

Tahoe's murky near shore getting more attention

By Kathryn Reed

While a uniform strategy is working to bring more clarity to Lake Tahoe as a whole, that is not the case for the water closest to the shore.

That is the conundrum scientists and regulating agencies are finding themselves in. There is no magic solution to clean up, so to speak, the murky, algae-ridden water by beaches. This is in direct contrast to the various initiatives to reduce sediment from the lake that is blamed for the lack of clarity.

The near shore, as those tasked with managing call it, is defined as "the low water elevation to a depth of 30 feet, or to a minimum width of 350 feet."

Bob Larsen with the Lahontan Regional Water Quality Control Board this month updated the board about what staff and others are doing to improve the quality near the shore.

As has been stated many times, the data is lacking – especially compared to lake clarity. Then there is the quandary of data and anecdotal testimony from longtime locals not being in sync. Data show things aren't that much different, but those who have lived in the basin for a while or visited the area seem to be a chorus stating things are much different, and not in a good way.

Making things difficult is that conditions vary depending on where on the lake studies are conducted. That requires the need for multiple solutions, which to date have been somewhat elusive. This in part is because studies should involve fish, algae, aquatic invasive species and more.

Money is often a barrier. And then there are competing interests. Plus, it wasn't until a few years ago that a coalition was put together to tackle near-shore issues.

Algae – some floating, some attached to rocks – is one of the bigger concerns, at least for the public.

At Crater Lake algae has been increasing in the last few years. That body of water in Oregon has similarities to Tahoe.

Larsen said at Crater Lake officials believe crayfish may be responsible for the algae growth. That could be a factor in Tahoe, where the crustaceans were introduced decades ago.

Another concern is there has been an increase of algae in wilderness lakes in Lahontan's jurisdiction, which goes from the Oregon border to Southern California through the Sierra. There's the potential to do a peer watershed study. Lake Tahoe, which is a highly disturbed lake when it comes to plant and animal species being introduced, could be compared to a higher elevation lake that has not been artificially changed. Though, there are some lakes that have been stocked with fish.

Lahontan is looking for partners to investigate the ecological change at Lake Tahoe to determine the impacts on native species. Ecological studies would determine biological changes, while climate change has physical drivers.

With the cyanobacteria, or blue-green algae, bloom this summer in the Tahoe Keys, human health concerns at the near shore are now a very real concern. This was the first such outbreak in the basin.

This winter/spring the near shore action plan from 2014 will be updated. Next summer an aquatic plants survey will be conducted, along with a microorganisms and toxin survey pertaining to human health, and further algae research. The plant survey will include marinas – unlike previous surveys, “to understand what is going on with native and nonnative

species.”