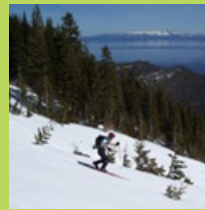




U.S. Environmental Protection Agency
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24 Years of Investing in a Clear, Healthy Lake Tahoe

Lake Tahoe is an EPA Priority Watershed, in part because of its iconic clarity and beauty. But climate change and human disturbance of the watershed threaten this national treasure. Lake clarity recovered from the impacts of extensive logging in the 19th century, but rapid, unregulated development following the 1960 Winter Olympics again increased fine sediment and nutrients flowing into the lake. Between 1968 and 1997, annual average clarity was dramatically reduced from around 100 feet to 64 feet (Figure 1).

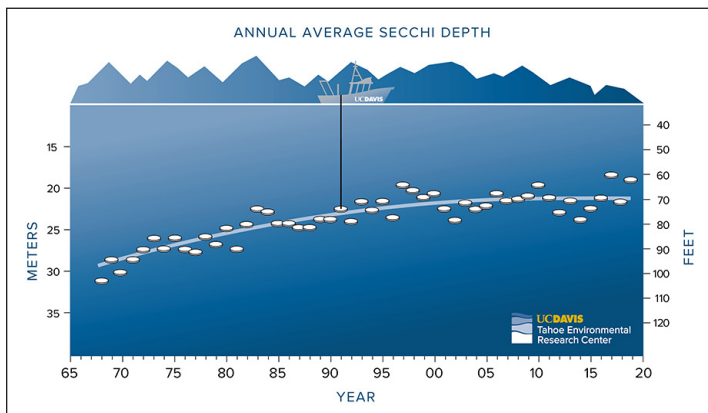


Figure 1. Source: UC Davis TERC (terc.ucdavis.edu)

A new era of ecosystem and watershed restoration began in 1997 with the visit of President Clinton to Lake Tahoe, where he helped launch the [Environmental Improvement Program](#). This \$2.5 billion effort has helped achieve improvements for air and water quality, soil conservation, forest health, wildlife and fisheries, and scenic and recreational resources. The decline in annual average lake clarity has slowed in recent years, although extreme winters in 2017 and 2019 led to two of the worst annual average clarity measurements ever recorded: 60.4 and 62.7 feet, respectively. Past improvements may be attributed in part to local management of urban runoff guided by innovative decision-making tools.

Continued progress as we face growing challenges tied to climate change, like increasing tree mortality, forest fires, warmer lake temperatures and invasive species, will require constant vigilance and dedicated resources.

What Is EPA Doing to Protect Lake Tahoe?

EPA has been charged with protection of the Tahoe Basin ever since Section 114 of the 1972 Clean Water Act required implementation of a study to “...preserve the fragile ecology of Lake Tahoe.” EPA’s involvement accelerated sharply after the 1997 Tahoe Summit, which set air and water quality goals, and started the work of EPA’s Lake Tahoe Basin Coordinator. Since then, EPA has invested over \$47 million, including \$9 million for a lake clarity restoration plan, known as a Total Maximum Daily Load (TMDL). EPA also oversees implementation of the Clean Water Act, Safe Drinking Water Act, Clean Air Act and other statutory requirements by our state and local partner agencies in California and Nevada.

What Is the Lake Tahoe Total Maximum Daily Load (TMDL) and What Does It Do?

The Lake Tahoe TMDL is the centerpiece of efforts to reverse the decline in the lake’s deep-water clarity and restore it to historic levels. The TMDL and its Implementation Plan were adopted by California and Nevada, and approved by EPA in 2011 following a 10-year, \$10 million development effort funded by state and federal agencies. Both the scientific research and stakeholder input that went into the final plan are among the most advanced ever applied to a TMDL in the Clean Water Act’s history. Key elements include:

- **Understanding Pollutant Sources:** The TMDL quantified relative amounts of fine sediment, phosphorus and nitrogen inputs to the lake from major pollutant sources including urban and forest stormwater runoff, stream channel erosion, and atmospheric deposition.

- **Targeting Load Reductions:** The TMDL set needed load reductions for the largest pollutant sources to achieve the clarity target of 78 feet by 2026 and the long-term goal of 97 feet by 2076 (Figure 2).

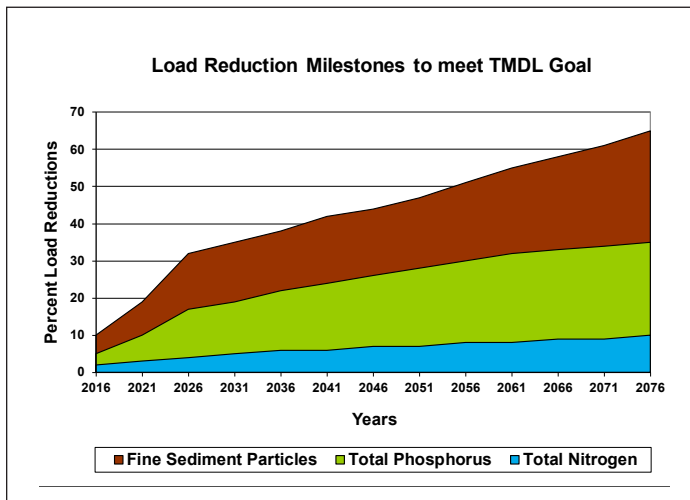


Figure 2. Source: U.S. EPA

- **Creating and Implementing a Strategy:** The TMDL developed a strategy to achieve pollutant load reductions through many specific actions, including improved roadway operations and maintenance, targeted street sweeping, infiltration basins to capture and treat urban stormwater, stabilizing eroding slopes, removing impervious cover restoring soil infiltration, and numerous source control and reduction measures, including reconnecting streams with floodplains.
- **Tracking and Reporting Results:** The TMDL included development of the Lake Clarity Crediting Program, an innovative, comprehensive accounting system that measures key urban stormwater pollutants entering the lake and sets load reduction targets, or “Lake Clarity Credits,” for city, county and highway agencies. The program enables greater transparency and accountability, and is a model for urban stormwater programs confronting similar issues. Adaptive management procedures enable TMDL managers to report results, identify and respond to challenges, and make needed adjustments to the TMDL. So far, the TMDL achieved 2016 fine sediment load reduction goals and is on track to achieve the 2021 milestone of 21% load reductions.

What Are EPA’s Priorities for Lake Tahoe?

EPA will continue to work with our federal, state, tribal and local partners to support the TMDL planning and implementation needed to restore deep water clarity, improve nearshore water quality, and protect Lake Tahoe as a drinking water source. EPA will continue to support projects with multiple and sustainable benefits, especially to improve watershed resilience to the effects of climate change. We will also continue to invest in applying scientific tools to predict and measure project benefits.

What Can YOU Do to Protect Lake Tahoe?

Visit the Tahoe Regional Planning Agency website and find **“10 WAYS TO SAVE LAKE TAHOE”** for both homeowners and visitors: ww.trpa.org/get-involved/10-ways-to-save-lake-tahoe

Actions YOU can take to protect Lake Tahoe

1. Choose native plants: to reduce water, fertilizer and pesticides.
2. Use phosphorus-free fertilizer: to reduce algae growth.
3. Adopt a storm drain: to keep sediment and other pollutants out.
4. Bike, walk, or catch the bus: to reduce air pollution.
5. Don't litter, pick up trash: to keep trash out.
6. Replace old woodstoves: to reduce air pollution.
7. Install and maintain Best Management Practices: to keep sediment and other pollutants from flowing off your property.
8. Volunteer: to help clean up and get involved.
9. Clean, drain, & dry: to prevent invasive aquatic species.
10. Become a Tahoe Keeper: learn to spot invasive species on your paddle crafts.

Additional actions shown: Pick up after your pet: to keep bacteria and nutrients out. Get defensive!: defensible space reduces wildfire risk. Support restoration efforts: to improve Lake Tahoe's ecosystem and water quality.

Developed through a collaboration between Tahoe Regional Planning Agency, Nevada Division of Environmental Protection, Lahontan Water Board and Environmental Protection Agency April 2014

For more information:

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Learn more about the activities of EPA and partner agencies at EPA’s Lake Tahoe website at

www.epa.gov/lake-tahoe