



# White Lake

Residential Resort Community

## White Lake Water Quality Update

***Lake safe for swimming, all other public use;  
State confirms alum unrelated to fish kill;  
Treatment to reduce algal blooms completed***

### FOR IMMEDIATE RELEASE

**Contact: Mike McGill, for the Town of White Lake  
(910) 622-8472  
[mike@WaterPIO.com](mailto:mike@WaterPIO.com)**

**WHITE LAKE, NC (May 15, 2018):** Ahead of this week's 40<sup>th</sup> Anniversary White Lake Water Festival, the Town of White Lake would like to update the public about the condition of the lake and the steps taken by the town to improve the lake's water quality.

White Lake is a natural, spring and rainwater-fed lake approximately 1,200 acres in size. Because the lake water lacks buffering to protect it from the impacts of nutrients, it has experienced the rapid and sustained growth of algae, including algal blooms, in recent years. The blooms often cause fish kills, especially when significant changes occur following a temperature increase like the one experienced earlier this spring.

During a public meeting back in January of this year, Mayor Goldston Womble informed the public of the steps being taken by the Town to find solutions to the water issues. Unfortunately, five years of testing and studies have provided little information about the cause of the lake's high pH levels. At the meeting, state officials stated the algae involved was non-toxic and that the water remained safe for swimming.

Algal blooms occur when nutrient levels in a body of water are too high. When they happen, they often cause a significant drop in dissolved oxygen levels in the water, which can lead to fish kills. Town officials contracted with HAB Aquatic Solutions, LLC, a firm with more than 60 years of combined experience improving water quality in lakes. The goal of the effort? To use a proven treatment method to reduce the amount of algae in the water and improve the color and clarity of the lake.

In early May, HAB began applying alum to reduce the amount of phosphorus in the water, which leads to less frequent and intense algal blooms and better water clarity. Alum is a safe and commonly-used additive used during drinking water treatment processes. A buffered alum application dose and strategy was developed and delivered a target dose to White Lake.

An algal bloom was already underway as HAB began their work, and the bloom resulted in a very rapid increase in the lake's pH levels. The high pH levels, found to be at 9 and above, can be a major stressor to fish, as Dr. James Rice of NC State University noted to both the Town and State staff investigating the fish kills.

While the initial decision to stop the alum application was proper until a cause could be assessed, state scientists quickly determined that the alum did not cause the fish kill. In a letter sent to the town last week, state officials detailed how scientists had reviewed fish necropsy results, as well as data from water quality samples, and concluded the fish did not die due to the alum treatment but because of the algal bloom.

As a result of the findings, alum treatment was allowed to resume. "We are hopeful the reduction in pH following the initial alum treatment will lessen the potential for additional fish impacts," said NC Division of Water Resources Interim Deputy Director Jim Gregson in the letter to the Town of White Lake.

If alum had been the problem, more fish would have been killed as the treatment continued. Instead, it has been a full week since dead fish have been found. pH levels are dropping, indicating that the alum treatment is having the desired effect on the algae bloom. The color of the water has already shown a marked improvement.

The alum application was completed in time for this week's festival, and both the Town and Bladen County Health Department are increasing monitoring of the lake's water quality to make sure it remains safe for the public to use. As a result, the Town of White Lake can inform the public that the lake's water is safe for swimming and all other public use ahead of this weekend's festival.

The Town is also continuing its partnerships with scientists and environmental leaders to find both short and long-term solutions to the situation. "We are working with the Bald Head Island Conservancy to understand the causes of the algae blooms and to assess the lake's groundwater resource," said Mayor Womble. "We would also like to thank local leaders who have expressed their support for identifying what can be done to improve such a critical piece of our community and economy."

For more information on HAB Aquatic Solutions work to improve White Lake's water quality, visit [www.whitelakealum.com](http://www.whitelakealum.com). To help address public concerns, the Town of White Lake will have staff at the festival this weekend to answer questions.