



## 2025 Annual Report

The Tahoe Science Advisory Council (Council) operates under a bi-state mandate to provide independent, science-based advice to natural resource management agencies in the Lake Tahoe Basin. Its mission is to ensure that decisions about water quality and watershed management are grounded in credible science and to provide a venue for science/management dialogue.

The Council is composed of members from California and Nevada academic institutions and federal research agencies with expertise in limnology, water quality, ecology, and forest management.

This report summarizes the Council's activities during calendar year 2025 and provides a brief look at anticipated activities for 2026.

### Work Groups

The Council's work groups provide a structured forum for focused dialogue between scientists and managers on priority issues. Work groups facilitate technical discussion, improve shared understanding of complex topics, and identify areas of uncertainty where further work is needed. By convening members and relevant experts around specific questions, work groups support the exchange of different perspectives and help align management objectives with scientific findings.

#### Water Quality

The Council's water quality work group provides a venue for the science/management partnership to regularly engage on priority water quality topics — primarily clarity and nearshore issues. In 2025, the work group met almost every month, focusing on lake clarity drivers and trends within the context of the Total Maximum Daily Load (TMDL) program.

Following a comprehensive review of the established pelagic monitoring program, the group helped develop a proposal request to implement the next phase of water quality monitoring to better understand clarity conditions.

#### Plastics

In 2024, the Council convened a work group of local and regional experts to assess the state of knowledge regarding microplastics in the Lake Tahoe Basin. The group prepared a technical memorandum summarizing existing research, identifying data gaps, and recommending priorities for future work.

To continue the dialogue the work group met three times in 2025, sharing technical presentations on monitoring methods, research findings, and ongoing science needs.



## Clarity Workshop

In May 2025, the Council's water quality work group convened a two-day workshop to review the current understanding and status of modeling related to Lake Tahoe's mid-lake clarity. The workshop brought together scientists and agency staff to discuss recent analyses, model performance, data limitations, and management questions. Pre-workshop coordination and early distribution of technical materials supported focused dialogue that consisted of presentations and structured discussion.

Following the workshop, Council members drafted a memorandum outlining initial steps for developing clarity predictive tools coupled with an executive summary of workshop actions. Participants identified the need for a follow-on workshop focused on particle and nutrient loading estimates and associated modeling.

## Peer Review

In partnership with management agency staff, the Council coordinates independent peer review to evaluate the scientific quality and relevance of various studies, reports, and policy proposals. Subject-matter experts provide objective technical feedback that is documented and shared with agencies and the public to support transparent and defensible decision making.

## Nearshore Project Review

The water quality work group coordinated a project to review the methods and findings from recent studies on Lake Tahoe's nearshore algal dynamics. Reviewers found that while the reports identified key patterns regarding algal growth, substantial knowledge gaps remain, particularly regarding nutrient sources, spatial variability, and less-studied algal forms. The review concluded with recommendations to refine reporting structure, expand monitoring scope, and support further data analysis to better guide future research and management priorities.

## Tahoe Keys Final Report Review

Council members have been engaged in efforts to control invasive weeds in the Tahoe Keys lagoons for several years. In 2025, the Council convened an independent peer review of the Tahoe Keys Control Methods Test Final Summary Report. The review evaluated study design, data interpretation, and the extent to which conclusions were supported by the available evidence. Review findings were provided to implementing agencies to support the ongoing discussions related to aquatic invasive plant management in the Tahoe Keys lagoons.

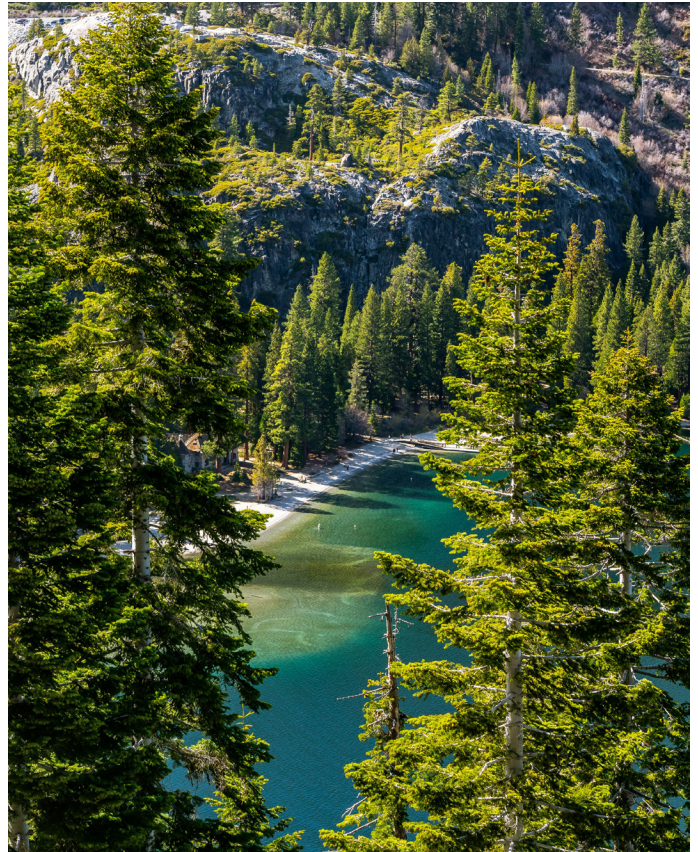
## TRPA Threshold Evaluation Review

Every four years the Tahoe Regional Planning Agency (TRPA) conducts an evaluation of the adopted threshold standards. The findings summarize TRPA's assessment of existing standards within the established

framework. The Council coordinated a comprehensive independent peer review of the 2023 Threshold Evaluation to determine whether TRPA assessment used appropriate methods, the best available science, and accepted best practices. The Council coordinated with nine different experts who found the TRPA's approach generally sound. The reviewers identified opportunities to improve data presentation, usability, and the linkage between threshold results and management actions.

### TRPA Forest Health Threshold Update

TRPA is updating its forest health thresholds to reflect contemporary understanding of desired forest conditions in the Lake Tahoe Basin. As part of this process, TRPA developed draft desired condition targets based on forest type, stand density, seral stage, and canopy cover metrics. The Council conducted an independent third-party review to consider the scientific basis and credibility of the draft thresholds and provide further guidance. Reviewers engaged directly with TRPA staff and offered detailed suggestions to improve the proposed standards.



## Operational Improvements

As a self-governed body with limited resources, the Council strives to enhance operational efficiency and to better communicate among scientists, resource management partners, and other stakeholders.

### Conflict of Interest

In 2025, the Council strengthened its operational foundation by developing and adopting a Conflict-of-Interest policy to reinforce transparency, accountability, and public trust in Council activities. The policy clarifies expectations for disclosure and recusal, supporting the integrity of advisory and peer-review processes with an emphasis on separating Council members from discussions related to requests for proposals and project selection.

### Website

The Council initiated a series of minor website (<https://www.tahoesciencecouncil.org/>) improvements to enhance usability and make Council-supported science easier for partners and the public to find and use. The Council also updated member biographies, providing a consistent and informative resource for those seeking to understand who sits on the Council.

### Communication

The Council partnered with graduate students at the UC Santa Barbara Bren School for Environmental Science and Management to develop a communication strategy that provides a repeatable framework for sharing new scientific findings with management and regulatory audiences. The strategy strengthens consistency and clarity across projects and provides suggestions for both written and digital materials to improve accessibility and visibility of Council-supported science.

## Looking Forward

The Council strives to strengthen its role in connecting science to management and policy across the Lake Tahoe region. In 2026, the Council plans to continue its core functions of peer review and management engagement. While water quality is expected to be an ongoing focus, the Council will explore opportunities to engage in forest management.

The Council is grateful for the opportunity to continue the long-standing science/management partnership at Lake Tahoe and looks forward to building on the successes of 2025 in the coming year. Anticipated activities include:

- **Quarterly Council meetings and regular water quality and plastic work group meetings.** The Council has shifted from monthly to quarterly meetings and will leverage the established work groups for focused science/management discussion. In 2026, the full Council will meet four times, and the two active work groups will meet as needed.
- **Pelagic monitoring project selection.** As noted, the Council helped develop and issue a proposal request to address outstanding pelagic monitoring needs. In early 2026, the Council will coordinate proposal review and selection.
- **Nearshore workshop.** Following the 2025 clarity workshop, the Council's water quality work group has proposed a 2026 workshop focused on nearshore conditions. The workshop will consider recent research and monitoring data in the context of management questions and implementation concerns.
- **Watershed loading.** Watershed loading is a fundamental driver of Lake Tahoe's clarity, and the basin-wide fine particle and nutrient load estimates prepared for the Lake Tahoe TMDL are more than 20 years old. In 2026, the Council's water quality work group will lead discussion on updating the outdated estimates and explore opportunities to assess watershed load changes.
- **Executive coordination.** In the interest of strengthening the connection between Council institutions and the States of California and Nevada, the Council plans to host a meeting with State, academic, and institutional executives to re-affirm the shared commitment to science/management partnership.
- **TRPA threshold update.** Per the memorandum of understanding, supporting the Tahoe Regional Planning Agency's threshold standard update process is one of the Council's priority functions. In the coming year, the Council will continue to provide independent peer review and expert advice to inform the initiative.
- **EIP working groups.** There are several active groups that support the Environmental Improvement Program that are led by management agency staff. In the coming year, the Council will connect with relevant groups and consider ways to support their work. For example, the Tahoe Fire and Fuels Team provides a perfect venue for engaging practitioners on science needs. The Aquatic Invasive Coordinating Committee is another group that could benefit from Council connections.