

MCCUAIG LAKE

	Transparency (metres)	Phosphorus (micrograms/litre)	Chlorophyll (micrograms/litre)	Dissolved Organic Carbon (milligrams/litre)
2010	7.0	6.7	1.0	2.0
2011	6.2	2.7	0.9	1.8
2012	7.2	1.6	0.8	2.3
2013	6.4			
2014	6.3			
2015	6.9			
2016	----			
2017	----			
2018	7.5*			
2019	6.1	4.2	0.7	3.1
2020	6.9	3.9	0.8	1.9
2021	7.7	2.9	0.6	1.8

*Only one Secchi disk measurement taken (September 2018).

Brief Summary of 2021 Results:

- Transparency of 6.9 metres characterizes very clear water (oligotrophic);
- Phosphorus level indicates that the lake has only very slight signs of enrichment by phosphorus (ultra-oligotrophic);
- Chlorophyll level shows a very low biomass of microscopic algae in suspension (ultra-oligotrophic);
- Dissolved organic carbon level indicates that the water is slightly coloured (from organic deposits) but this colour would likely have very little effect on the transparency of the water;
- Overall, McCuaig Lake is placed in the **ultra-oligotrophic** state with little or no signs of eutrophication. This is the very 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", which indicates a lake of exceptional quality, to "hyper-eutrophic", which indicates a lake in serious trouble.

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)