

Report to White Lake Town Board
June 7, 2022

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LIMNOSCIENCES

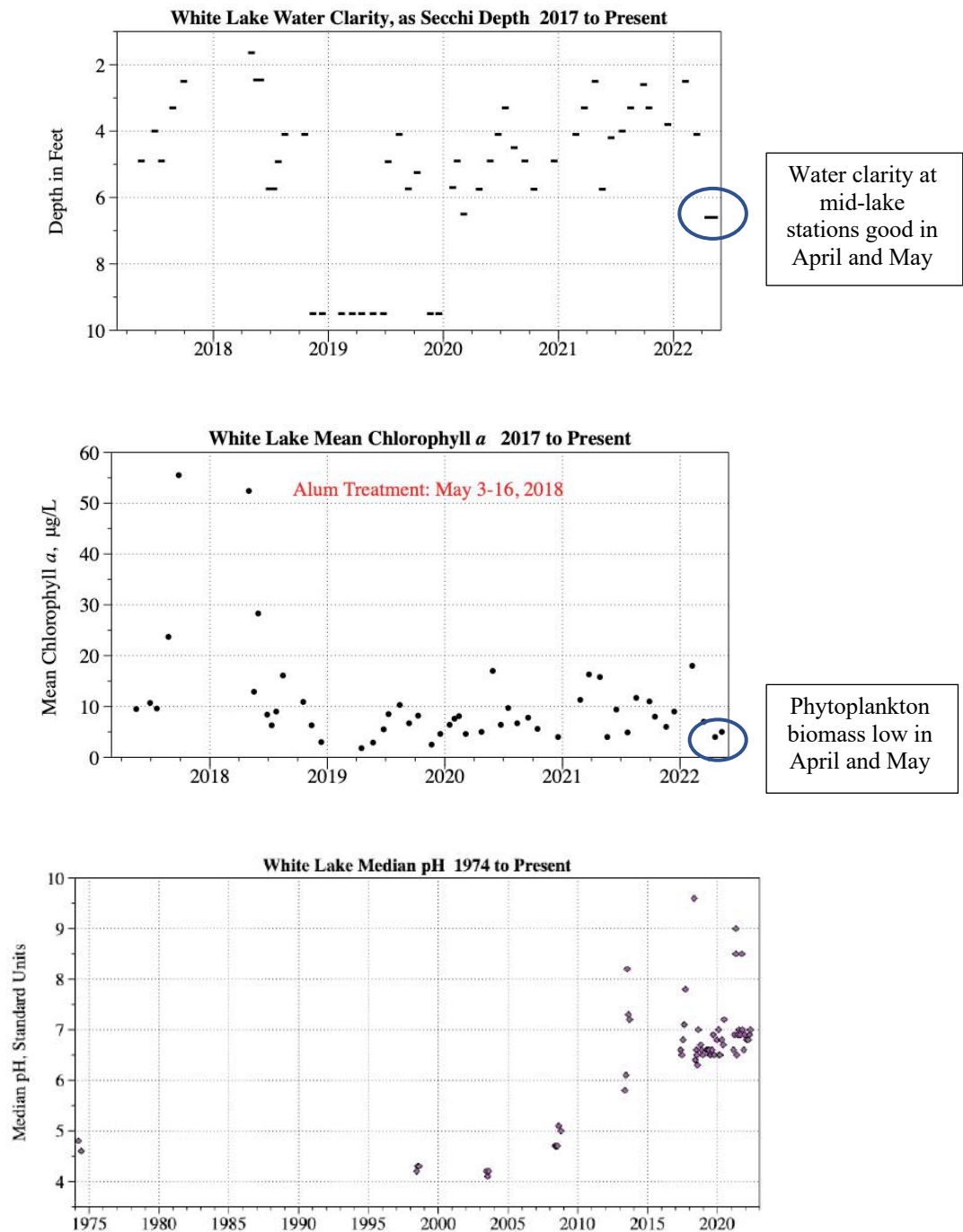
1. Lake Level Decline in May

Rainfall for the month of May, at 2.2 inches, was below normal, and the lake level dropped 4.8 inches over the month. By comparison, May 2021 rainfall totaled 3 inches, and the lake level dropped 3.6 inches over the month. The summer months are the time when the rate of loss from evaporation is highest and so in general, summer is the time when lake levels are lower.

2. Lake Conditions—Good Clarity Extends into May

Views from Goldston's Pier on May 11, 2022:





3. Changes Seen at the End of May

Lake residents noticed a change in clarity in shallower areas over the Memorial Day weekend. This was associated with the increased boating activity, which stirs up lake bottom sediments, vegetation, and filamentous algae, all of which is pushed into shallow areas by wave action. The type of filamentous algae which is seen in the lake now is called *Spirogyra*, and one of its common names is “mermaid’s tresses”. While some have described the material as floc from the alum treatment four years ago, this is not what it is—it is plant and algal life that has always been found in the lake to a greater or lesser degree.



Shoreline at Lake Place Condos at the end of Memorial Day weekend, with mats of filamentous algae coated by brown sediments from the lake bottom. Photo provided by a condo resident.

The following 1941 report on State Parks, presented to the Board of Conservation and Development, was found in digital archives:

State Lakes (p. 11-12)

The administration of White Lake and Waccamaw Lake is, however, somewhat difficult because the Department owns no land around these lakes. The employment of a Lake Warden at White Lake during the summer months has helped considerably to bring about better use of this lake, although complaints of the way in which high-powered speed boats are used on the lake were received last summer (1940).

So, the situation at White Lake remains as it has always been—this is a very shallow lake, and boating activity can and does stir up the bottom material, reducing clarity. The abundance of sea walls adds to the problem, as the waves are deflected again and again, keeping material suspended in the water.