

# Opinion: Improving lake clarity is a group effort

By Joanne Marchetta

Lake Tahoe is known around the world for its crystal-clear water. For several decades, Tahoe's clarity, which measured more than 100 feet in 1968, was declining each year because of stormwater pollution from poorly planned development and the lingering effects of historical activities such as cattle grazing and logging.



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Clarity reached an all-time low of 64 feet in 1997, sparking fears that Tahoe's clarity could be lost forever. But it also galvanized the federal government, the states of California and Nevada, local governments, and the private sector to launch the Lake Tahoe Environmental Improvement Program, a collaborative partnership to invest in projects that reverse clarity loss and address other environmental problems.

Partners in the Tahoe basin are working together to restore the lake's clarity by reducing stormwater pollution from roads and communities and by restoring meadows, wetlands, and streams important to the lake's health. That work is paying off. As of last year, Tahoe's five-year average clarity measured 73 feet.

We still have a long way to go in restoring Lake Tahoe's clarity to historic levels, but the long-running, year-after-year declines in Tahoe's clarity have been halted. Scientists estimate that without all the work done over the last two decades clarity would have continued to decline each year and be 20 feet worse than it was in 1997.

Tahoe met a major milestone this summer through the total maximum daily load (TMDL) program, a science-based plan administered by the Lahontan Regional Water Quality Water Board and Nevada Division of Environmental Protection to reduce stormwater pollution and restore Tahoe's water clarity back to its historic level of 97.4 feet by 2076.

Through the program, local governments and highway departments are making significant progress to reduce stormwater pollution. Every option is being pursued: Upgrading roads with curb, gutter, and infiltration basins; area-wide projects that capture and treat stormwater; more street sweeping; better management of traction abrasives applied to roadways; and restoration of natural areas that help improve Tahoe's water quality.

Working together over the last five years, TMDL partners have reduced fine sediment pollution by 12 percent. That's 268,500 pounds of fine sediment particles—about 70 dump truck loads—that will no longer wash into the lake and cloud its waters.

In that same five years, TMDL partners reduced the amount of phosphorus pollution entering the lake by 8.5 percent and the amount of nitrogen pollution entering the lake by 6 percent. It is important to keep these nutrients out of Lake Tahoe, where they fuel algae growth.

Through the TMDL program, partners around the lake have taken proactive steps to reduce stormwater pollution. They have shown that we can reduce pollution to restore Lake Tahoe's

famous clarity, and the lake is responding favorably.

While we are making significant progress, we face many challenges. Foremost among them is climate change. Each of the last three years was among the warmest on record for global surface temperatures, and this summer is on track to be one of the warmest on record in California.

Warming air and water temperatures at Tahoe threaten to disrupt the lake's environment and ecosystems, and upset the delicate balance that has governed the lake for thousands of years. This poses major challenges for restoration initiatives and makes it all the more important to keep fine sediment, phosphorus, and nitrogen out of the lake.

Please join us in working to protect and restore Lake Tahoe's famous clarity. Install best management practices at your home or business to prevent soil erosion and stormwater runoff. Walk, bike, or take the bus instead of driving. If you have a lawn, don't over-fertilize or use phosphorus-only fertilizers, and consider getting rid of the lawn for native vegetation that doesn't require excessive watering or fertilizers. Pick up after your pet while enjoying Tahoe's trails and beaches. Join the League to Save Lake Tahoe's Pipe Keepers program to help monitor stormwater outfalls, or the Eyes on the Lake program for training on how to identify and report aquatic invasive species in the lake.

By working together and everyone doing their part, no matter how small, we build on our progress. Together we can make sure Tahoe's treasured clear waters are not only passed on, but improved, for future generations to enjoy.

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