

# 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. Factors affecting clarity include recent rainfall, runoff, algae, silt and water color.
- 2016 results are improved for a fourth year, yet historically we still have an overall downward trend.
- Low clarity in Pushaw Lake may be helpful, as it inhibits light to the bottom, which is necessary for algae growth. New information indicated that it may also bind some of the phosphorus, reducing available phosphorus for algae blooms.

# 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.
- 2016 results continue to show healthy levels of oxygen in the water, consistent with historical ranges.

## Phosphorus: the lower the better

- Measure of phosphorus content in the water. Factors affecting phosphorus levels include rainfall/runoff, faulty septic systems, lakeside hygiene, shoreline buffer removal, etc.
- ◆ 2016 numbers were the highest, averaging 19.3 ppb, since 2009, but are still statistically "in control". We had 4 sample dates in 2016 with results higher than 20 ppb. Phosphorus levels in the mid teens (parts per billion) are high enough to support an algae bloom.

#### Don't Bury Your Head in the Sand (or the algae)!

The continued increase in phosphorus testing results needs to be a wakeup call to us all. We can all choose to ignore the issue, but we will also all suffer the consequences of an algae bloom in Pushaw Lake. Think about how an algae boom would affect your recreational activities on and in the water. Then, please take the time to look how you can decrease runoff into the lake from your property. Plant a buffer and stop using fertilizer. If you have a boat ramp, consider installing a rubber razor diverter. Do your part to help reverse the trend. Contact GPLA for more information.