Reducing fine sediment helping Lake Tahoe

By Kathryn Reed

Abrasives put on roadways in the Lake Tahoe Basin are a huge contributor to the loss of lake clarity.

That was one of the messages delivered to the Lahontan board on Thursday when staff gave an update about the total maximum daily load program. The TMDL is designed to keep fine sediment from reaching the lake. Those tiny particles are degrading the lake's clarity, along with phosphorus and nitrates.

"Caltrans is leading the way with El Dorado County with traction abrasives. They were shooting themselves in the foot by putting fine sediment on the ground," Bob Larsen, senior environmental scientist with Lahontan Regional Water Quality Control Board, said March 12.

Brine is now being used more often than salt or decomposed granite to handle slick roadways. Sweeping after a storm to collect the leftover matter is also helping to keep material from the lake. Changing abrasives and vigilant street sweeping has proved to be a cost-effective route.

Larsen said it has also been proven that sweeping streets with cracks is not effective.

"That is why it is important to maintain the infrastructure," he said.

Lake Tahoe clarity is an ongoing issue. Photo/Kathryn Reed

One of the early complaints from the jurisdictions having to comply with the unfunded TMDL mandate was the cost. Larsen told the board it's important for Lahontan to be an advocate for the stakeholders when it comes to securing funding for projects.

Another tactic is to crack down on lax maintenance of erosion control measures – or best management practices.

Larsen said he is cautiously optimistic that the decline of Lake Tahoe's clarity is stabilizing.

The Lake Tahoe TMDL is a 65-year program, with this being year four. The goal after all that time is to be able to see what amounts to a white dinner plate being visible 100 feet below the surface of Lake Tahoe. Larsen said the 2016 goal of 71 feet of clarity is on target to be met.

Because the urban runoff is responsible for 70 percent of the fine particles reaching the lake, that is where the emphasis is.

Non-urban areas are also a concern, with unpaved roads in the forest being the biggest problem. Since 2004, the U.S. Forest Service has decommissioned more than 200 miles of roads.

All of the initiatives are likely to help improve the near shore as well, Larsen said. This is the beach area that has

turned murkier as the water temperature increases. This area is also being studied by other agencies to determine other reasons why the water is more brown than clear.

While Lahontan only has jurisdiction in California, the TMDL is a joint policy with Nevada. A universal website has been established to encompass what is going on lakewide.

TMDL is not unique to Lake Tahoe. Lahontan also has jurisdiction over the TMDL program for Heavenly Valley Creek, Indian Creek Reservoir, Squaw Creek, Blackwood Creek, and Truckee River.

Rich Booth with Lahontan gave a summary to the board about those water bodies. He said the four main pollutants are metals, nutrients, total dissolved solids, and other things, with bacteria being part of the other.

All but Squaw Creek are on target to meet the 20-year compliance goal, Booth said. He called the increase in fine sediment “disturbing”.

The agency is also going to take a harder look at the Truckee River because by the current standards it is in compliance. However, last year the Truckee River Watershed Council presented information to the board saying it is still an impaired waterway. It’s likely the goals will be reconfigured.