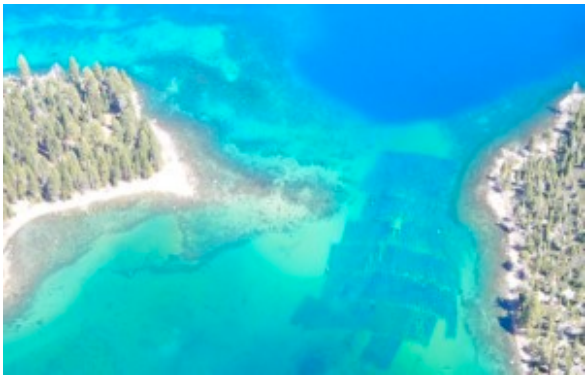
Aquatic invasive species a constant struggle

By Kathryn Reed

MEYERS – What's living and growing in Lake Tahoe wasn't always here. Some of the non-native or aquatic invasive species were intentionally introduced to the waters and others were surreptitiously brought here.

No matter their course of arrival, the AIS as they are better known, are altering the ecosystem. The Eurasian milfoil that is so prevalent in the Tahoe Keys is a breeding ground for warm water fish like big mouth bass. Neither of these two organisms is native to Tahoe.

At the fifth annual AIS Forum at Lake Tahoe Golf Course on May 21 various people spoke about what is being done to deal with some of the AIS that are here and how to keep out ones that aren't. The major AIS already calling the lake home are curly leaf pondweed, Eurasian milfoil, warm water fish, Asian clams and bullfrogs. The three AIS that could be most devastating to the lake are New Zealand mud snails, Quagga mussels and zebra mussels.



Mats at the mouth of Emerald Bay suffocated invasive clams. Photo/LTN file

A multi-year project that ended six months ago with the removal of the mats from Emerald Bay showed a 80 percent mortality rate for the Asian clams. While it was deemed a successful project, it was also called expensive.

This fall a different mechanism will be used to help eradicate the clams from a spot at Emerald Bay. Aqua Treasures has been hired to use a Zamboni-like machine that will remove the shells as they are separated from the substrate.

The Tahoe Keys Property Owners Association expects to have the draft Integrated Weed Management Plan done in September, with associated environmental documents completed in February 2017 and implementation of the plan beginning in mid-2017.

The Tahoe Keys is blamed for the spread of milfoil to other parts of the lake. Photo/LTN file

Milfoil is choking more than 80 percent of the lagoons in this South Lake Tahoe enclave. Harvesters have been the traditional method for pulling up the weed, but it is costly and ineffective. In 2014, 18,600-cubic-yards of milfoil were removed from Keys. In 2007, 4,400-cubic-yards were taken out. Herbicides and bottom barriers are being considered as alternative methods.

Scientists at UNR and the Desert Research Institute did tests

on Quagga mussels from Lake Mead with water from Lake Tahoe. Eighty percent of the adults and 80 percent of their offspring could live in those waters. Various tests were done with different amounts of calcium in the water. These mussels need calcium to survive and Tahoe has pockets that could provide habitat.

Clam shells at Lakeview Commons in South Lake Tahoe. Photo/LTN file

Quagga and zebra mussels multiply quickly, encrust watercraft and infrastructure, and compete for food with native fish. They are spread from one body of water to another attached to nearly anything that has been in an infested water body, or via standing water from an infested water body entrapped in boat engines, bilges, live-wells and buckets. That is why the boat inspection programs at Tahoe and other nearby water bodies were established.

“Our state’s natural resources are facing unprecedented threats today,” California Department of Fish and Wildlife Director Charlton Bonham said in a statement. “Preventing the spread of Quagga and zebra mussels, as well as other invasive species, is something everyone can take an active role in, thereby helping to protect the fish, wildlife and the habitats

on which they depend.”

Quagga mussels were first detected in the Colorado River system in January 2007 and were later found in San Diego and Riverside counties. They are known to be in 29 waters in California, all in Southern California. Zebra mussels were discovered in San Justo Reservoir in San Benito County in January 2008.