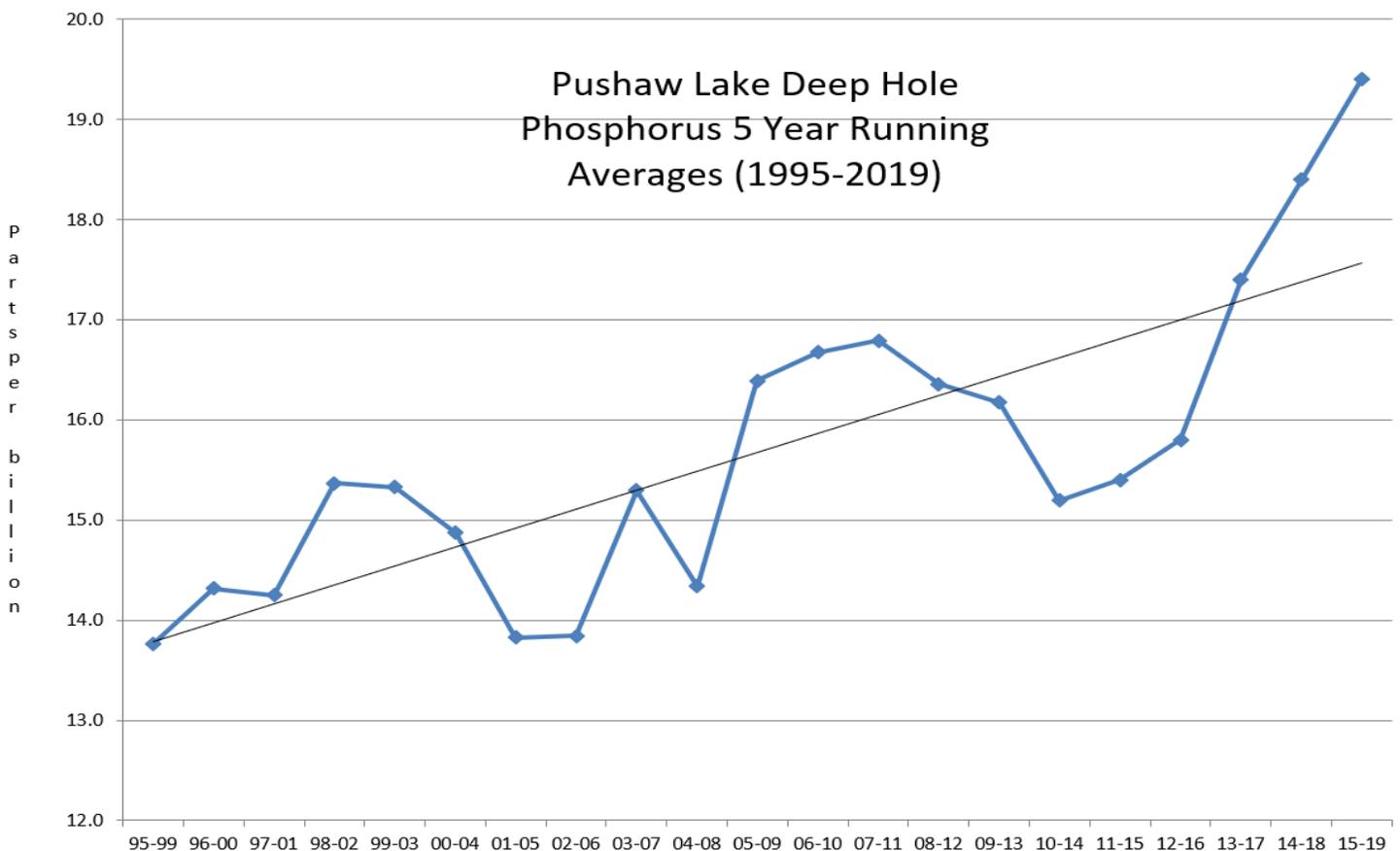
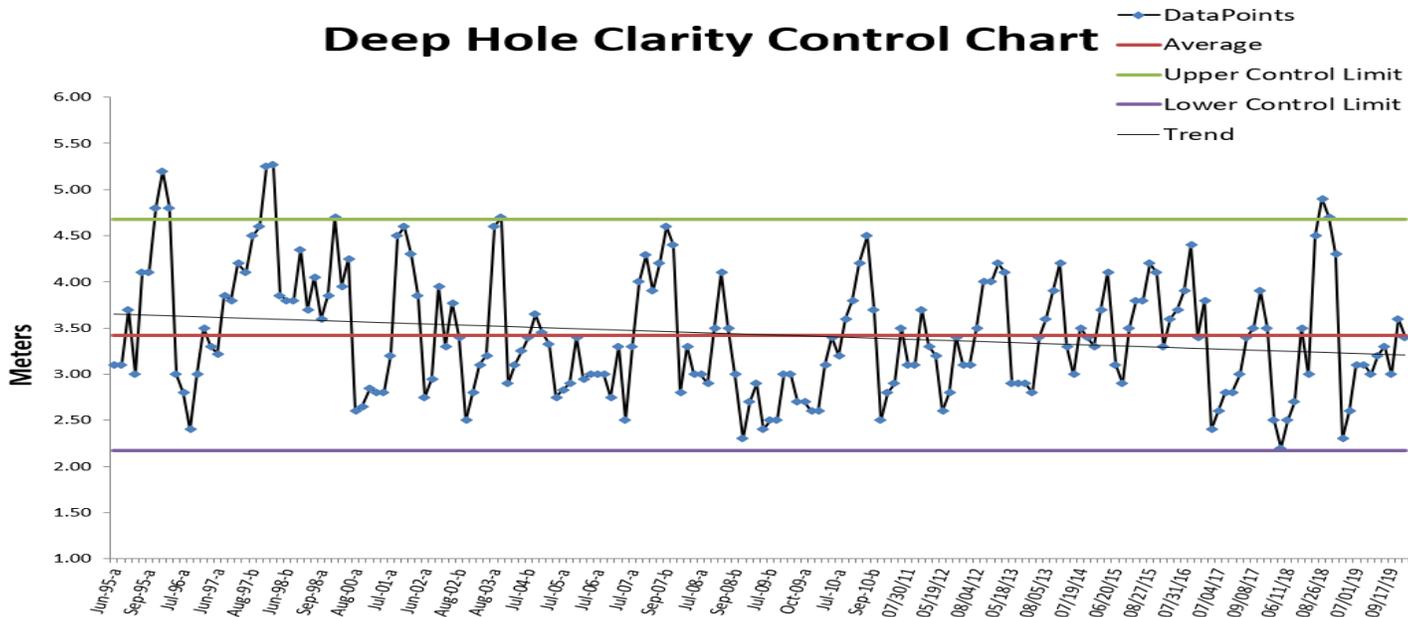


Highlights...

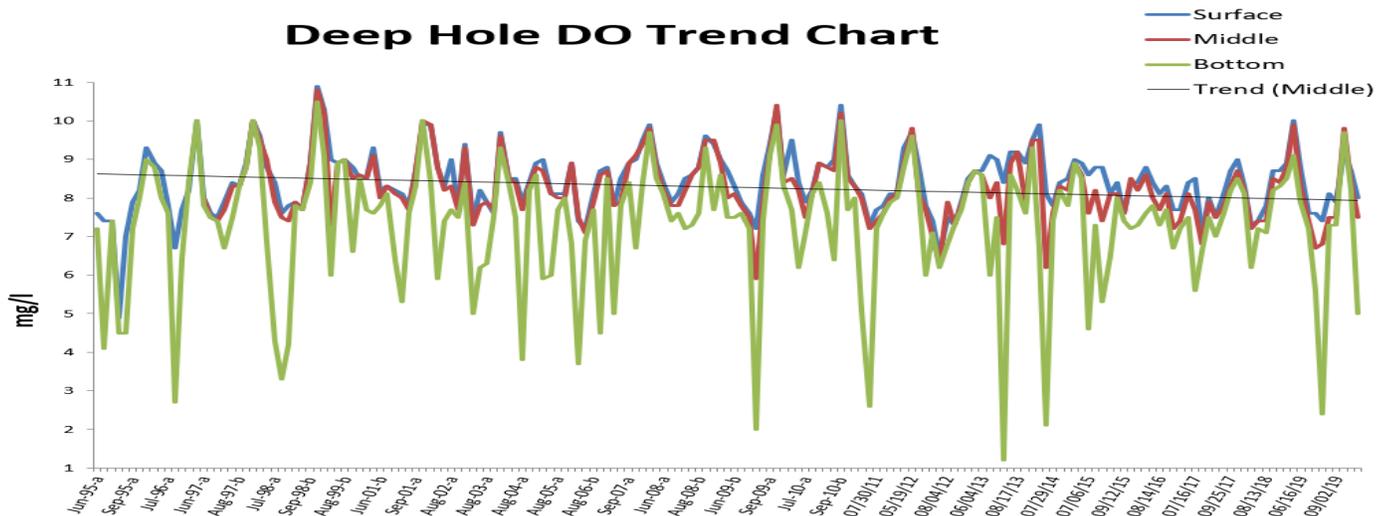
- 2020 summer water quality is off to a stressed start
 - ⇒ High June temperatures
 - ⇒ Early minor stratification (layers of temperature and Dissolved Oxygen differences)
 - ⇒ Observed pockets of floating algae
- Pushaw Lake phosphorus sampling scaled back to one test in mid June and one in mid August
 - ⇒ Saves on laboratory costs
 - ⇒ Aligned with historical sampling results
- Phosphorus levels continue to trend upward
 - ⇒ Algae bloom risk



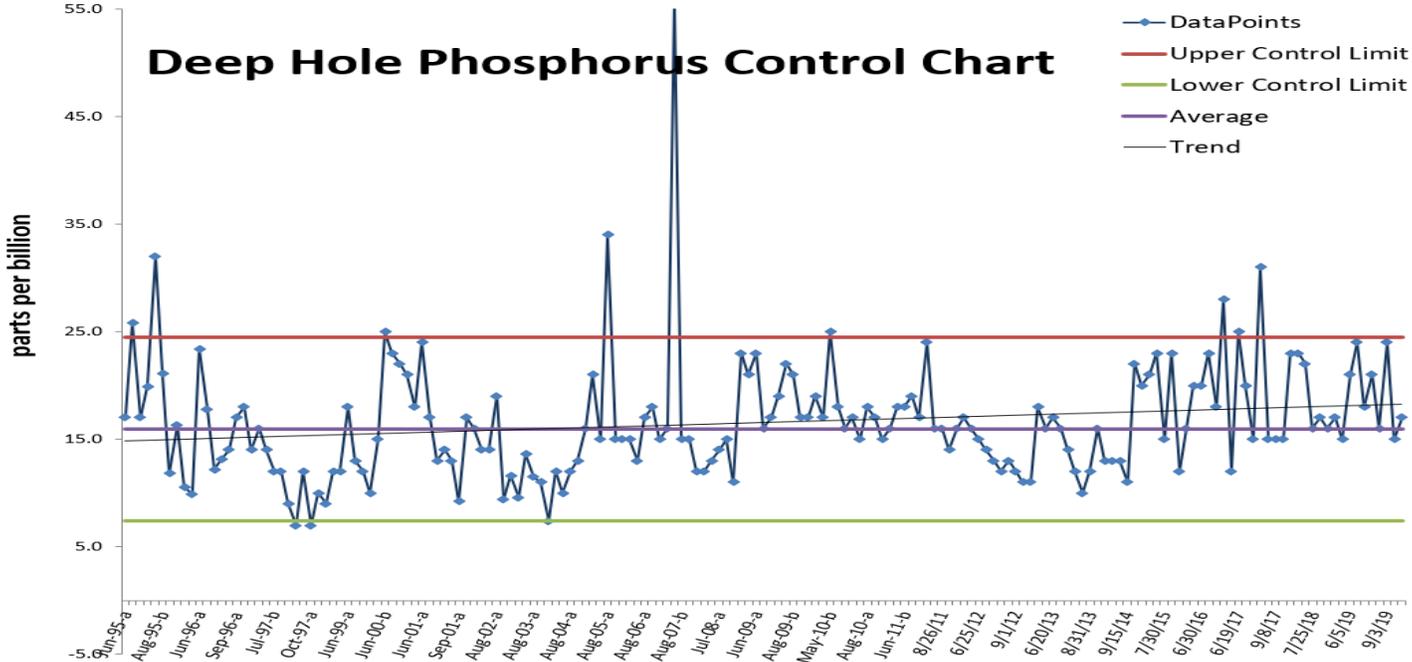
Deep Hole Clarity Control Chart



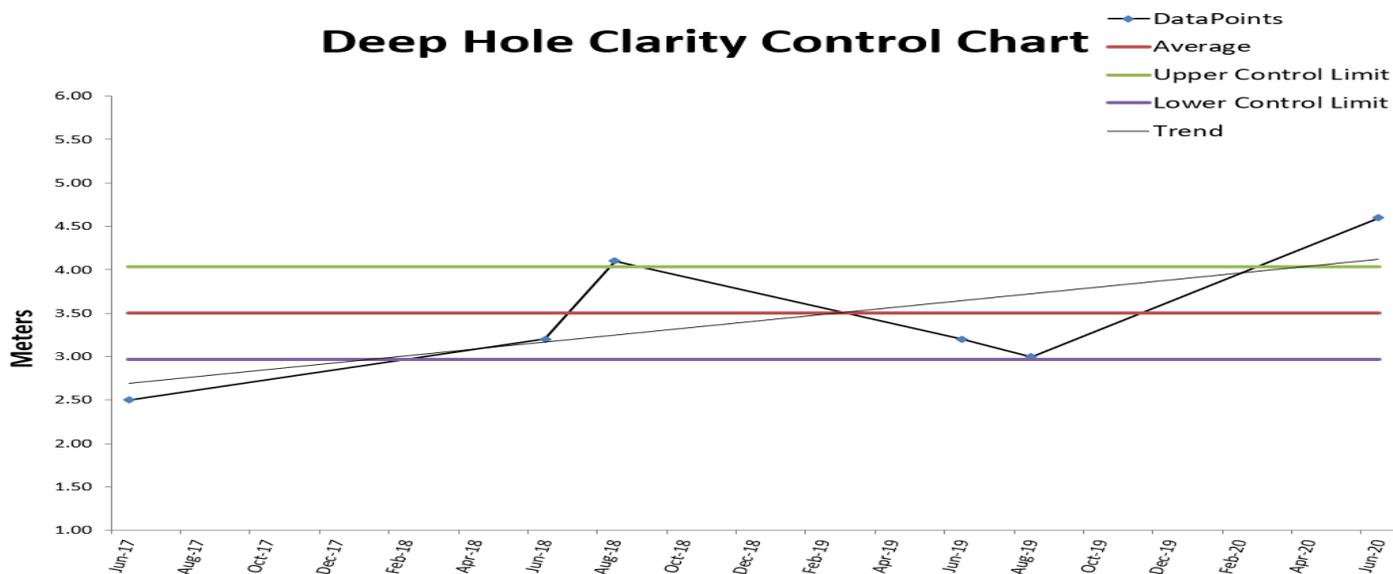
Deep Hole DO Trend Chart



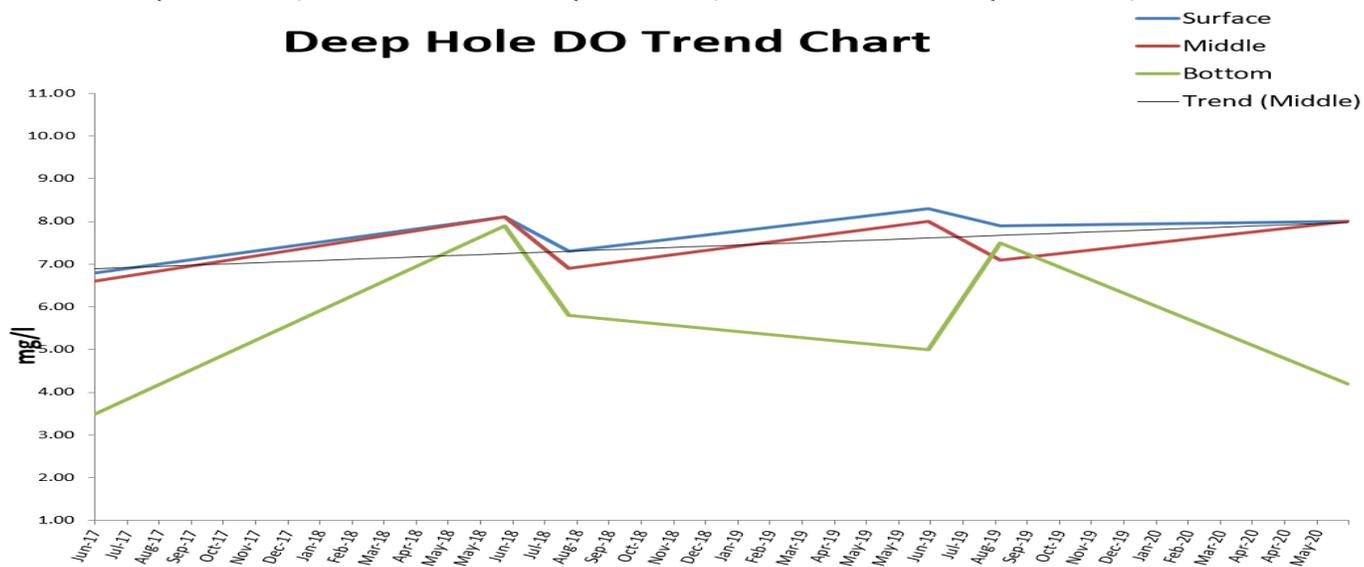
Deep Hole Phosphorus Control Chart



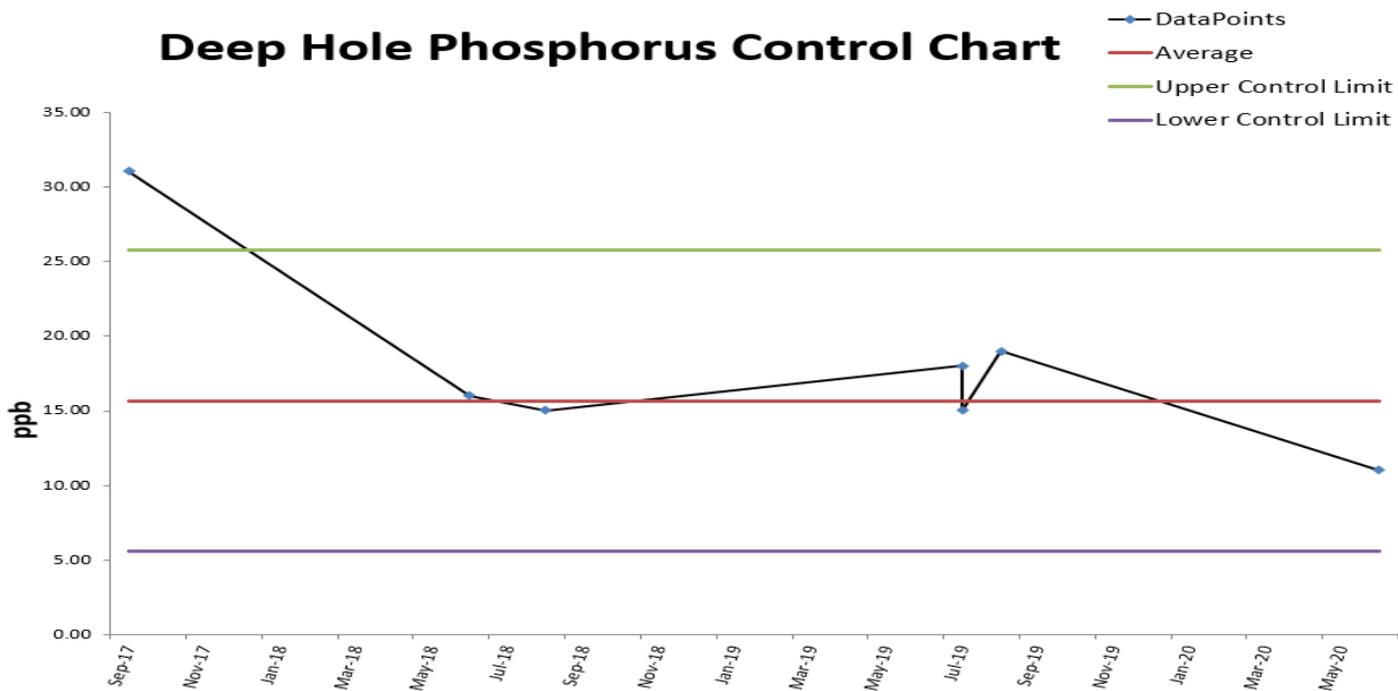
Deep Hole Clarity Control Chart



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** 2019 results were healthy, but down slightly to an annual average of 3 meters with no 4+ meter readings recorded

 **Little Pushaw** also had in control results for 2019 in the 3 meter range.

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** 2019 results show healthy levels of oxygen in the water, indicating continued good mixing. There was one mid August reading that indicated stratification was occurring, but it had cleared by the next reading.

 **Little Pushaw** 2019 results also show healthy levels of oxygen. There was one mid June reading that indicated stratification was starting to occur, but it had cleared by the next reading.

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** 2019 averaged 19.9 ppb, our highest annual average on record, with the best result of 15 ppb recorded in September. The June 2020 result is 17 ppb which is a good start, but still high enough to support an algae bloom.

 **Little Pushaw** averaged 17.3 ppb, an increase of about 2ppb from 2018. The first sample for 2020, however, is favorable at 11.0 ppb.