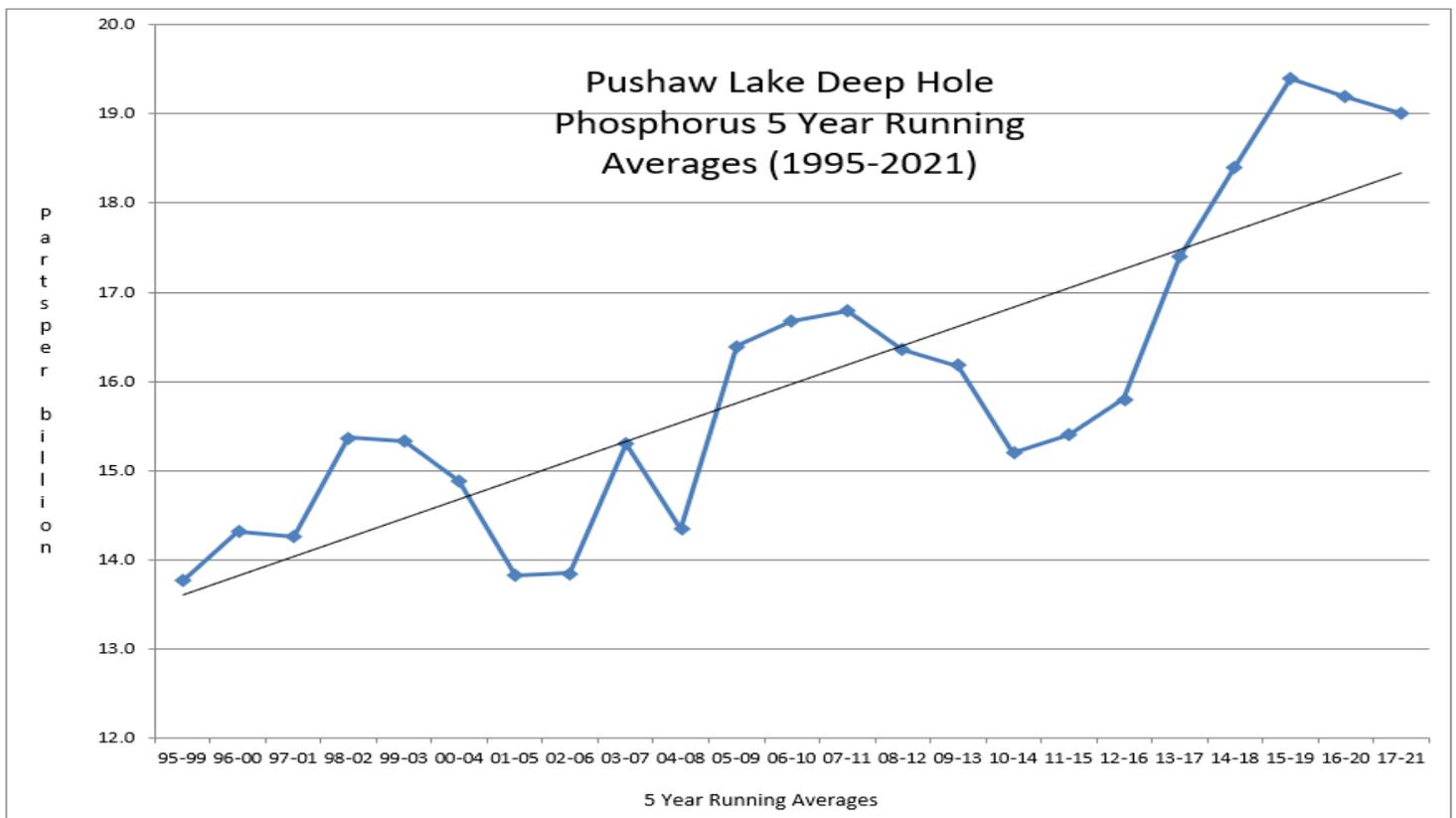
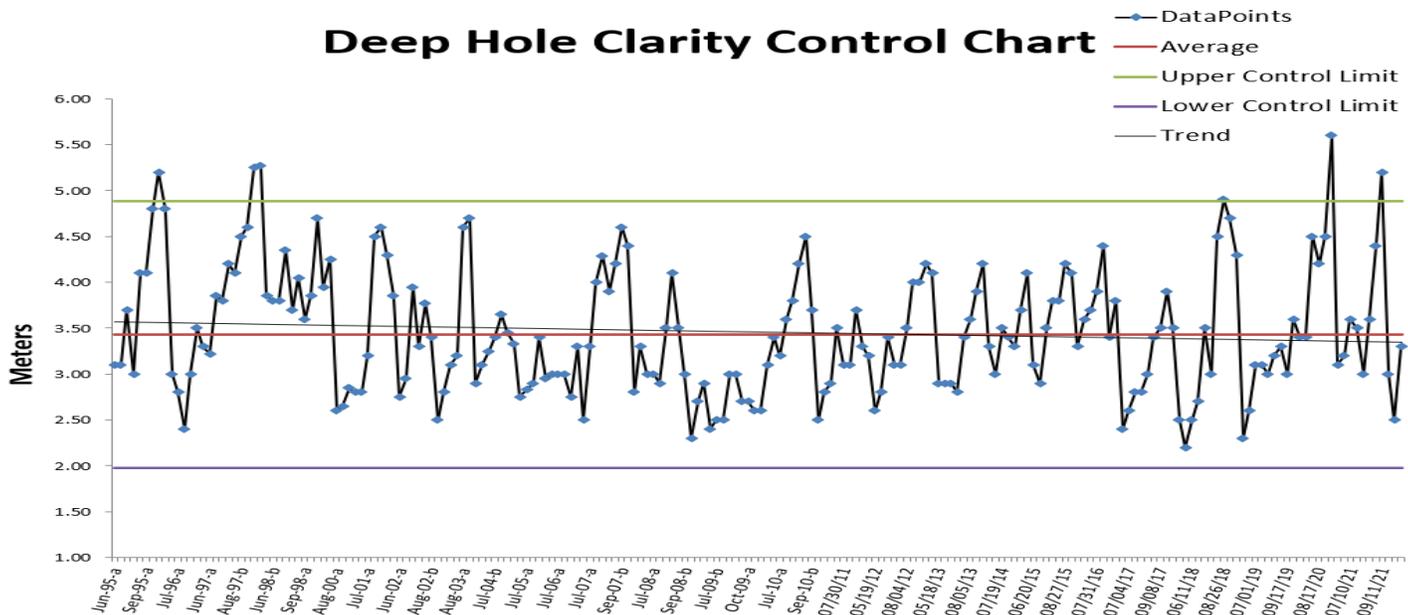


Highlights...

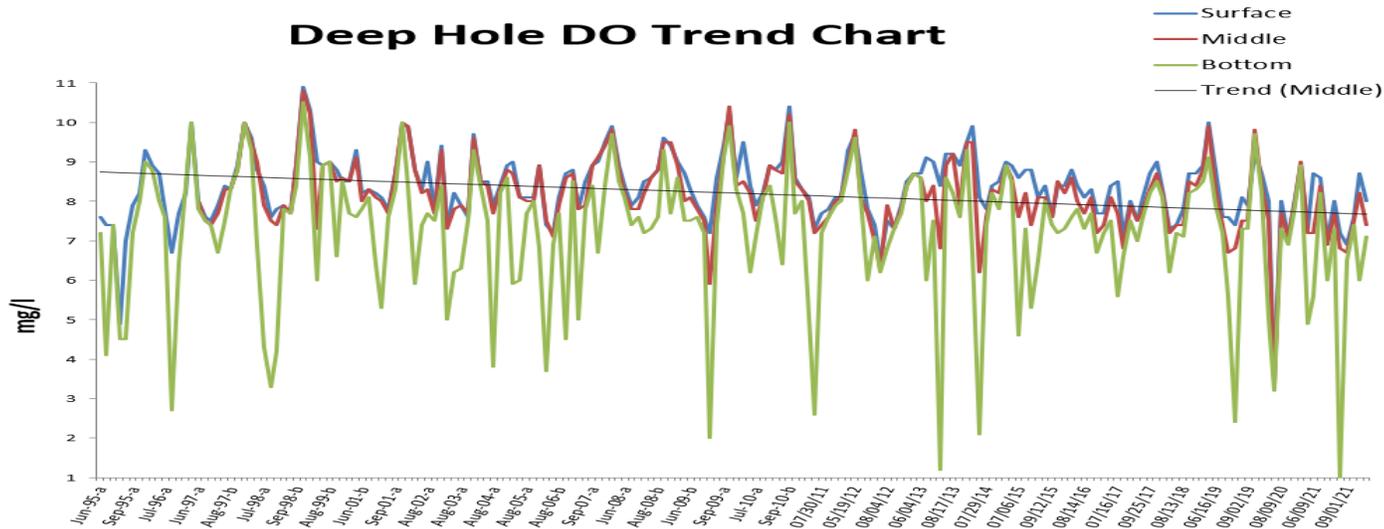
- 2021 results were comparable to recent years with no dramatic shift in either a positive or negative direction
- 2021 is the second year of only two phosphorus tests per season. Results seem sufficient to support that continued testing approach.
- 2022 early results are “normal” for clarity and dissolved oxygen. There are no 2022 phosphorus results as of this update. Return to normal spring/June rainfall may create an uptick in phosphorus over 2020 and 2021.



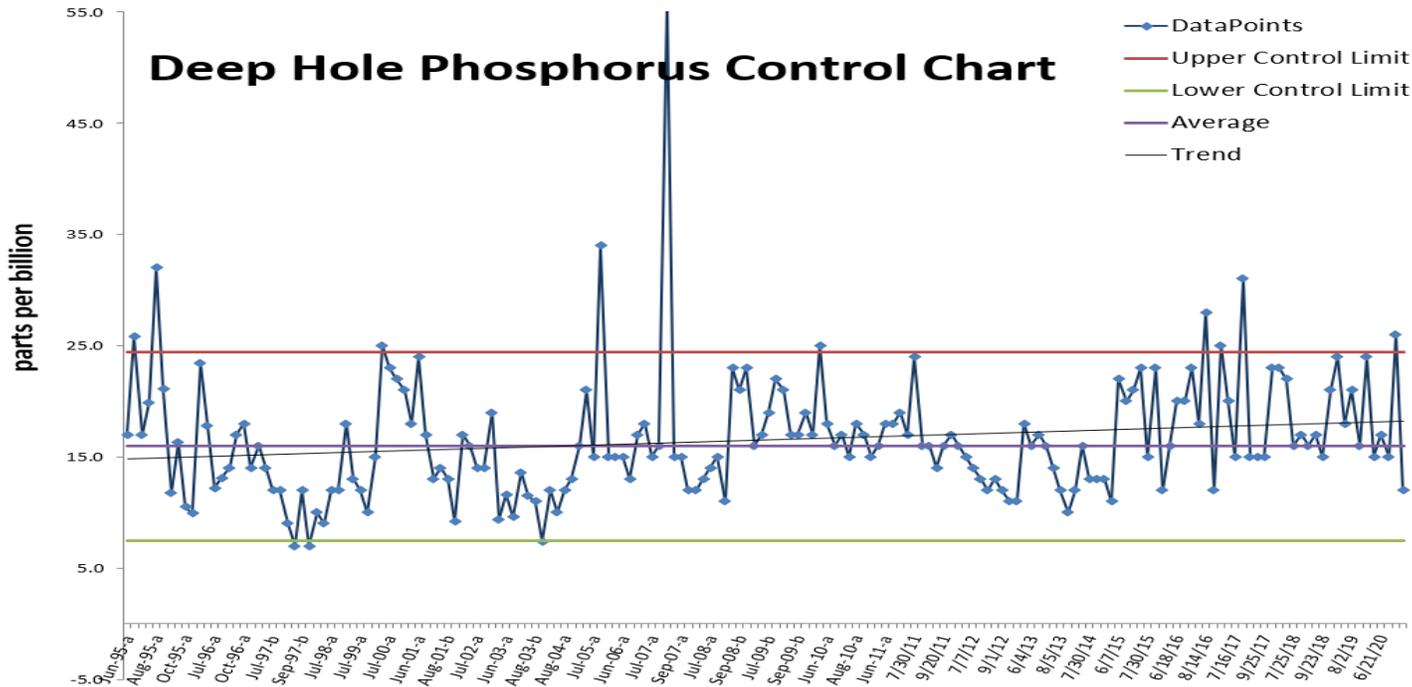
Deep Hole Clarity Control Chart



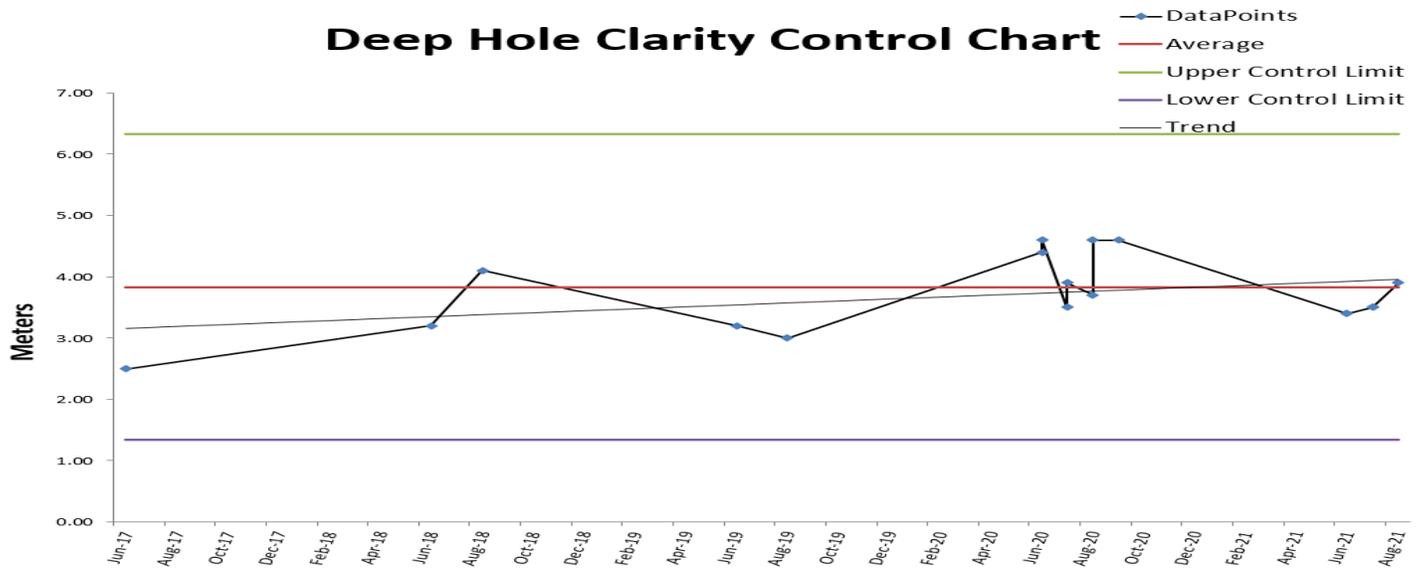
Deep Hole DO Trend Chart



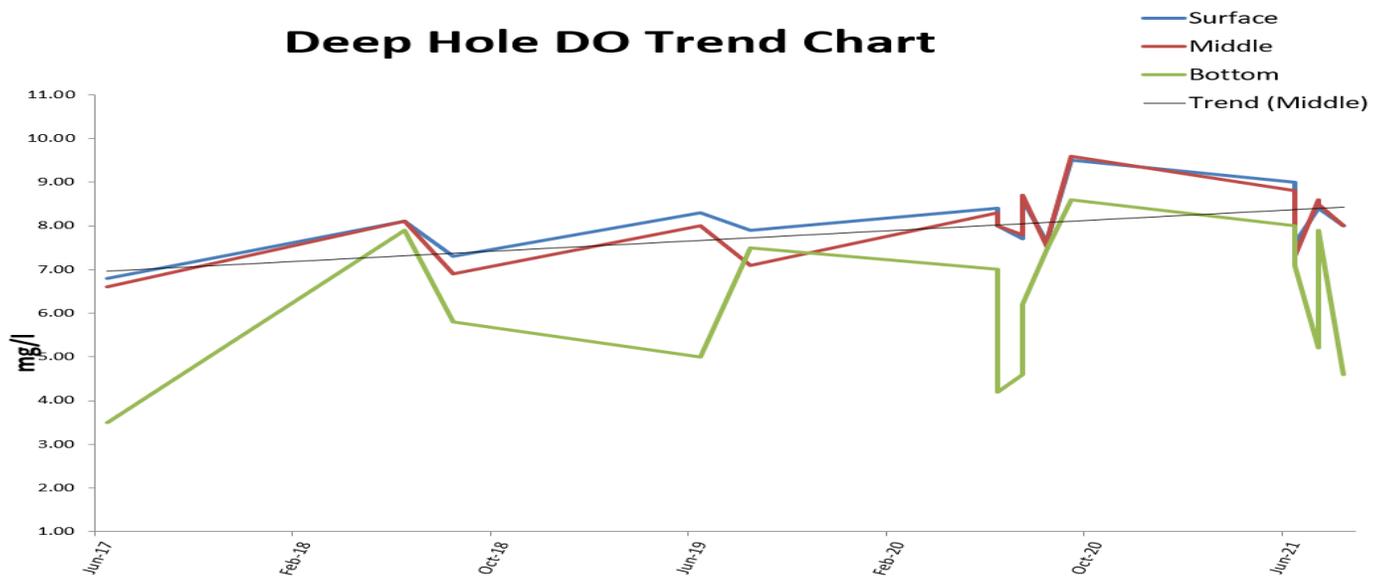
Deep Hole Phosphorus Control Chart



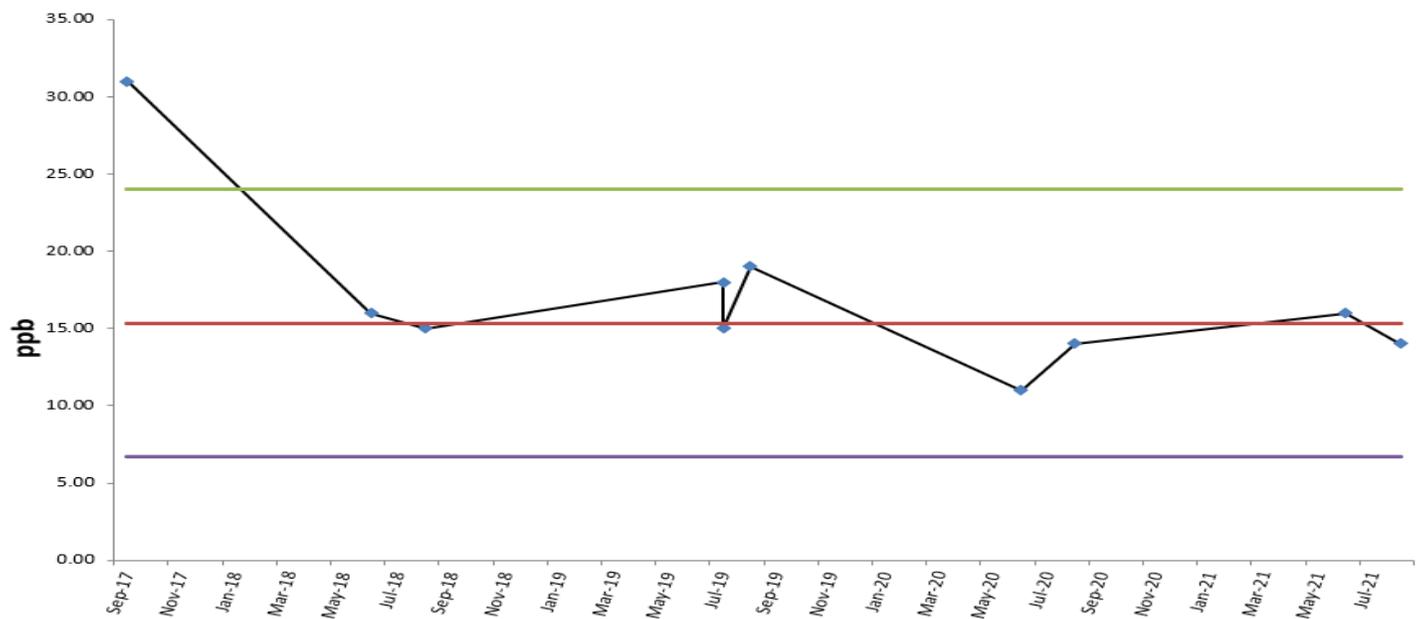
Deep Hole Clarity Control Chart



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** 2021 results averaged 3.62 meters, down from the 2020 favorable spike of 4.27 meter average for the season.

 **Little Pushaw** 2020 results averaged 3.54m meters, down from the 2020 favorable spike of 4.19 meter average for the season.

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** 2021 DO averaged 7.66 mg/l surface and 5.9 mg/l bottom, with one stratified 1.0 mg/l bottom in mid August. Oxygen levels indicate good mixing.

 **Little Pushaw** 2021 DO averaged 8.28 mg/l surface and 6.56 mg/l bottom, with a low of 4.56 mg/l in mid August. Oxygen levels indicate good mixing.

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** 2021 results of 26 ppb (July) and 12 ppb (Sept) show the variation of season, wind and rain/runoff. Overall 5 year running average has dropped slightly to 19 ppb, but phosphorus continues to be primary risk.

 **Little Pushaw** 2021 results of 16 ppb (June) and 14 ppb (Aug) are an uptick from 2020, but comparable to historical annual averages.

Despite the marginal 2021 improvement, phosphorus results are still high and able to support an algae bloom .