

January 19, 2021

TAHOE SCIENCE ADVISORY COUNCIL DOCUMENT REVIEW: Tahoe Keys Lagoons Aquatic Weeds Control Methods Test Draft Environmental Impact Report/Environmental Impact Statement

Two Tahoe Science Advisory Council representatives, Dr. Sudeep Chandra and Dr. Alexander Forrest, reviewed the Tahoe Keys Lagoons Aquatic Weed Control Method Test Draft Environmental Impact Report/Environmental Impact Statement. On August 18, 2020, they provided verbal feedback to the agency partners (e.g. Tahoe Regional Planning Agency) and the environmental consultant, Zephyr Collaborations, who developed the document for the agencies and the Tahoe Keys Property Homeowners Association.

The following is a summary of findings and recommendations after document review and a statement of conclusion by the Tahoe Science Advisory Council members who reviewed the report.

Summary of findings and recommendations:

- The environmental assessment is comprehensive. The documents include approaches and impacts that should be considered if no action is taken.
- Given the increased stress on the Lake Tahoe ecosystem from aquatic invasive species (AIS), the role invasive plants play in creating habitat for other invasive species (e.g. warmwater fishes), and the expansion of the latest plant invader, Curly Leaf Pondweed, to grow in the main lake, the reviewers believe it is critical to adopt new approaches to control invasive plants at much larger spatial scales than previously considered. In short, the “no action” alternative poses significant threats to the nearshore water quality and ecology of the lake.
- The impacts of the current state of AIS in the Tahoe Keys far outweighs the impacts and benefits that could be seen using the tools analyzed.
- The draft environmental assessment appropriately considers the potential impacts of what can happen to the main lake if the invasion issue is not addressed in the Tahoe Keys. Data collection comparisons over multiple years make it clear that there are little to no sensitive or endangered species concerns related to this project.
- In addition, the document includes water quality analyses regarding the different components of the nutrient pools in the Tahoe Keys, indicating that there is minimal concern of water quality impact in the long-term as associated with this project. In short, the analyses related to water quality including nutrient pools (e.g. sediment, water) is sufficient.
- The approaches suggested for plant control estimation are thought to be the best available for a project/system of this size.
- The evaluation of the use of herbicides and degradants is sufficient. There is ample literature and testing of the proposed herbicides outside of Lake Tahoe waters. The scientific literature supports the application of herbicides as a tool that should be tested at Lake Tahoe.
- Quantifying circulation patterns is an important component of the study to justify the use of herbicides and their impacts along with understanding water quality. The environmental analysis adequately assesses the circulation patterns across different parts of the Tahoe Keys and is a portion of this work that was highlighted.

- The data supporting the use of the ultraviolet tool is sufficient. Testing this tool in addition to herbicides is warranted.

Statement of Conclusion:

Dr. Sudeep Chandra and Dr. Alexander Forrest conclude that the Tahoe Keys Lagoons Aquatic Weed Control Methods Test DRAFT EIR/EIS, as a whole, has thoroughly considered the importance and urgent need for controlling aquatic invasive plants in the Tahoe Keys. Various approaches and alternatives that could be utilized for plant control for this situation and their potential impacts have been well-researched and presented in a logical way. The document is well written, transparent in its findings and includes sufficient data analysis to proceed with projects that seek to control plants. Based on this work, sustainable solutions should be developed before the situation worsens both in the Tahoe Keys and then the broader body of Lake Tahoe.