



June 12, 2018

Tahoe Science Advisory Council
291 Country Club Drive
Incline Village, NV 89451

Dear TSAC members,

As the co-chairs of the Tahoe Science Advisory Council (TSAC) Executive Committee we are requesting that the Tahoe Science Advisory Council undertake a special review of the 2017 Lake Tahoe annual clarity report data and the underlying cause for the unprecedented decline. This extraordinary review is intended to help inform the TSAC Executive Committee at its annual priority setting meeting in August. We seek to gain a deeper understanding of recent data showing significant seasonal declines in clarity and to leverage TSAC's scientific expertise to better understand the factors impacting lake clarity. The TSAC's findings will help policymakers best protect Lake Tahoe.

The TSAC was established as a bi-state partnership to link scientific research with smart, targeted planning and resource management. We have a shared obligation to ensure that sound science remains the foundation of our collective resource management and planning programs. Recent examples of effective science-based management partnerships include Lake Tahoe West's study of large-scale forest ecosystem restoration and TRPA's review to improve and update the environmental threshold standards embodied in the bi-state Compact to reflect the best contemporary science. These factors, among many others, are a reminder that protecting the unique and complex Lake Tahoe ecosystem requires comprehensive and coordinated science that is the foundation for natural resource protection and remediation efforts throughout the Lake Tahoe watershed. The TSAC is integral to these, and many other, efforts across the Basin.

Unfortunately, in 2017 one of the most iconic indicators of Lake Tahoe's health – lake clarity – registered its lowest recorded annual level. While annual clarity declines are not unusual, the record decline experienced in 2017 warrants additional investigation to help further understand ecosystem impacts, and to propose potential remedies. We understand that looking at clarity alone year-by-year does not necessarily reveal a trend. Nonetheless, considering the large reduction in clarity, the states need to have a better understanding of how the 2017 reported results relate to expected trends for the overall health of Lake Tahoe.

As the natural resources leads for our states, we want to engage the broader scientific community working within the Basin. We ask TSAC to recommend future research needs and to identify actions to help us better understand the underlying impacts to the ecological health of Lake Tahoe. In turn, this will help inform future conservation actions to help ensure the 2017 decrease in clarity is an anomaly, and not a trend. Specifically, we request TSAC to address the following questions and to offer other information that the Council feels may directly address this critical issue:

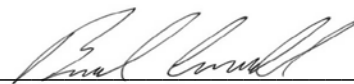
1. What does the 2017 clarity result tell us about the overall health of the Lake and its watershed? What additional information would enable us to better understand the change in 2017 and the relative impact on the Lake and/or the connection to the Basin's broader ecosystem health?
2. Why was the negative impact on lake clarity in 2017 different from other years with extreme wet weather conditions?
3. How much, if any, did warming of the Lake's surface waters or other impacts from effects of a changing climate influence 2017 clarity?
4. The 2017 annual clarity result was heavily influenced by seasonal data during the Fall of 2017. Are Lake Tahoe's seasonal dynamics changing? If so, why, and what impact may that have on the Lake's long-term ecosystem health?
5. How much worse might clarity be today had investments in the EIP and the TMDL not been made?
6. Do 2017 sources of pollutant load differ from those identified in the TMDL?
7. Once the likely cause(s) of the 2017 clarity decline are identified, how likely are these factors to repeat, persist, or cause a change in trend?
8. Should the annual clarity average report be adjusted to analyze a different time scale to better determine various causes and impacts related to changes in Lake clarity?
9. When assessing the health of the Lake ecosystem and watershed, what other metrics for determining ecosystem health are most important for analyzing in conjunction with Lake clarity?
10. Given the questions above, what local or regional impacts are causing the greatest impact and/or pose the largest threat to protecting the Lake and surrounding Tahoe Basin ecosystem?

The protection and restoration of Lake Tahoe remains a core priority for California and Nevada. On behalf of the TSAC Executive Committee, we look forward to receiving the Council's scientific expertise to help ensure that best available science is used to guide management policies and environmental improvement actions. We look forward to discussing preliminary results of this special review and initiating a cooperative effort to focus our joint conservation efforts at our upcoming annual priority setting meeting this August.

Sincerely,



John Laird
Secretary for Natural Resources
State of California



Bradley Crowell
Director of Conservation and Natural Resources
State of Nevada