Opinion: Managing AIS critical for Tahoe

By Joanne Marchetta

Over the last two decades, the Lake Tahoe region has become a national leader in fighting the introduction and spread of aquatic invasive species (AIS) that threaten to harm its world-renowned environment and the \$5 billion recreation-based economy it supports.

The Lake Tahoe region is working with other partners throughout the American West to better safeguard waterbodies and improve national invasive species policies. We are also working with the boating industry to help manufacturers design watercraft that are less likely to carry AIS and are easier to inspect and decontaminate.



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Ben Franklin said, "An ounce of prevention is worth a pound of cure." This is especially true for invasive species that outcompete native species, and, once established, become incredibly difficult and costly to manage or eradicate.

Fortunately, Lake Tahoe's watercraft inspection program has overseen the safe launch of tens of thousands of motorized boats at Lake Tahoe since its creation in 2008. Along with the Tahoe Keepers program that trains people to inspect and

decontaminate their own hand-powered watercraft, it has successfully prevented the introduction of any new invasives in the lake.

With this critically-important frontline prevention program working and sustainably funded through boater fees and contributions from the states of California and Nevada, now is the time to ramp up programs to better manage or eradicate the invasive species that are already in the lake before they can spread or do more harm.

The \$415 million Lake Tahoe Restoration Act that Congress passed in December will help on this front. The legislation authorizes up to \$45 million in federal funding over seven years for projects to combat invasive species at Lake Tahoe, and TRPA and its partners are working to secure those funding appropriations.

We have seen the impacts invasives can have, with invasive aquatic plants like Eurasian watermilfoil and curly leaf pondweed fouling marinas, beaches, and swimming areas. Nonnative warm water fish that follow the spread of these weeds further impact the lake's ecology and populations of native species.

Work done in Emerald Bay shows we can successfully fight the spread and harmful impacts of these invasive aquatic weeds. Through a labor-intensive project with light-blocking bottom barriers and weed pulls by divers, partner agencies restored six acres of shoreline that were being choked by aquatic invasive weeds. Several years later, iconic Emerald Bay remains weed-free.

Today, the Tahoe Keys is ground zero in the fight against these invasive aquatic plants and warm water fish. Weeds have overtaken as much as 90 percent of the 172 acres of canals and lagoons in this South Shore neighborhood. Clearing the canals and lagoons with mechanical harvesters each summer has failed

to stop the spread of the weeds, which have grown back thicker each year. It also creates small fragments of weeds that threaten to carry infestations to other parts of the lake.

Working with numerous public agency partners and researchers, the Tahoe Keys Property Owners Association is creating an integrated management plan that identifies ways to better manage the aquatic weeds.

The plan is looking at improved mechanical harvesting and fragment collection methods, the use of bottom barriers, and scuba-assisted weed pulls. It is also investigating potentially new treatment methods at Lake Tahoe, such as the possible use of aquatic herbicides.

The Tahoe Keys Property Owners Association this month applied for permits from the Lahontan Regional Water Quality Control Board and TRPA for a pilot project that would test the use of federally-approved aquatic herbicides at nine sites in deadend lagoons in 2018. The association is proposing to install a barrier between the test sites and the lake and other safety and monitoring measures to ensure that the herbicides, which break down with exposure to sunlight and other natural processes, do not reach the lake.

While these herbicides are used to control invasive aquatic weeds in other parts of California and the United States, they have never been used at Lake Tahoe. And the application for this pilot project to test their use has raised some public questions about the risks it could pose for communities, drinking water, and the environment at Lake Tahoe.

Over the next year, TRPA looks forward to working closely with the Lahontan Regional Water Quality Control Board, the Tahoe Keys Property Owners Association, other partner agencies and researchers, and the public to fully consider all the risks that could be associated with this potentially new approach to controlling invasive aquatic weeds at Lake Tahoe, as well as the potential benefits.

To protect the environment, the economy, and the natural resources we all treasure, our Region must continue to work together and innovate for new solutions to better protect Lake Tahoe from the harms of invasive species.

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