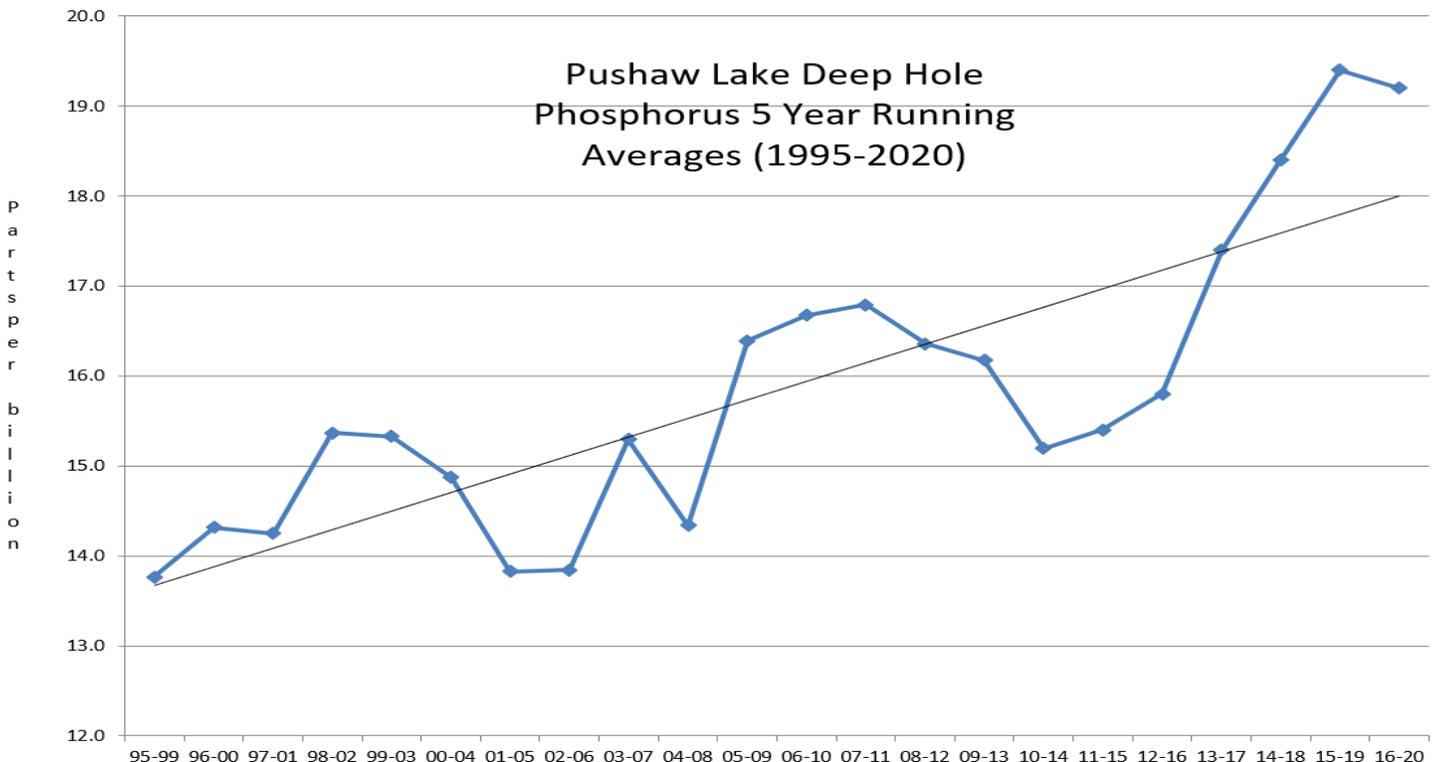
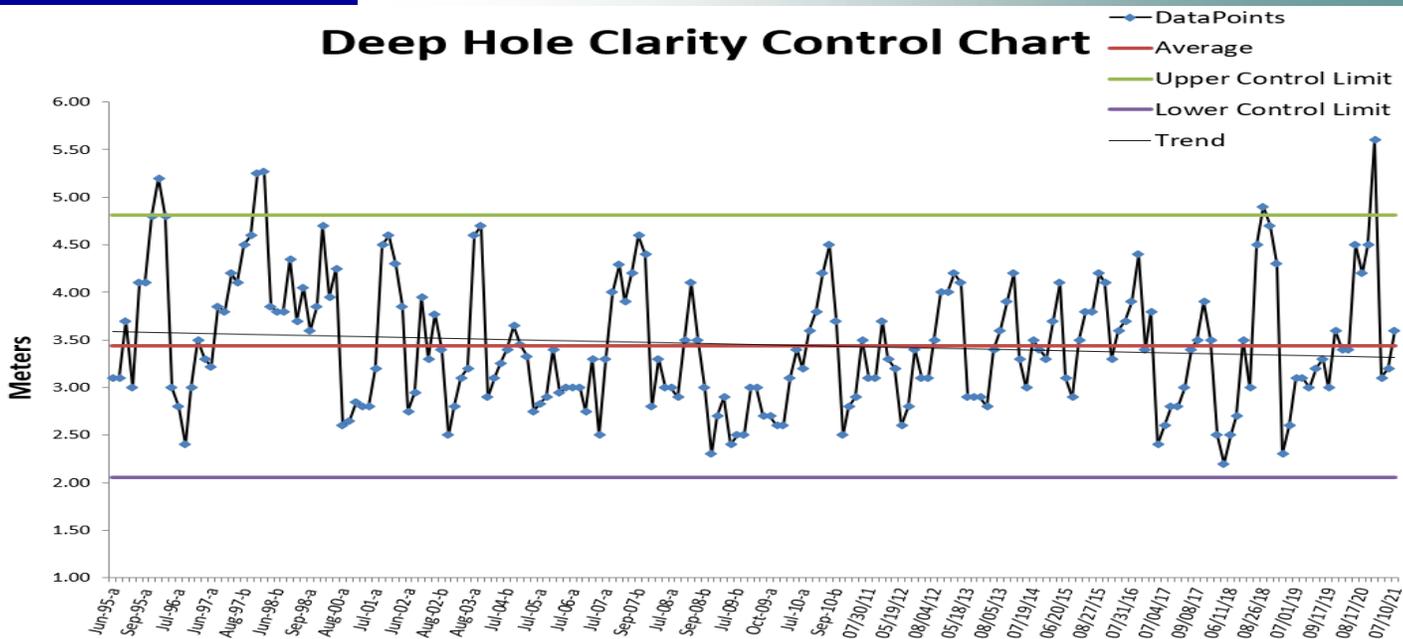


Highlights...

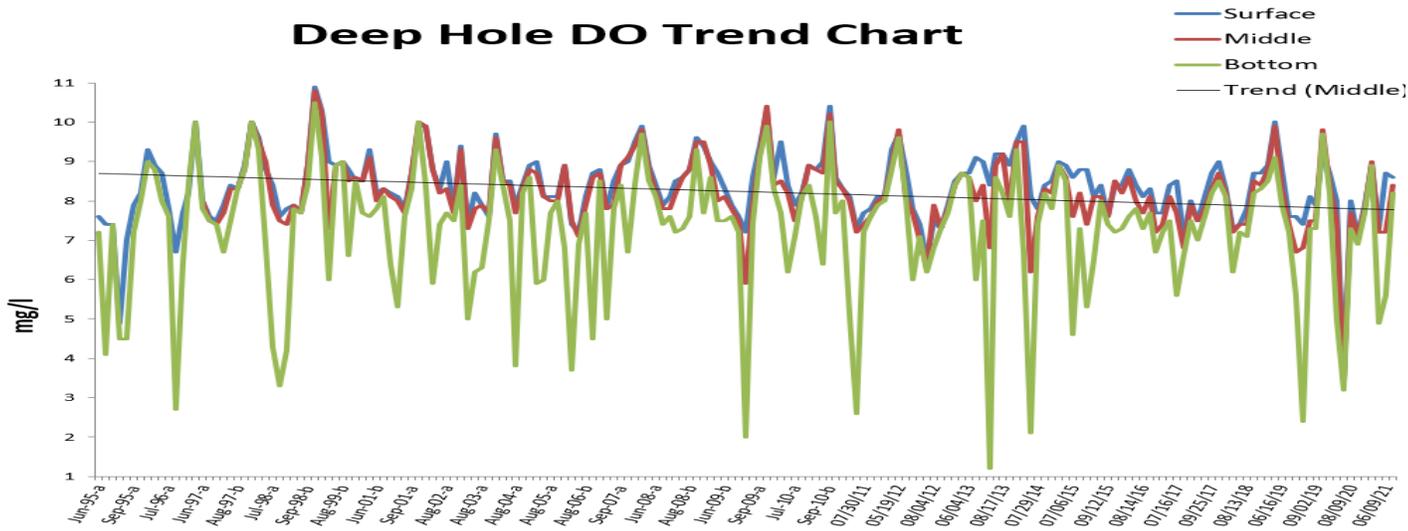
- 2020 results were all very favorable (good quality) as compared to recent years, but most likely a result of very little rain and runoff during the testing months.
- 2020 was our first year with phosphorus testing scaled back to two tests per season. Results seem sufficient to support that continued testing approach.
- 2021 early results similar to 2020 with low runoff and high temperatures. Recent heavy rainfall may start to trend the results back to “normal” (no phosphorus results are in as of this update).



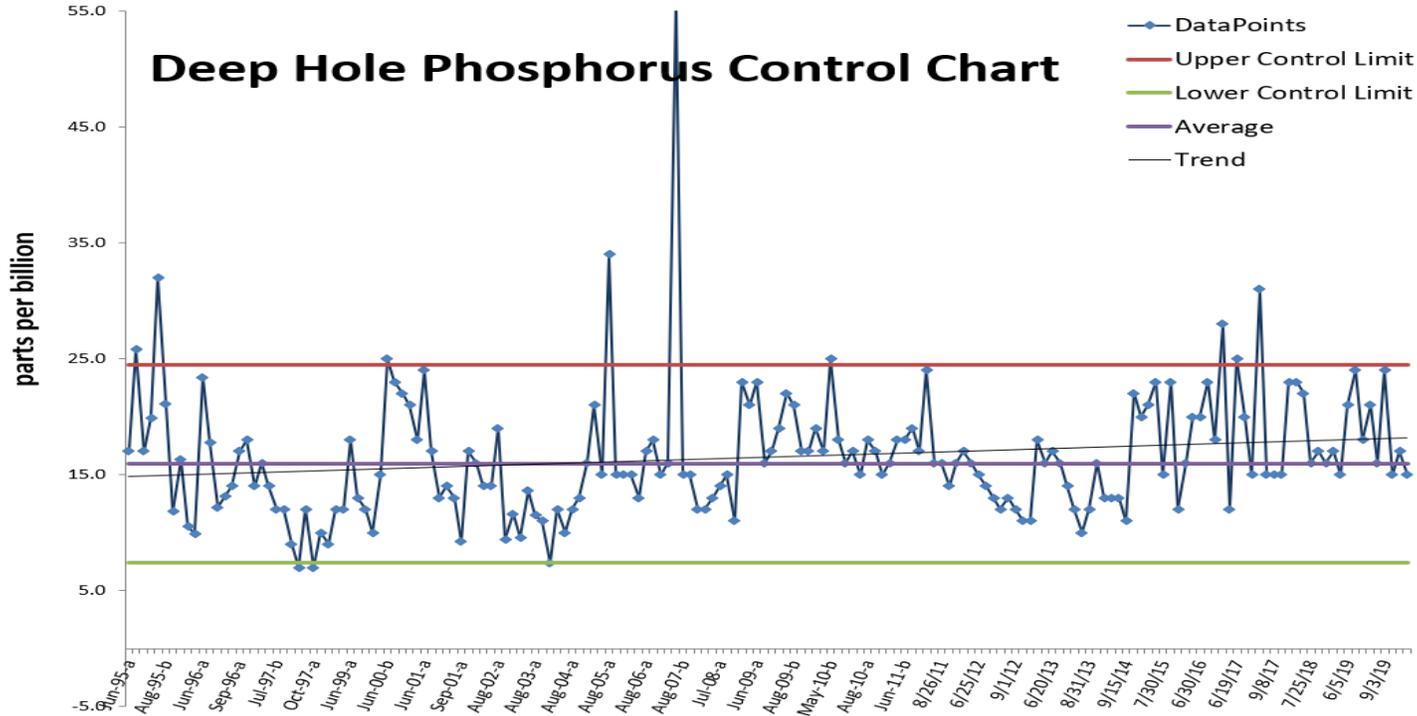
Deep Hole Clarity Control Chart



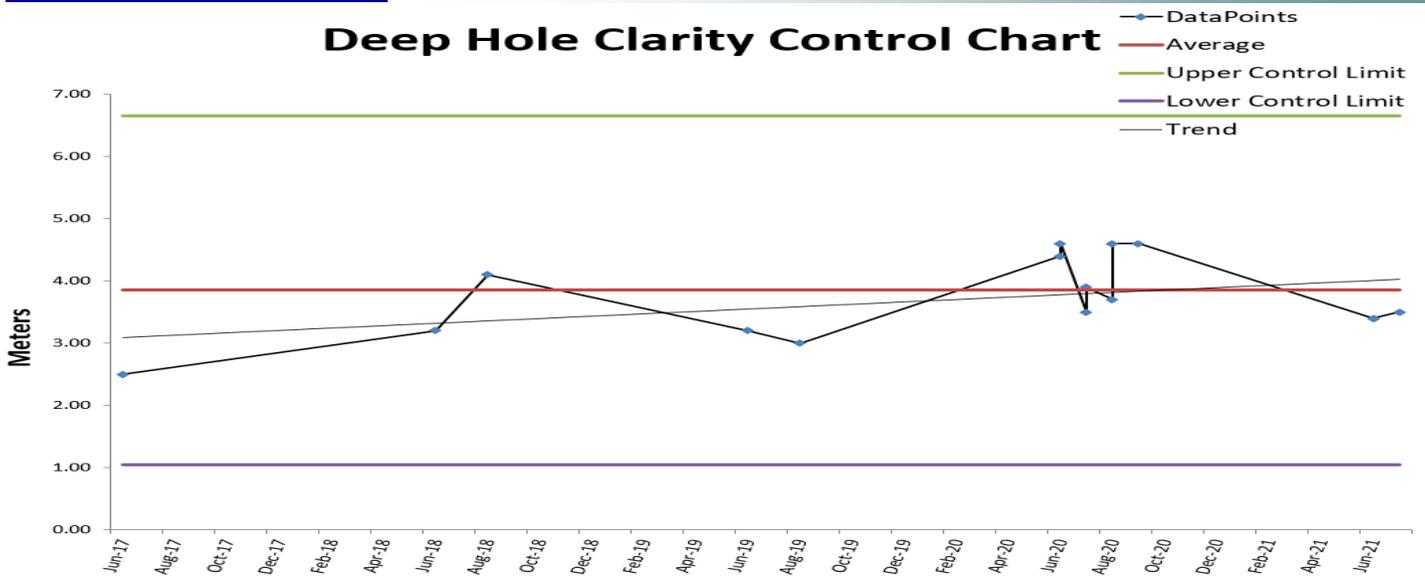
Deep Hole DO Trend Chart



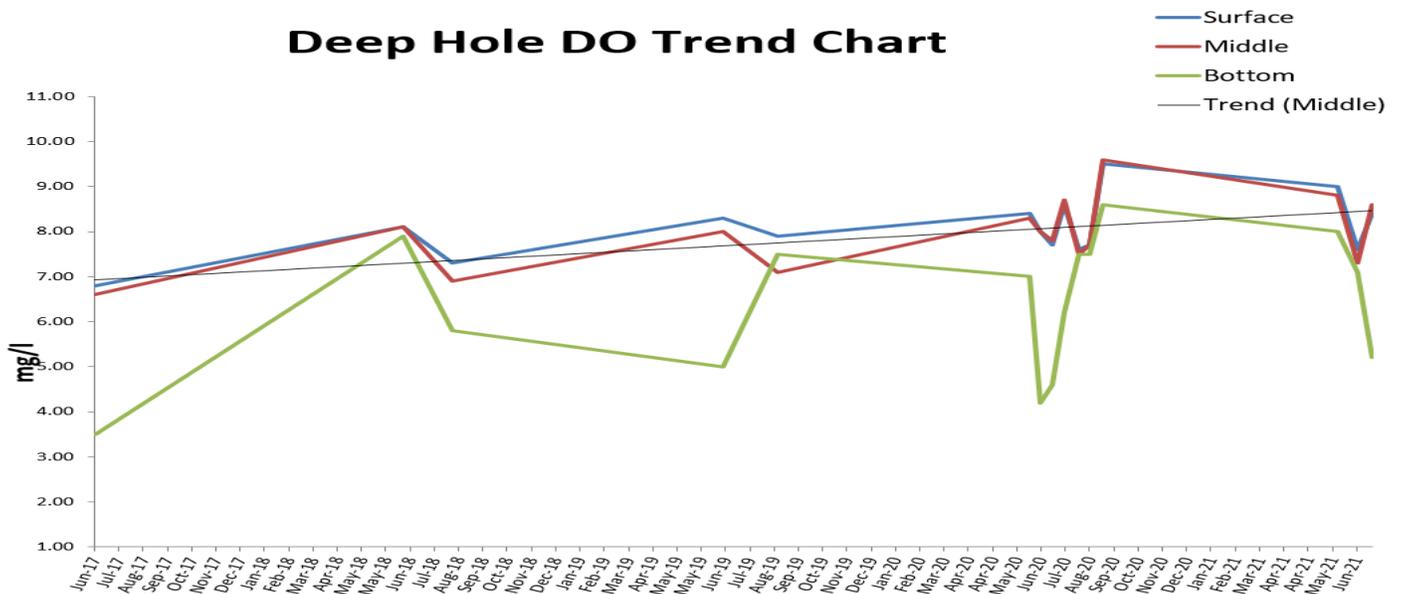
Deep Hole Phosphorus Control Chart



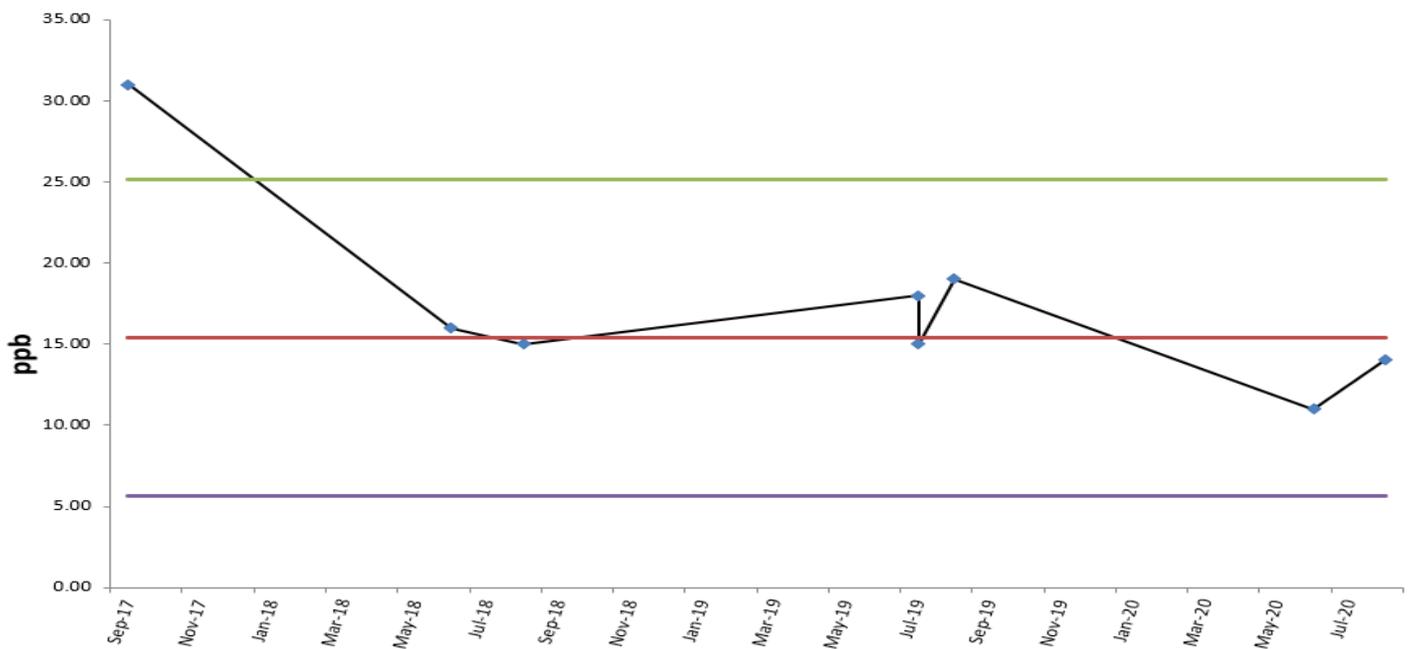
Deep Hole Clarity Control Chart



Deep Hole DO Trend Chart



Deep Hole Phosphorus Control Chart



What do the water tests mean?

Clarity: the higher the better

Measure of distance that an object can be viewed under the water from the surface of the lake (in meters). Factors affecting clarity include recent rainfall, runoff, algae, silt and water color.

-  **Pushaw Lake** 2020 results averaged 4.27 meters for the season, the highest season average since 1997.
-  **Little Pushaw** 2020 results of 4.19m average were highest annual average since testing started in 2017.

Dissolved Oxygen (DO): the higher the better

Measure of temperature and amount of oxygen dissolved in water at 1 meter increments top to bottom. Factors affecting DO include lake mixing (seasonal turnovers), algae growth, and stratification.

-  **Pushaw Lake** 2020 results overall showed healthy levels of oxygen in the water, indicating continued good mixing. A two week period in late July and early August during extreme heat showed stratification with low oxygen levels near bottom.
-  **Little Pushaw** 2020 results showed some stratification in early July, but otherwise all other results showed healthy oxygen at all levels.

Phosphorus: the lower the better

Measure of phosphorus content in water in parts per billion (ppb). Factors affecting phosphorus levels include rainfall/runoff, faulty septic systems, lakeside hygiene, shoreline buffer removal, etc. Phosphorus numbers in the low teens are enough to trigger an algae bloom!

-  **Pushaw Lake** 2020 results of 17ppb and 15ppb were a small favorable rebound from 2019 record high average of 19.9 ppb., most likely due to low 2020 rainfall/runoff.
-  **Little Pushaw** 2020 results of 11ppb and 14ppb, both better than any prior year results, again likely to low rainfall/runoff year.

Despite the 2020 improvement, phosphorus results are still high and able to support an algae bloom .