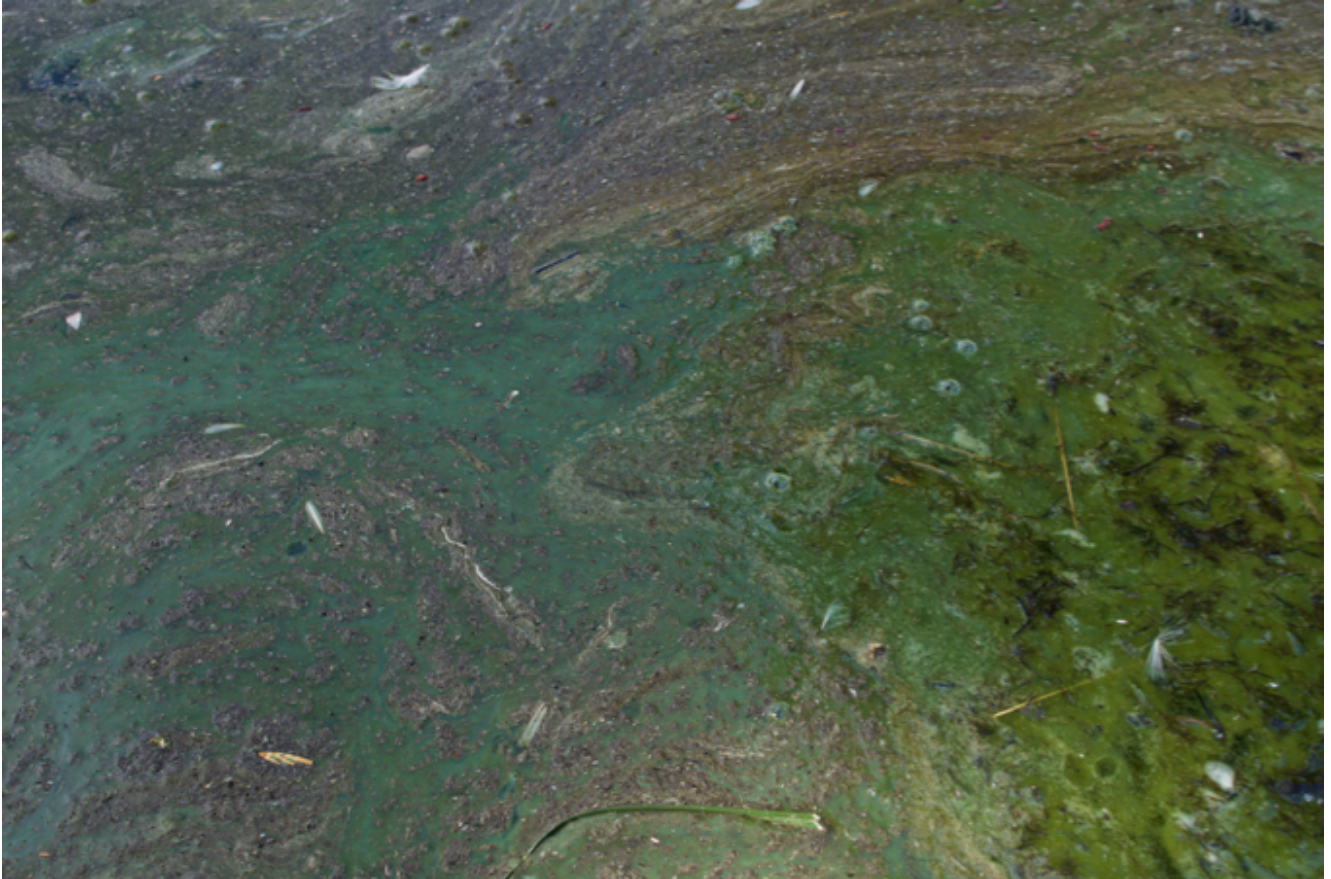


Near shore clarity issues difficult to solve



Blue-green algae in the Tahoe Keys showed up this month.
Photo/LTN

By Kathryn Reed

Figuring out how to make the water near the shore as consistency clear as it is in the middle of Lake Tahoe is confounding scientists.

Part of the problem is the limited historical data there is to work with. While scientists for decades have been studying the overall lake clarity issue, the near shore has been an afterthought. Some data goes back 15 years, but even it is spotty.

It has been in the last few years that agencies have started

to take an interest in the water that most people interact with. It got on people's radars because of the deterioration of water clarity. In some places it is brown, not "blue."

The Tahoe Regional Planning Agency was given an update last week on what is going with the near shore. Dan Segan with TRPA and Bob Larsen with Lahontan Regional Quality Control Board delivered the message.

For TRPA, there are 19 standards related to the near shore. With all the other agencies studying this subject, there are 62 standards. The bi-state regulatory agency divides them into four main groups: clarity; trophic status (primarily periphyton); fish, invertebrates, plants; community structure (human health).

"Our standard in the basin should be less than 1 NTU (nephelometric turbidity unit) at the near shore. At outflow less than 3 NTU. One NTU is near drinking quality," Segan said.

Scientists from the Desert Research Institute in Reno did not find any measurements of more than 1 NTU from November 2014 to November 2015.

UC Davis installed 11 monitoring instruments two years ago and two more will be online this year on the South Shore. These are designed to determine if lake clarity is changing based on natural factors or if they are human caused. Wind and wave action play a role in those findings.

Periphyton, or the algae that sticks to rocks, has been studied for the last 28 years by UCD. The nine sites are visited five times a year.

"The findings are interesting. There is no lakewide trend. There is no clear signal what is happening," Segan said.

Metaphyton is the algae that floats in the water. It has never

been studied, but will be going forward.

A request for proposal is being developed for a comprehensive aquatic plant survey. The hope is it will incorporate near shore management and aquatic invasive species. The study will include marinas.

The plan is to also establish intervals for fish and invertebrate surveys.

One of the human health issues is the blue-green algae that was found in the **Tahoe Keys** earlier this month. And while people at the board meeting knew about the outbreak in the Keys, nothing was said to the Governing Board – at least in public – during the meeting.

For 2018, the plant survey will be done, micro-organism and toxic survey (human health) will be conducted, and algae research.