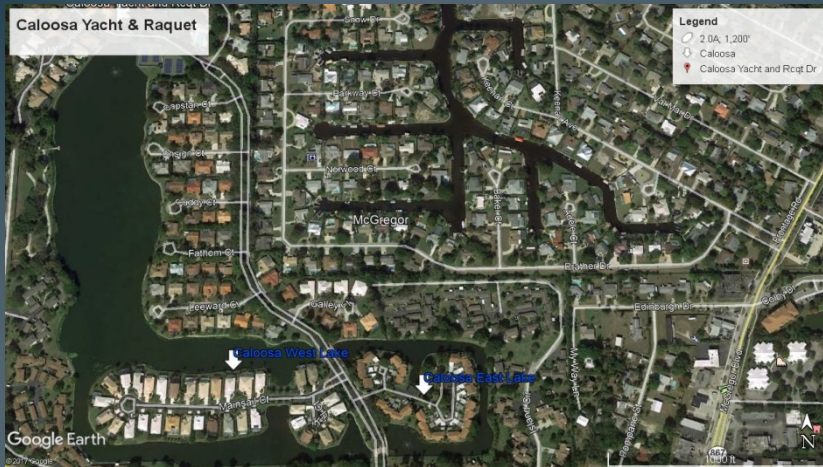


CALOOSA YACHT & RACQUET CLUB

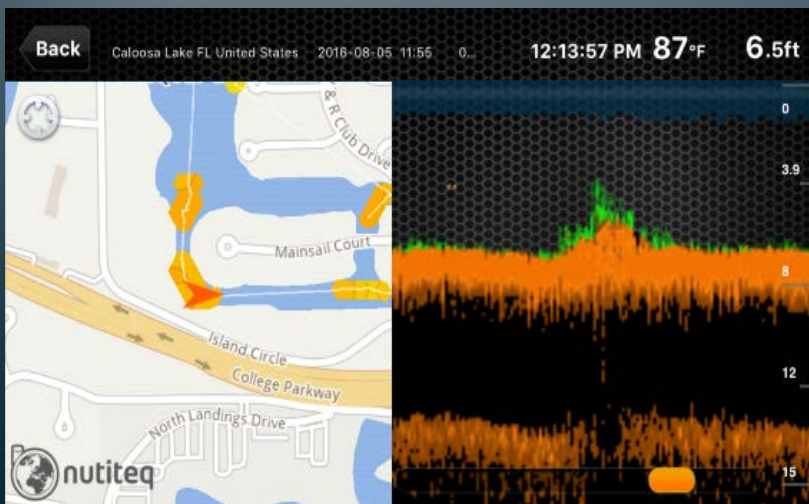
Fort Myers, Florida
2017



BACKGROUND INFORMATION



- Caloosa Yacht & Racquet is a community in Southwest Florida with two man-made lakes. The West Lake totals 21.5 acres and the East Lake totals 2.3 Acres. These lakes are connected.
- In 2016, Microsystis, Anabeneia and other forms of Filamentous Algae were an ongoing issue.
- Algaecide treatments provided short-term solutions.
- Algaecide treatments provided 4 to 7 days of results before the cycle restarted.
- Water samples and lab analysis results showed high levels of nitrates and phosphates.
- Sediment buildup (Muck) was 12" to 18".



OBJECTIVE



Our objective was to design and implement a Lake Management Plan that would return homeowner property values by making the lake healthy and aesthetically pleasing.

Homeowners contacted numerous lake management professionals, consultants, engineers, and professors. They spent hundreds of hours reading information online. After months of deliberation, and with many skeptics, a multi-step plan was approved in March 2017.



DESIGN & IMPLEMENTATION

- Physically remove some Filamentous Algae, coconuts, and other floating debris
- Install an adequate aeration system to ensure all areas of the lake had sufficient dissolved oxygen
- Six-month intensive bacteria and enzyme applications
- Applications of *Aquafix* products every two-weeks including **AQUAFIX M-D PELLET; PONDZILLA; SUMMER-SLAM**
- Collect water samples and test results

RESULTS: 6 WEEKS

After six-weeks of implementation, the lakes made tremendous improvements.

- Algae levels had diminished
- Water clarity was returned
- Aesthetics were returned



RESULTS: 6 MONTHS

The lakes were vastly improved when our six-month program was complete.



- Microsystis and Anabeaa were gone
- Filamentous Algae was minimal
- Clarity in the lake was restored
- Sedimentation buildup (muck) was reduced
- Nitrogen and Phosphorus levels were reduced
- Noxious smells were gone
- Property values were increased



FINAL THOUGHTS

Using Aquafix products and aeration, we restored the health and beauty of the lakes. The Lake Doctors will continue using Aquafix products to keep the lakes healthy and balanced.



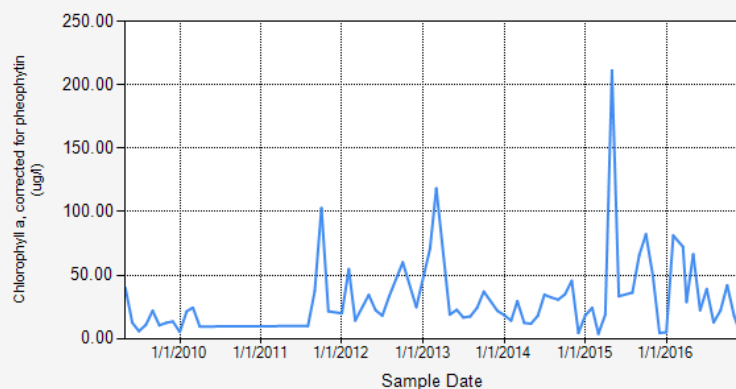
BEFORE



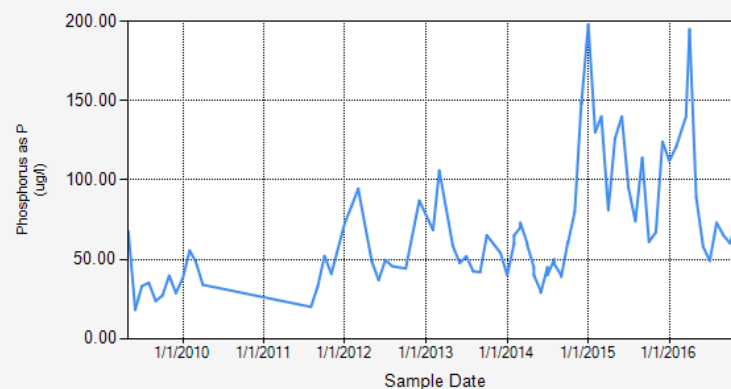
AFTER

APPENDIX: LEVELS BEFORE TREATMENTS

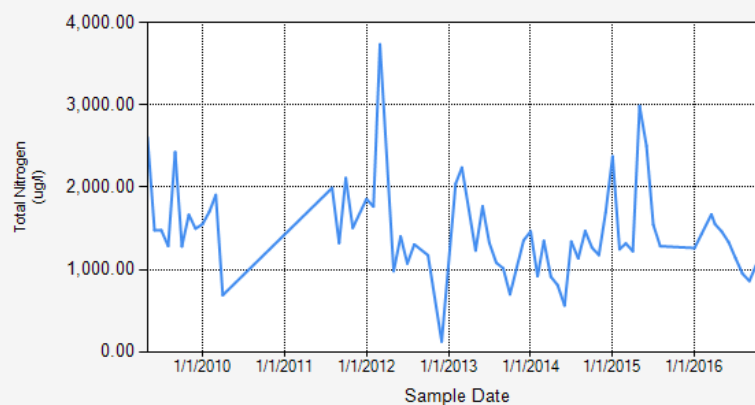
**Chlorophyll a, corrected for pheophytin
Caloosa Yacht
(81 measurements)**



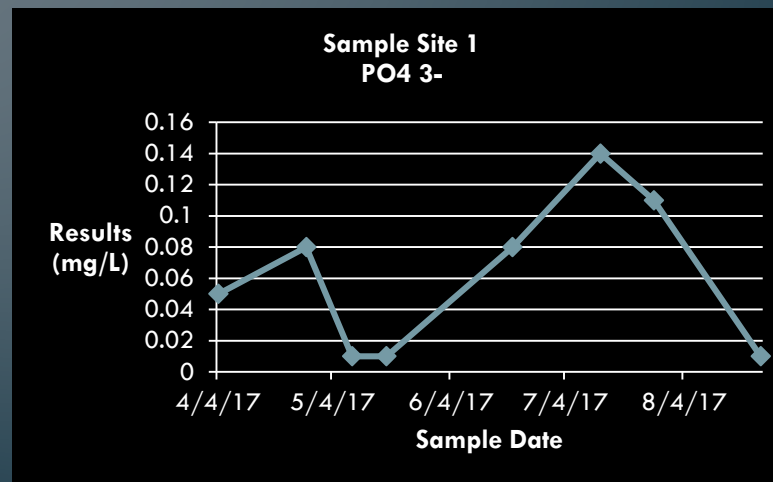
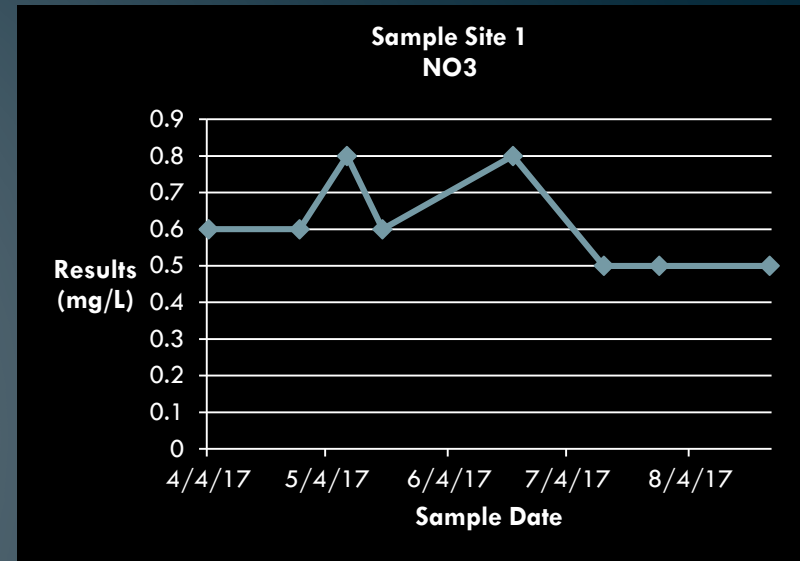
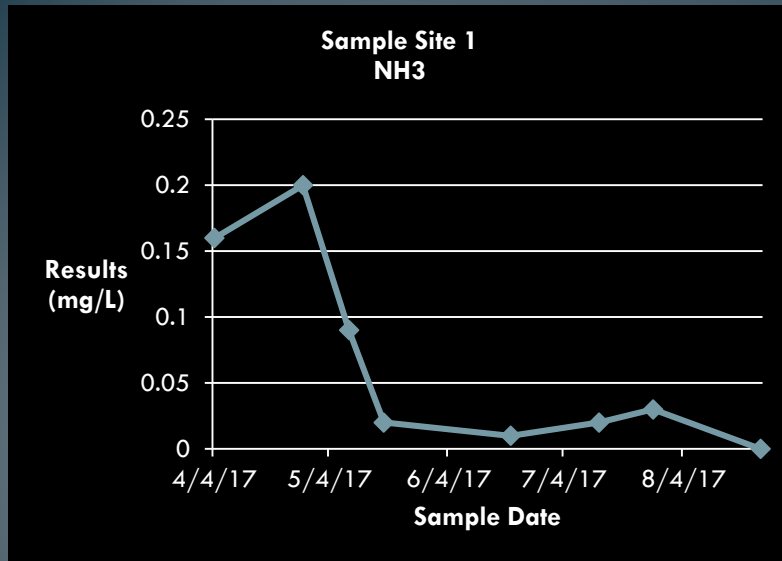
**Phosphorus as P
Caloosa Yacht
(82 measurements)**



**Total Nitrogen
Caloosa Yacht
(66 measurements)**

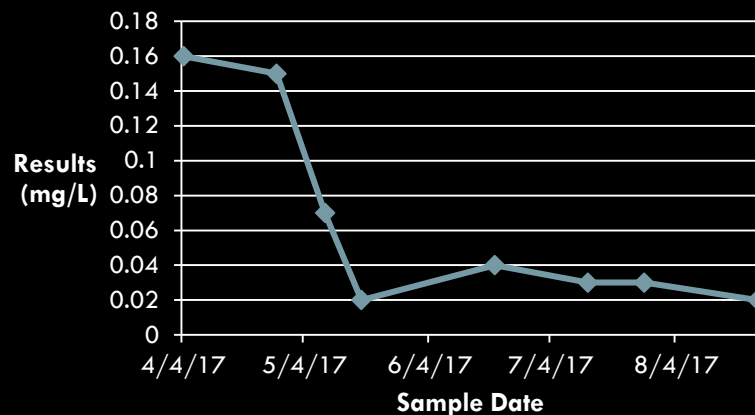


APPENDIX: LEVELS AFTER TREATMENTS AT SAMPLE SITE 1



APPENDIX: LEVELS AFTER TREATMENTS AT SAMPLE SITE 2

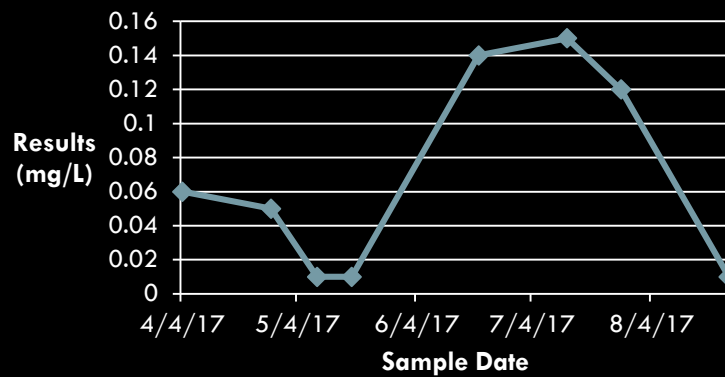
Sample Site 2
NH3



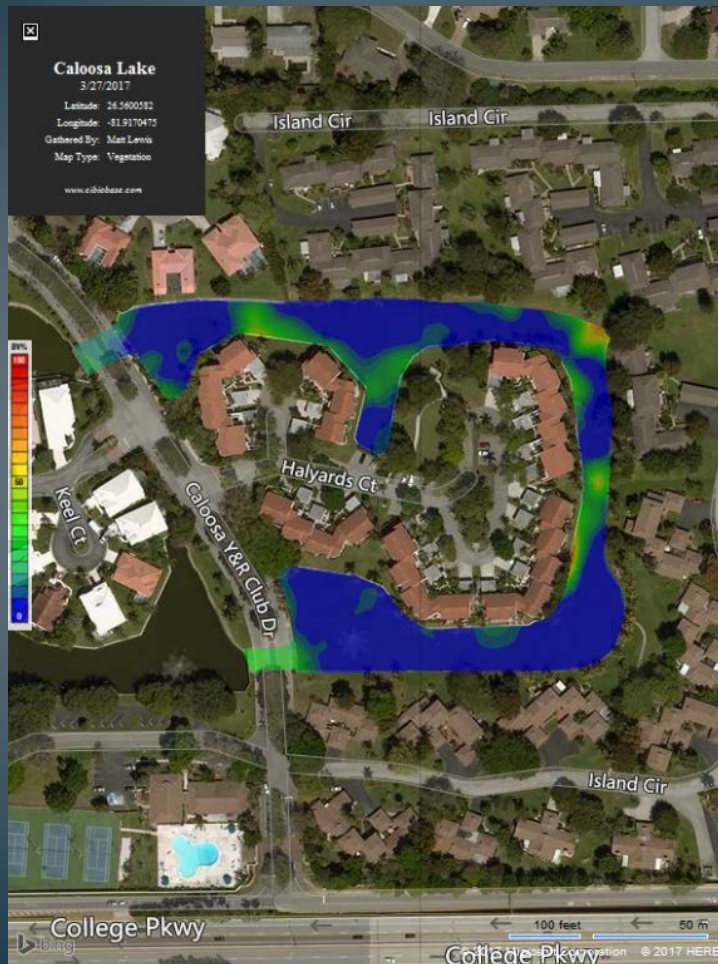
Sample Site 2
NO3



Sample Site 2
PO4 3-



APPENDIX



Small Lake Merged
Vegetation Map



Vegetation Heat Map