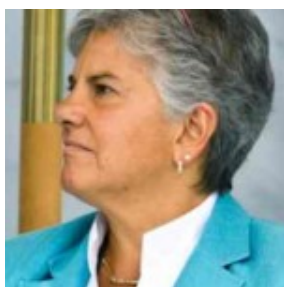


Opinion: Reason to be optimistic about lake clarity

By Joanne Marchetta

UC Davis and the Tahoe Regional Planning Agency recently released their yearly water clarity readings for Lake Tahoe. The good news: Mid-lake water clarity improved significantly in 2014, with an average reading of 77.8 feet. That's 7.5 feet greater than the average reading for 2013, and almost 14 feet greater than the 64.1 feet measured in 1997, Lake Tahoe's lowest recorded clarity.

Water clarity averaged 78.7 feet in summer months. That's a yearly increase of 13 feet and the highest summer average recorded since 2002. Average winter clarity improved by about one foot, continuing a pattern of steady improvement since 1997.



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Mid-lake water clarity is the depth to which a 10-inch white disk, called a Secchi disk, remains visible when lowered below the lake's surface. Clarity readings have been taken at Lake Tahoe each year since 1968, one year before TRPA was created. We have one of the longest continuous records for water clarity anywhere in the world.

Water clarity is an iconic indicator of Lake Tahoe's

environmental wellbeing. Science tells us that clarity is heavily influenced by fine sediment pollution, and that about 70 percent of the sediment washing into Lake Tahoe with stormwater comes from roads and other developed areas. Most of the development around the Tahoe basin was built before stormwater treatment systems were required, or is located on environmentally sensitive land where it would not be allowed today.

Last year's improved clarity readings are yet another sign that our public and private work to reduce stormwater pollution and erosion through the Environmental Improvement Program has successfully halted the long-running decline in water clarity at Lake Tahoe. But they should not be interpreted as a victory in our mandate and collaborative work to restore its famed clarity levels that once measured 100 feet.

Last year's clarity readings were also influenced in part by the severe drought now entering its fourth year. Reduced precipitation means less stormwater and less fine sediment pollution flowing into the Lake, and warm winter weather causes shallow seasonal mixing of the Lake's water, both of which can improve annual clarity readings.

There is reason for optimism about these improved clarity readings. Public and private projects completed over the last two decades to improve water quality and restore sensitive environmental areas such as streams and wetlands are having a positive impact on mid-lake clarity and other key environmental indicators at Lake Tahoe. That success is no small feat for a lake that holds 39 trillion gallons of water and a watershed that takes about 650 years for an average drop of water to flow into the lake and out the Truckee River.

Environmental improvement program projects continue to be implemented around the Lake Tahoe region and incorporated into the area plans local governments and TRPA are designing to

both restore our natural environment and revitalize and improve our communities. They also are being incorporated into the Lake Tahoe Total Maximum Daily Load Program, which requires all local jurisdictions to reduce their fine sediment, phosphorus, and nitrogen pollution loads.

Even with this progress, we have not lost sight of other challenges already upon us at Lake Tahoe. Funding to continue the collaborative Environmental Improvement Program is stretched thin and meeting our restoration mandates will stall without new resources. That's why TRPA is working closely with our federal delegation to introduce and pass the Lake Tahoe Restoration Act, which would ensure that adequate federal funding remains available to leverage with state and local funding and private investment for continued environmental gain.

The potential long-term impacts of drought and the continued warming of air and water temperatures also pose new questions for the future. While we're moving in a positive direction on mid-lake clarity, we remain concerned about the shoreline's nearshore waters which are fouled with increased algae growth, reduced water quality, and the spread of aquatic invasive species. TRPA remains strongly committed to leading the collaborative partnership in the Tahoe basin to tackle these challenges head on and we thank you for working with us for the benefit of the lake and our communities.

Joanne Marchetta is executive director of the Tahoe Regional Planning Agency.