said addressing fine sediments would impact nutrients, which in turn affects near shore water quality.

Fine sediment is defined as particles less than 16 micrometers. Seventy-two percent comes from the urban upland – basically all the developed area of the basin; 15 percent from atmospheric deposition (the air), 9 percent non-urban upland (U.S. Forest Service and other undeveloped areas), 4 percent

stream channels, and less than 1 percent from shoreline erosion.

The urban areas on both sides of the state line are being asked to cut the amount of fine sediment reaching the lake by 24.5 percent so the overall goal can be achieved. Larsen estimates it costing \$1.5 billion to achieve this goal.

Where the money is going to come from was not discussed. It is one of those unfunded government mandates. The credit program will be the penalty part for non-compliance.

The counties, city, and both state departments of transportation are the primary players that must meet the criteria being set forth.

Robert Erlich, stormwater coordinator for South Lake Tahoe, was the only member of public to speak Wednesday. He has concerns about the costs involved as well as the continuing operation and maintenance dollars required.

The public will have 90 days to comment on the TMDL document. Click here for more information. If the report is not there, it will be by June 14.

The board will have a public hearing in September, with adoption likely in November. From there Nevada officials must approve it, as well as the California Office of Administrative Law and state Water Board. It could be implemented in 2011.