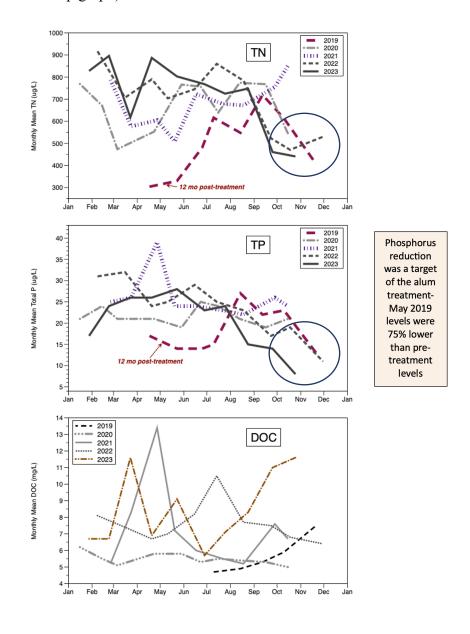
## Report to White Lake Town Board May 2024

## Diane Lauritsen, Ph.D. LIMNOSCIENCES

The objectives of the May 2018 alum treatment were to reduce high phosphorus levels and the filamentous cyanobacteria bloom, which would in turn improve lake clarity and reduce pH levels. The treatment worked to reduce both phosphorus and nitrogen levels, as well as eliminate the filamentous cyanobacteria, which reduced the very high pH seen during the bloom.

Lake monitoring over the period since the treatment indicates a natural variability in phosphorus levels, with the lowest levels generally found in late fall (circled area of middle graph below). Nitrogen levels are more variable, with a drop generally seen in early spring and late fall (circled area of top graph).

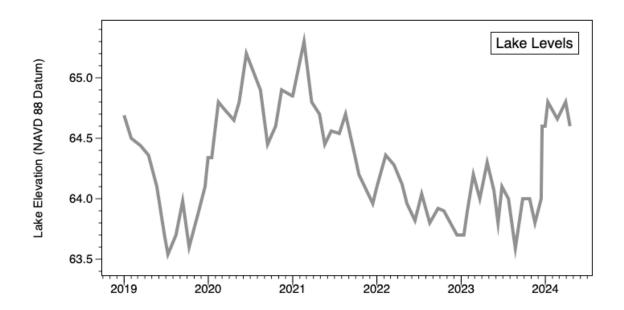


Phosphorus levels have been equal to what has been seen in the past fifty years (so no additional treatment is warranted), while nitrogen levels are higher, because of the nitrogen (ammonia) emissions in the region.

There was little rain in April, and the lake level dropped 3.6 inches, although it is still higher that it was in all of 2022 and 2023. The Thursday Bass Tournament is going strong.

Monthly Rainfall (inches) for White Lake 2012-2023

Month	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015	2013	2012	Monthly Average for Region
January	2.75	4.3	5.75	8.25	4.5	2.75	4.20	7.0	3.0	2.5	1.75	2.75	3.81
February	2.5	3.6	1.0	9.2	6.7	2.25	2.00	1.5	10.7	5.5	2.5	4.0	3.44
March	5.0	2.5	2.45	2.7	3.7	3.25	3.95	3.7	1.55	4.15	1.0	7.0	3.91
April	1.75	8.5	3.75	1.75	5.1	7.25	6.75	6.75	6.75	4.55	1.75	2.25	3.12
May		1.5	2.2	3.0	12.25	1.20	7.70	2.7	4.5	4.20	2.25	9.25	3.67
June		6.3	6.2	7.9	7.15	5.25	10.00	4.5	3.65	8.70	17.0	2.0	4.70
July		3.8	10.5	7.5	6.85	6.00	4.75	6.75	3.75	3.0	11.25	8.6	5.75
August		7.5	5.5	6.5	7.55	5.35	6.25	5.6	4.12	9.4	8.25	9.75	5.95
September		3.05	6.5	3.2	5.95	5.00	29.45	5.2	15.0	4.7	1.0	5.0	5.29
October		1.75	0.6	0.6	3.35	3.60	2.25	2.95	14.25	9.75	1.75	2.25	3.38
November		3.25	1.55	0.4	7.5	4.90	4.25	1.0	0.50	7.25	0	2.25	3.16
December		8.5	1.2	3.4	4.25	6.00	7.5	5.45	5.1	6.5	5.75	4.25	3.14
Total		54.55	47.2	54.4	74.85	52.80	89.05	53.1	72.87	70.20	54.25	59.35	49.32
% of Lake Volume		71.4	61.8	71	97	69	116	69	95	91	70	77	64



White Lake Thursday Night Bass Tournament—2024

<u>Date</u>	#Boats	#Fishers	Big Fish	<u>Comments</u>
3/21	20	38	5.3	3 fish > 5#
3/28	12	18	4.7	Poor weather conditions
4/4	20	36	4.55	Cold
4/11			3.55	Windy
4/18	36	61	4.3	
4/25	23	38	4.0	
5/2	29	49	4.4	



*Fontinalis* moss, found washed up at Nathan's Cove in April, has at times been <u>very</u> abundant in White Lake, washing ashore in large windrows. All the aquatic vegetation in the lake has shallow roots, so can be easily dislodged, float to the lake surface, and collect in nearshore areas.