

Report to White Lake Town Board
April 5, 2022

Diane Lauritsen, Ph.D.
LIMNOSCIENCES

1. First Quarter 2022 Rainfall Below Average

A total of 9.2 inches of rain fell in the first three months of 2022; by comparison, 20.15 inches fell in the first three months of 2021. As a result, the lake level at the end of the first quarter of this year was at the same level as at the start of the year, 64.1 feet elevation (NAVD 88), which was 9.6 inches below the level at the same time in 2021.

If the weather patterns continue, summer lake levels could be about a foot lower than they have been the past two summers, and lake users should be prepared for this.

2. Hydrilla Doesn't Like White Lake

Annual aquatic vegetation surveys are conducted by personnel from NCSU; their survey results indicate that the present conditions in White Lake are not conducive for rampant hydrilla growth and reproduction (one sprig was found in only one location in 2021).

Despite this, it is important to prevent new introductions of invasive aquatic weeds. The Town is partnering with White Lake Marine and the NC Aquatic Weed Program to acquire a watercraft cleaning station at the public marina. Similar units will also be placed at the two public boat landings at Lake Waccamaw, and the NC AWP will be monitoring usage of these stations.

3. Lake Clarity Trend Improved

The winter algae activity this year has been shorter-lived by comparison with 2021, with clarity levels in March 2022 better than March 2021, and better than the previous month (photos and graphs attached).

4. Information on Phase 2 Sanitary Sewer Project Posted on Website

A map of the project and timeline have been posted on the White Lake Watch website; the monthly reports from the engineer will be posted as they are received.



Monthly Rainfall (inches) for White Lake 2012-2022

Month	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013	2012	Monthly Average for Region
January	5.75	8.25	4.5	2.75	4.20	7.0	3.0	2.5	2.0	1.75	2.75	3.81
February	1.0	9.2	6.7	2.25	2.00	1.5	10.7	5.5	1.5	2.5	4.0	3.44
March	2.45	2.7	3.7	3.25	3.95	3.7	1.55	4.15	ND	1.0	7.0	3.91
April		1.75	5.1	7.25	6.75	6.75	6.75	4.55	ND	1.75	2.25	3.12
May		3.0	12.25	1.20	7.70	2.7	4.5	4.20	ND	2.25	9.25	3.67
June		7.9	7.15	5.25	10.00	4.5	3.65	8.70	3.0	17.0	2.0	4.70
July		7.5	6.85	6.00	4.75	6.75	3.75	3.0	4.65	11.25	8.6	5.75
August		6.5	7.55	5.35	6.25	5.6	4.12	9.4	9.75	8.25	9.75	5.95
September		3.2	5.95	5.00	29.45	5.2	15.0	4.7	7.0	1.0	5.0	5.29
October		0.6	3.35	3.60	2.25	2.95	14.25	9.75	1.7	1.75	2.25	3.38
November		0.4	7.5	4.90	4.25	1.0	0.50	7.25	4.15	0	2.25	3.16
December		3.4	4.25	6.00	7.5	5.45	5.1	6.5	3.7	5.75	4.25	3.14
Total		54.4	74.85	52.80	89.05	53.1	72.87	70.20		54.25	59.35	49.32
% of Lake Volume		71	97	69	116	69	95	91		70	77	64

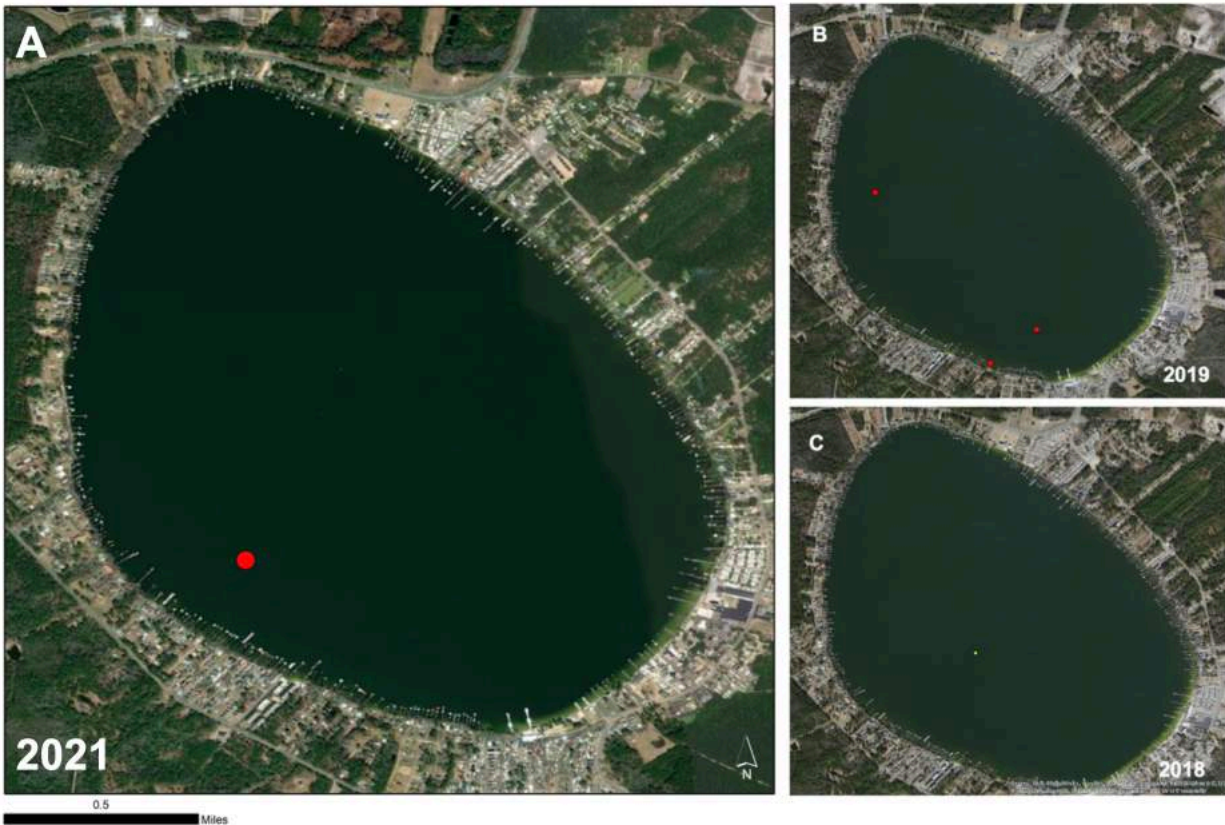
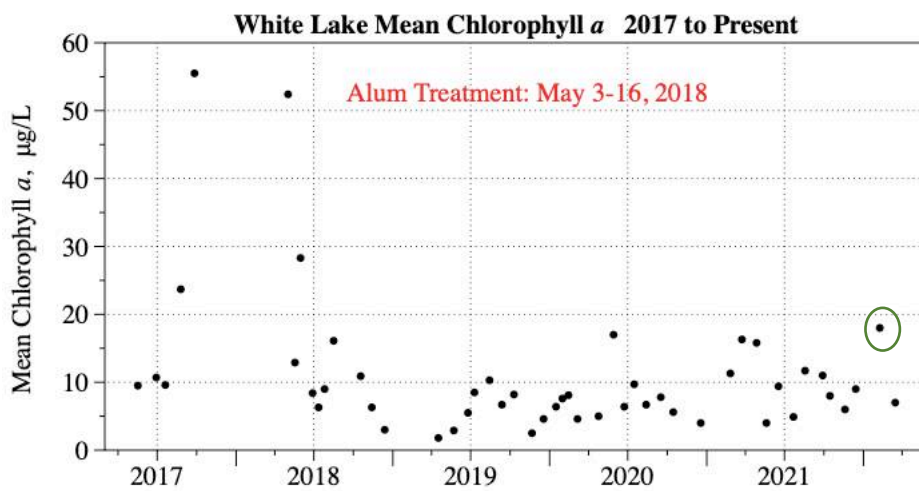
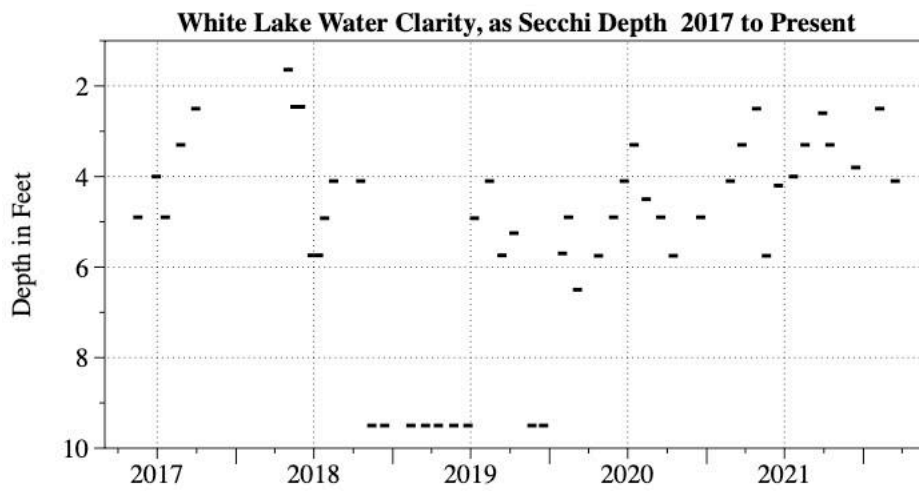
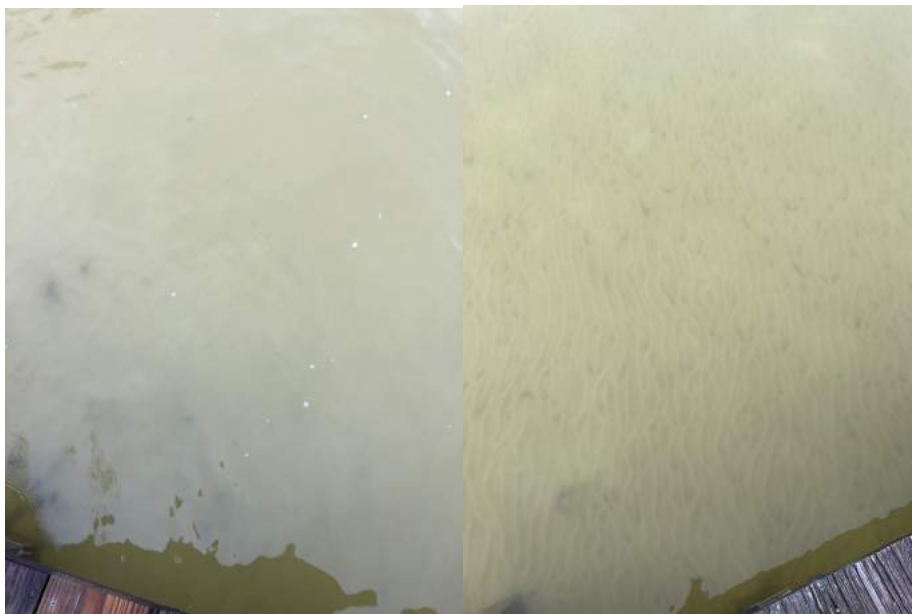


Figure from 2021 White Lake Aquatic Vegetation Survey; 202 stations were sampled, and hydrilla was found at only one location in 2021 (map A).

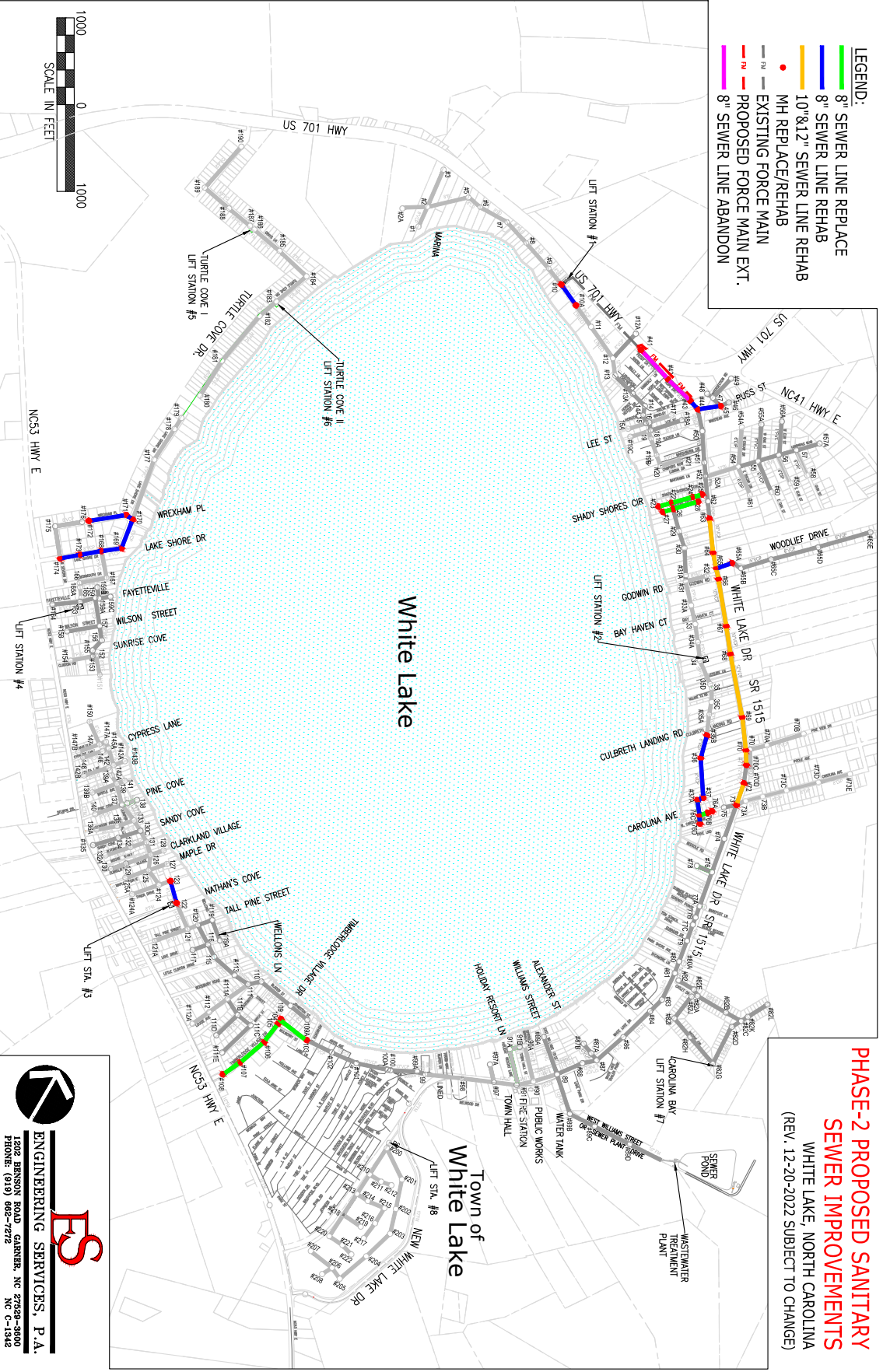


More algae in Feb., less in March



The difference in clarity between February 8, 2022, and March 16, 2022.
(Photos taken at Goldston's Motel pier)

- LEGEND:**
- 8" SEWER LINE REPLACE
 - 8" SEWER LINE REHAB
 - 10" & 12" SEWER LINE REHAB
 - MH REPLACE/REHAB
 - EXISTING FORCE MAIN
 - PROPOSED FORCE MAIN EXT.
 - 8" SEWER LINE ABANDON



**PHASE-2 PROPOSED SANITARY
SEWER IMPROVEMENTS**
WHITE LAKE, NORTH CAROLINA
(REV. 12-20-2022 SUBJECT TO CHANGE)

ENGINEERING SERVICES, P.A.
1202 BENSON ROAD GARNER, NC 27538-3000
PHONE: (919) 682-7272
NC-C-1342

