

Ultraviolet light to be used to kill Tahoe weeds

By Kathryn Reed

TAHOE CITY – Killing aquatic invasive weeds in Lake Tahoe with ultraviolet C light will be tried for the first time this summer.

The California Tahoe Conservancy board on March 16 agreed to spend \$260,128 on the pilot project in South Lake Tahoe. The money was awarded to the Tahoe Resource Conservation District, which has been integral in working on ways to eradicate various invasive species from Lake Tahoe.

John J. Paoluccio of Inventive Resources Inc. has developed a system in which the plants are killed – almost like getting a lethal sun burn. The light damages the DNA and cell structure of the aquatic invasive weeds. This stops reproduction and eliminates the weed in a few days.

The CTC staff report says, “The project will help the Tahoe RCD determine the optimum intensity and duration of treatment necessary for eradication of AIS plants.”



Milfoil is choking about 20 locations in Lake Tahoe. Photo/LTN file

An area inside Lakeside Marina and then along its shore in South Lake Tahoe will be tested this summer. About one-quarter of an acre will be treated.

The light can be applied either by dropping a box like device that resembles how an umbrella works over the infested area or using a mat. The latter would be good to reach under docks.

Eurasian watermilfoil and Curlyleaf pond weed will be the targeted weeds. Leaving native plants alone is the other goal, as is protecting fish.

“What we are doing is pioneering,” Paoluccio told *Lake Tahoe News*.

While Paoluccio has been building the necessary apparatuses for this project at his home in the Central Valley, he also has a house in South Lake Tahoe. He has been watching the proliferation of the invasive weeds through the years and knows all too well the negative impacts they have on recreation, navigation and the ecosystem.

Tests have been conducted in his lab using Tahoe water and the

two targeted weed species. A video at the CTC meeting on Thursday showed in a controlled environment the rapid decimation of the weeds.

Paoluccio wants to start the program at Lakeside when the water warms up a bit and plants are still young; probably in June. Pre- and post-treatment monitoring are covered in the costs. Data will be collected on how many plants are killed, if a second treatment is required, different durations for the application to see what works best, conditions of the lake when applied, and any other details about the two treatment locations. The entire process is expected to be completed in November 2018.

If it's successful, the plan would be to use this method in a larger area.

Paoluccio built an 8-foot-by-16-foot boat just for this process. He has two units ready to kill the weeds. The devices can go to a depth of about 20 feet.

Eurasian milfoil first started to take hold in the warm canals of the Tahoe Keys in South Lake Tahoe in the 1970s. It has since spread to various parts of the lake. The Keys has tried a variety of methods to rid its waters, with the next step being an herbicide. The homeowners' association is looking to use **chemicals starting in 2018**. The Lahontan Regional Water Quality Control Board needs to approve this first. In **December 2011** the state agency said on a case-by-case basis chemicals could be used in the lake.

The Keys also needs the money for the project. Ballots for a special assessment were mailed to Tahoe Keys Property Owners Association members this week.