

FARM LAKE

| | Transparency (metres) | Phosphorus (micrograms/litre) | Chlorophyll (micrograms/litre) | Dissolved Organic Carbon (milligrams/litre) |
|------|--------------------------|----------------------------------|-----------------------------------|--|
| 2010 | 6.1 | 4.1 | 1.9 | 2.7 |
| 2011 | 5.3 | 5.3 | 2.5 | 3.0 |
| 2012 | 5.8 | 2.2 | 1.7 | 3.6 |
| 2013 | 5.6 | | | |
| 2014 | 5.3 | | | |
| 2015 | 5.8 | | | |
| 2016 | 5.2 | | | |
| 2017 | 4.8 | | | |
| 2018 | 5.3 | | | |
| 2019 | 5.3 | 3.8 | 1.3 | 4.3 |
| 2020 | 5.9 | 3.3 | 1.5 | 4.4 |
| 2021 | 5.4 | 3.4 | 1.5 | 3.0 |

Brief Summary of 2021 Results

- Transparency of 5.4 metres characterizes clear water and indicates an oligo-mesotrophic state;
- Phosphorus level indicates that the lake is only slightly enriched by phosphorus (ultra-oligotrophic);
- Chlorophyll level shows a low biomass of microscopic algae in suspension (oligotrophic);
- Dissolved organic carbon level indicates that the water is slightly coloured (from organic deposits) and this colour would have minimal effect on the transparency of the water;
- Overall, Farm Lake is considered to be in an **oligotrophic** state with little or no signs of eutrophication. This is the second best out of the seven classifications of trophic levels.

The Government of Quebec uses a scale of 7 different classes along a spectrum from "ultra-oligotrophic" (1), which indicates a lake of exceptional quality, to "hyper-eutrophic", which indicates a lake in serious trouble (7).

Seven Classifications of Trophic Level of Lakes:

1 = Ultra-oligotrophic (exceptionally good state)

- 2 = Oligotrophic
- 3 = Oligo-mesotrophic
- 4 = Mesotrophic
- 5 = Meso-eutrophic
- 6 = Eutrophic
- 7 = Hypereutrophic (extremely poor state)