

*White Lake Report to Town Board
June, 2019*

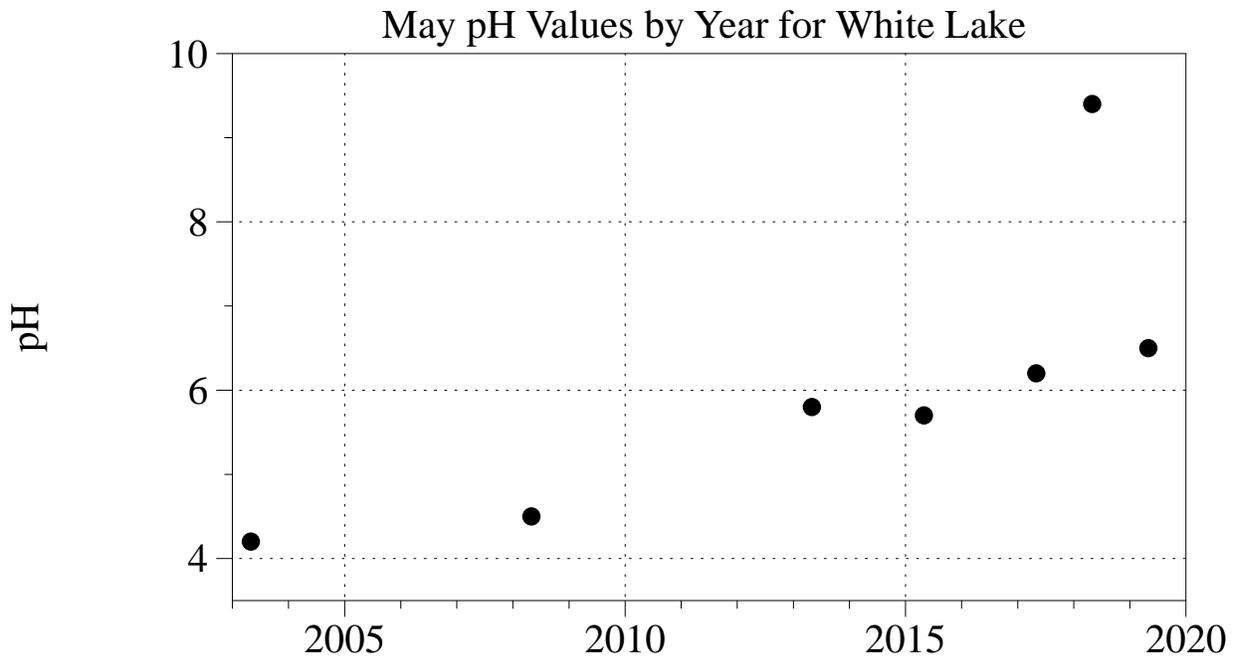
A Comparison of White Lake Water Quality Data for May, From 2013-2019

	5/21/2013	5/17/2017	5/2/2018	5/23/2019
Mean Temperature (C)	25	25	23	27
Water Clarity, Measured as Secchi Depth (m)	2.5	1.5	0.5	3.0
Mean Algal Abundance, Measured as Chlorophyll a Concentration (µg/L)	2.5	9.5	52	2.9
pH Range (std. units)	5.6-5.9	5.9-6.4	9.1-9.6	6.2-6.6
Dissolved Oxygen, Mean % Saturation	102	103	123	99
Total Nitrogen (mg/L)	0.34	0.57	1.26	0.33
Total Phosphorus (mg/L)	<0.02	0.02	0.15	0.01
Number of Samples	3	3	7	6

With the results just back from May’s sampling, you can see the usefulness of data for making comparisons: this information will be used to develop a graphical scorecard which can convey key points in a non-technical format. While the nutrient levels in the water column are now equivalent to what they were 6 years ago, this does NOT mean that there are not nutrients in the lake—sediment phosphorus data that was collected in February has been reviewed and we will have a story to tell about that soon. But the existing conditions will likely transition into a more “normal” summer—filamentous algal mats and vegetation (“seaweed”) will continue to be visible in nearshore areas and where abundant, these can be removed from the shoreline with a dip net or rake.

It has taken a lot of effort to develop a monitoring program that will provide good quality data. We are now using an analytical laboratory in Seattle, Washington that is able to provide the level of quality and sensitivity that we need for nutrient analysis, and as a result it is a scramble to get samples taken and shipped overnight—thanks to town staff for helping with this.

Another way to look at comparative data for pH:



Crews (from the NC Aquatic Weed Program or NCSU) are out monitoring vegetation monthly, on the lookout for the invasive weed Hydrilla. We will be arranging for a plant identification workshop for local residents and park staff to be held at White Lake sometime this summer.

Speaking of workshops, we have scheduled the first in a series, “Understanding White Lake and Its Management Challenges”, for Tuesday, July 9, from 4-6 pm.

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