

October 10, 2025

As I just received the lab results back from September sampling, I wanted to pass them along, as the total nitrogen values caught my eye. The results are from 6 samples taken in White Lake: at 0.5 meters and at 2.0 meters depth at three sample stations. September is a month in which I run over to Singletary Lake (SL) to take a sample as well, as it serves as a reference lake—acidic, but blackwater, compared to clearwater White Lake.



IEH ANALYTICAL LABORATORIES
LABORATORY & CONSULTING SERVICES
3927 AURORA AVENUE NORTH, SEATTLE, WA 98103
PHONE: (206) 632-2715 FAX: (206) 632-2417

CASE FILE NUMBER:	1760514	PAGE 1
REPORT DATE:	10/09/25	
DATE SAMPLED:	09/09/25	DATE RECEIVED: 09/10/25
FINAL REPORT, LABORATORY ANALYSIS OF SELECTED PARAMETERS ON WATER		
SAMPLES FROM TOWN OF WHITE LAKE		

CASE NARRATIVE

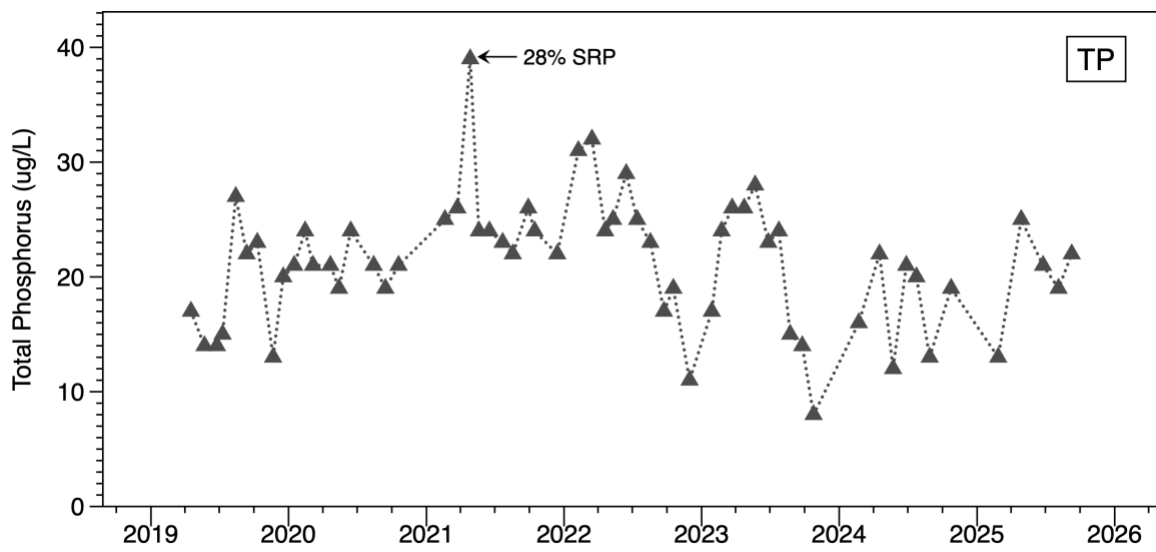
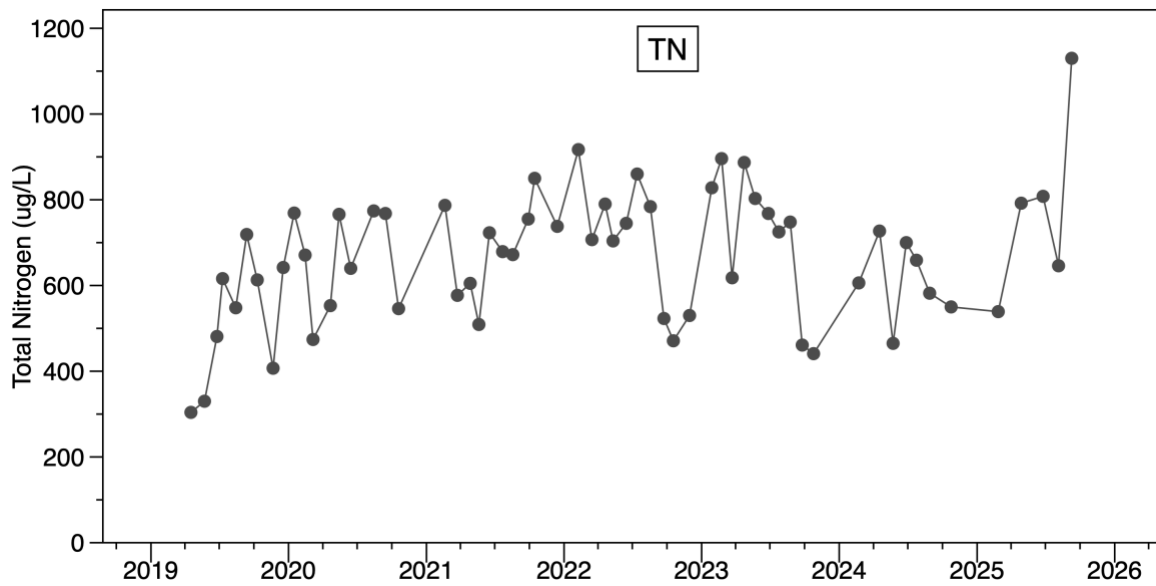
Seven water samples were received by the laboratory in good condition and analyzed according to the chain of custody. No difficulties were encountered in the preparation or analysis of these samples. Sample data follows while QA/QC data is contained on subsequent pages.

SAMPLE DATA

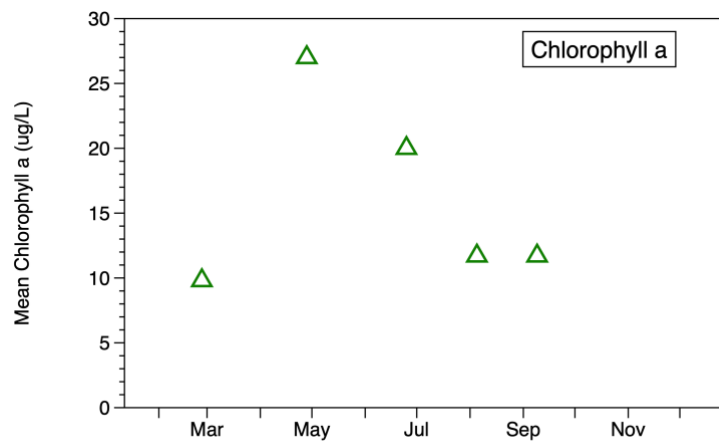
SAMPLE ID	TOTAL-P (mg/L)	SRP (mg/L)	N03+N02 (mg/L)	AMMONIA (mg/L)	TOTAL-N (mg/L)	DISSOLVED NITROGEN (mg/L)
WL-C1	0.021	<0.001	<0.010	0.011	1.10	0.774
WL-C2	0.023	<0.001	<0.010	0.012	1.12	0.744
WL-B1	0.024	<0.001	<0.010	<0.010	1.16	0.744
WL-B2	0.021	<0.001	<0.010	<0.010	1.13	0.769
WL-A1	0.021	<0.001	<0.010	<0.010	1.12	0.733
WL-A2	0.023	0.002	<0.010	<0.010	1.15	0.730
SL-1	0.025	0.021	0.053	0.014	0.963	0.704

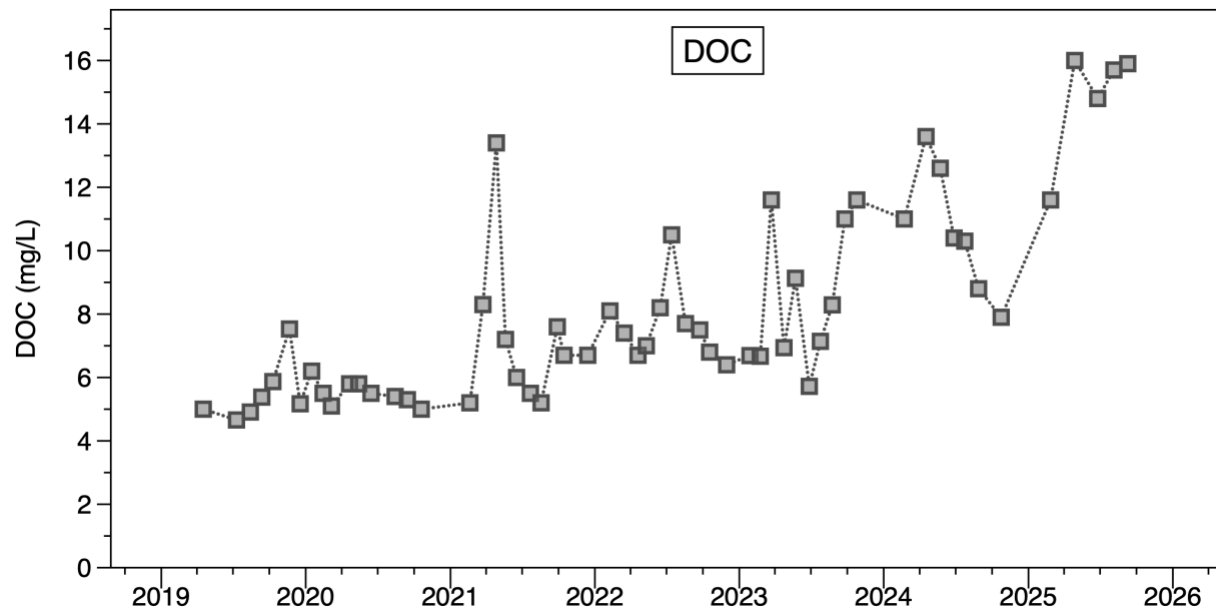
SAMPLE ID	TURBIDITY (NTU)	TOC (mg/L)	DOC (mg/L)	CHLOR_a (ug/L)	PHAEO_a (ug/L)
WL-C1	2.9	17.2	15.9	12	4.6
WL-C2	3.0	16.6	15.8		
WL-B1	3.6	16.2	16.3	12	3.7
WL-B2	2.8	16.1	15.4		
WL-A1	3.0	15.9	16.1	11	4.9
WL-A2	2.8	16.2	15.9		
SL-1	4.0	18.4	15.0	17	11

The following trend plot for mean TN explains why the nitrogen values caught my eye: September TN values were higher than what has been seen in White Lake in the past 7+ years. *Present day nitrogen levels are much higher than historical levels (data from 1974) and can vary quite a bit from month to month, with a tendency to be lower in winter months.* The mean Dissolved N/Total N ratio was 66.7% (which means that there is a significant particulate component to Total N).

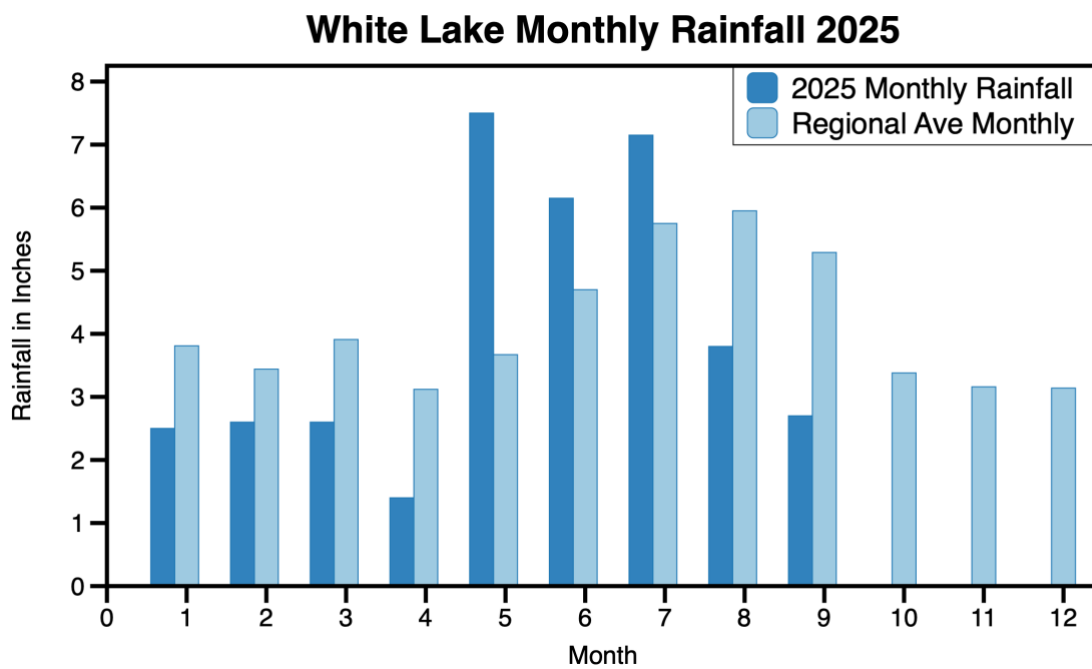
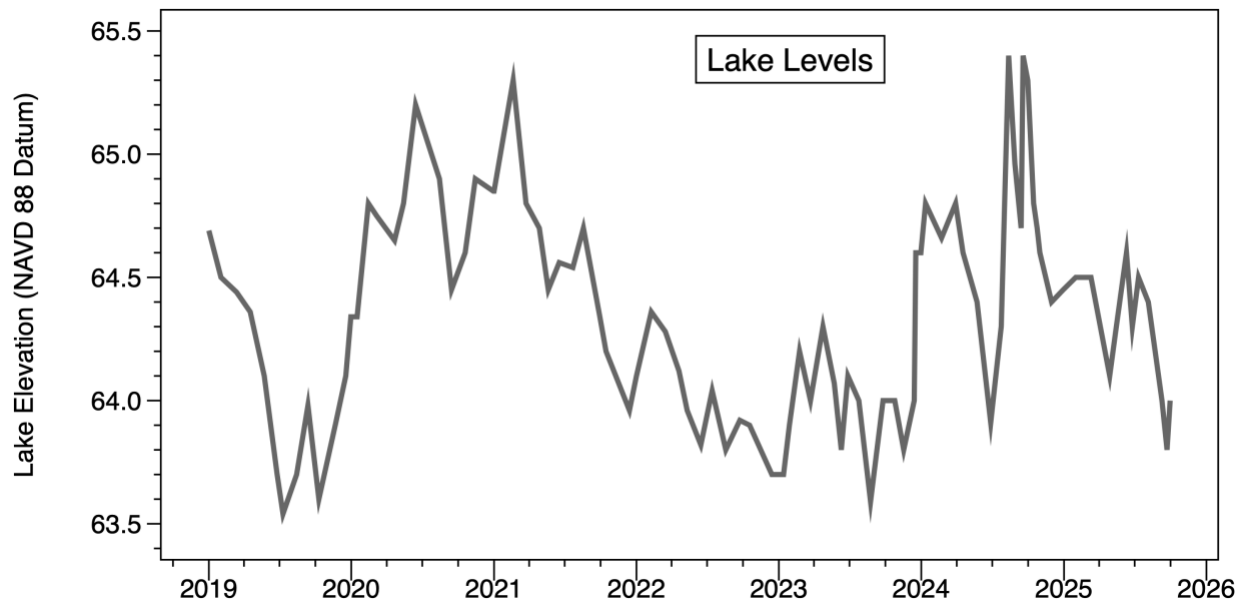


Total phosphorus levels did not show a spike and were in line with what has typically been seen this time of year. Chlorophyll *a* means (a proxy for phytoplankton biomass) were equivalent in August and September. Note that SL chlorophyll is higher than WL values (see lab data).





Total Dissolved Carbon (DOC) levels have been relatively high—this is the primary component of lake foam, which is generated in streaks due to Langmuir circulation under the lake surface and is moved towards the shoreline by wind action. The streaks photo was taken in the September sampling trip.



Lower rainfall in the past two months has resulted in a slight decline in lake level.