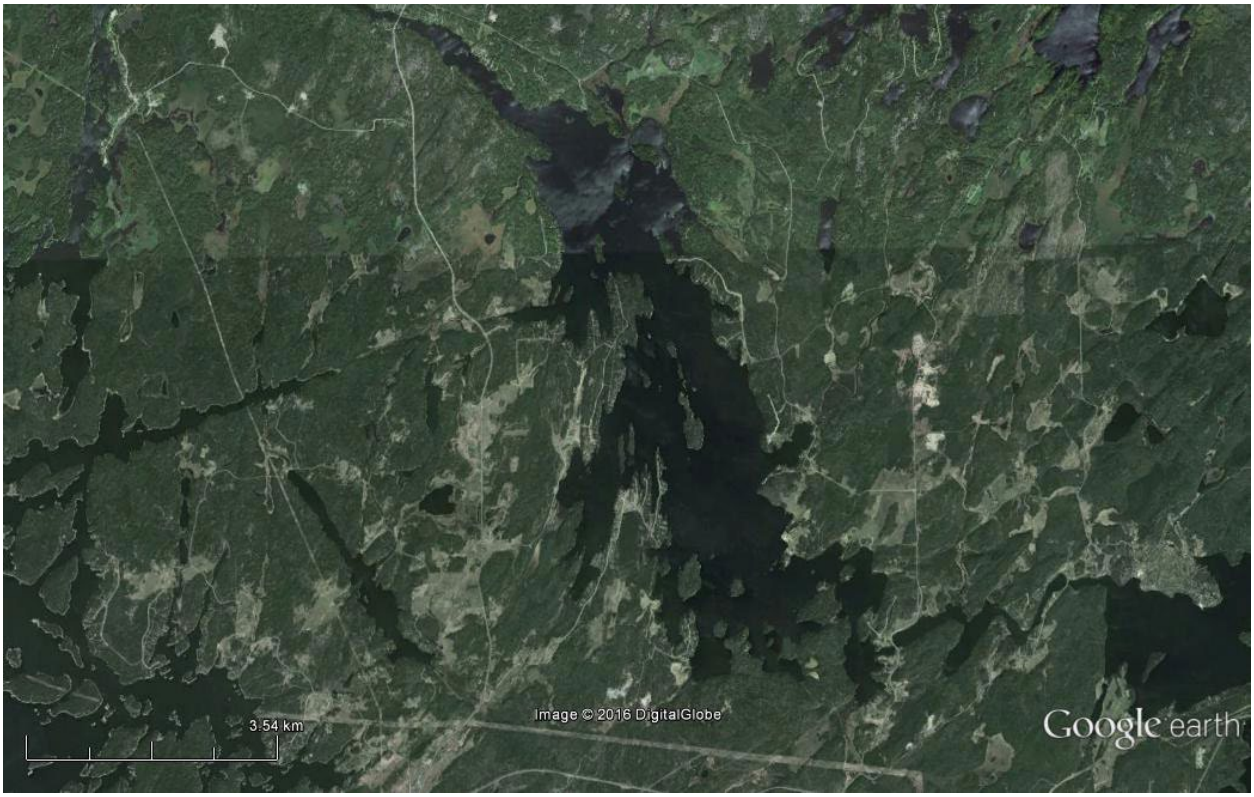
KENORA RESOURCE CONSULTANTS



BLACK STURGEON LAKES WATER QUALITY MONITORING

2022 REPORT

Prepared by:

Kenora Resource Consultants Inc.
Site 155, Compartment 14, RR #1
Kenora, ON
P9N 3W7

807-465-5689

Ryan Haines, M.Sc., RPP, MCIP
Planner and Biologist
ryan.haines@kenoraconsultants.com

Satellite images, aerial photographs, and the figures produced from them in this report are intended for illustration purposes only and shall not be considered as official plans or drawings.

Table of Contents

LIST OF FIGURES

1.0 BACKGROUND

In the fall of 2007, the City of Kenora was presented with the results of the *Lake Capacity and Management Study for Black Sturgeon Lake*. One of the recommendations of this study was to conduct a water quality assessment on Lower Black Sturgeon Lake for two consecutive years to establish baseline data and then once every five years to monitor changes to the water quality in the lake. Based on the results of the 2009, 2010, and 2015 sampling seasons, it was recommended by the consultant (Kenora Resource Consultants Inc.) that annual sampling focussing on one spring sampling session and one late summer sampling session would provide a more effective monitoring program than the original project design of 10 sampling sessions conducted every five years.

In 2009 and 2010, the City of Kenora awarded the contract to conduct the baseline data work for the first two years of water quality monitoring on Black Sturgeon Lakes to Ryan Haines Consulting. From 2015 to 2022, the water quality assessment contract was awarded annually to Kenora Resource Consultants Inc. (note – Ryan Haines Consulting was incorporated into Kenora Resource Consultants Inc. in 2012).

The summer of 2022 was characterized by high water levels throughout the region. Significant rains and snowmelt in the early spring resulted in high water levels in Black Sturgeon Lakes in the spring and throughout most of the summer (Figure 1).

Figure 1 – High water levels in spring of 2022 (view of Thatcher Road boat launch in May)

2.0 METHODOLOGY

Two sampling sessions were conducted during the 2022 season, a spring session on May 23rd and a late summer session on August 24th. Water samples were taken at two locations on Lower Black Sturgeon Lake and one location at Upper Black Sturgeon during each sampling session. Sample locations on Lower Black Sturgeon correspond to sites identified in the *Lake Capacity and Management Study for Black Sturgeon Lake*. A site on the western end of Upper Black Sturgeon Lake was added during the 2010 sampling season to help to better understand potential sources of the higher nutrient levels found at the upstream site on Lower Black Sturgeon during the 2009 sampling season.

The selection of the site locations has been designed to determine the impacts of development on the water quality of Black Sturgeon Lakes. Site 2 is located at the outlet of Black Sturgeon Lakes into the Winnipeg River, Site 3 is located at the inlet of Black Sturgeon Creek into Lower Black Sturgeon Lake, and Site 4 is located at the outlet of Upper Black Sturgeon Lake (Figure 2) into Black Sturgeon Creek. Site 2 is the main sampling location used to assess the impacts of development on water quality because the new and proposed developments on Lower Black Sturgeon Lake are occurring upstream of this site.

All fieldwork was conducted from a small motorboat with a sonar unit mounted to the stern. At each sampling site, an anchor was used to keep the boat in one location.

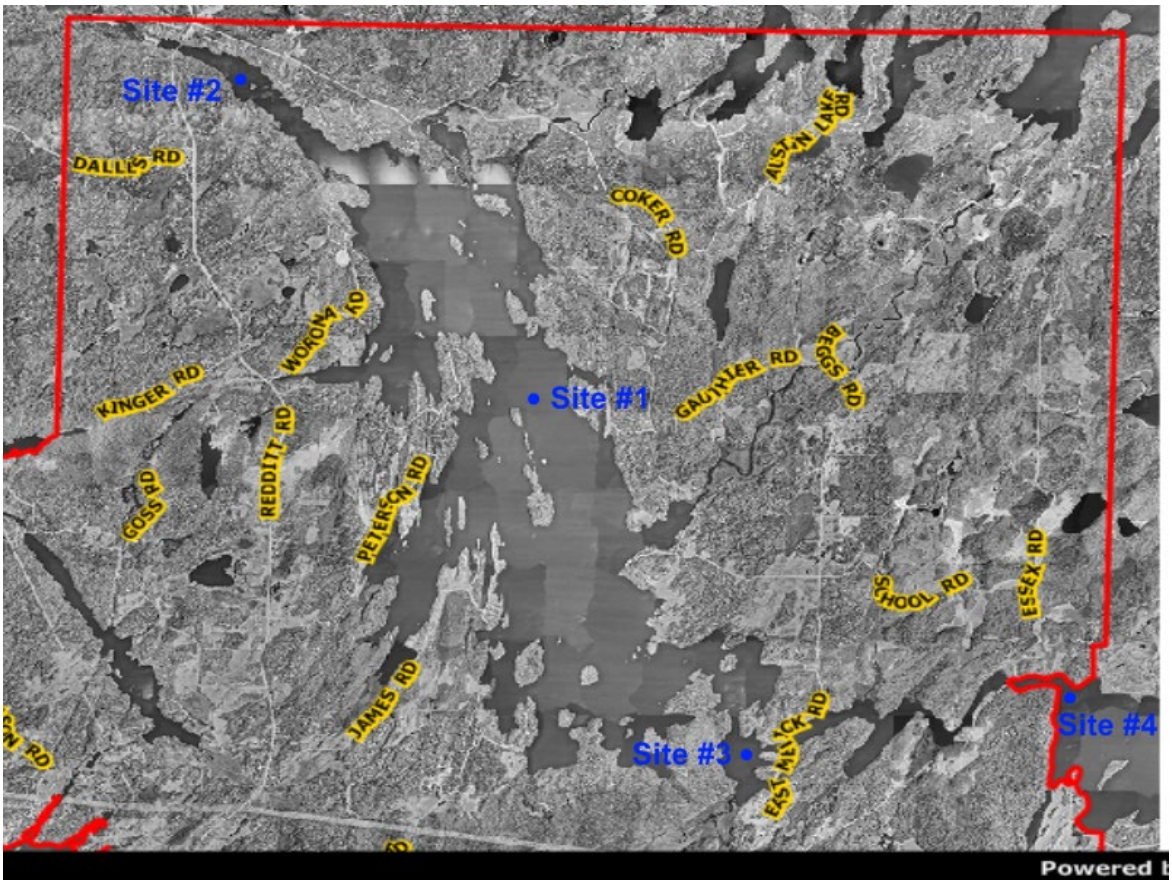


Figure 2 – Sampling Sites for Water Quality Monitoring on Black Sturgeon Lakes

2.1 Spring Sampling

During the spring sampling session, the focus was on the euphotic zone (surface water) sampling to capture spring turnover or mixing of the lake. The spring fieldwork consisted of recording Secchi depths and collecting euphotic zone composites at sites #2, #3, and #4. During the 2022 field season, spring euphotic zone composite samples were also collected from site #1 as well as the middle of the basin of Upper Black Sturgeon Lake for submission to the Ministry of the Environment, Conservation, and Parks (MECP) laboratory in Dorset as part of the Lake Partner Program. Results from the Lake Partner Program were not available when this report was submitted and will be provided in an addendum at a future date.

Secchi depth was determined at each site by lowering a Secchi disk (20-cm disk with alternating black and white quadrants) over the shaded side of the boat (Figure 3). The disk was lowered until the observer could no longer distinguish between the white and black quadrants and then raised until the disk came back into view. This was repeated three times and then the depths at which the disk disappeared and then reappeared were averaged to give the Secchi depth.

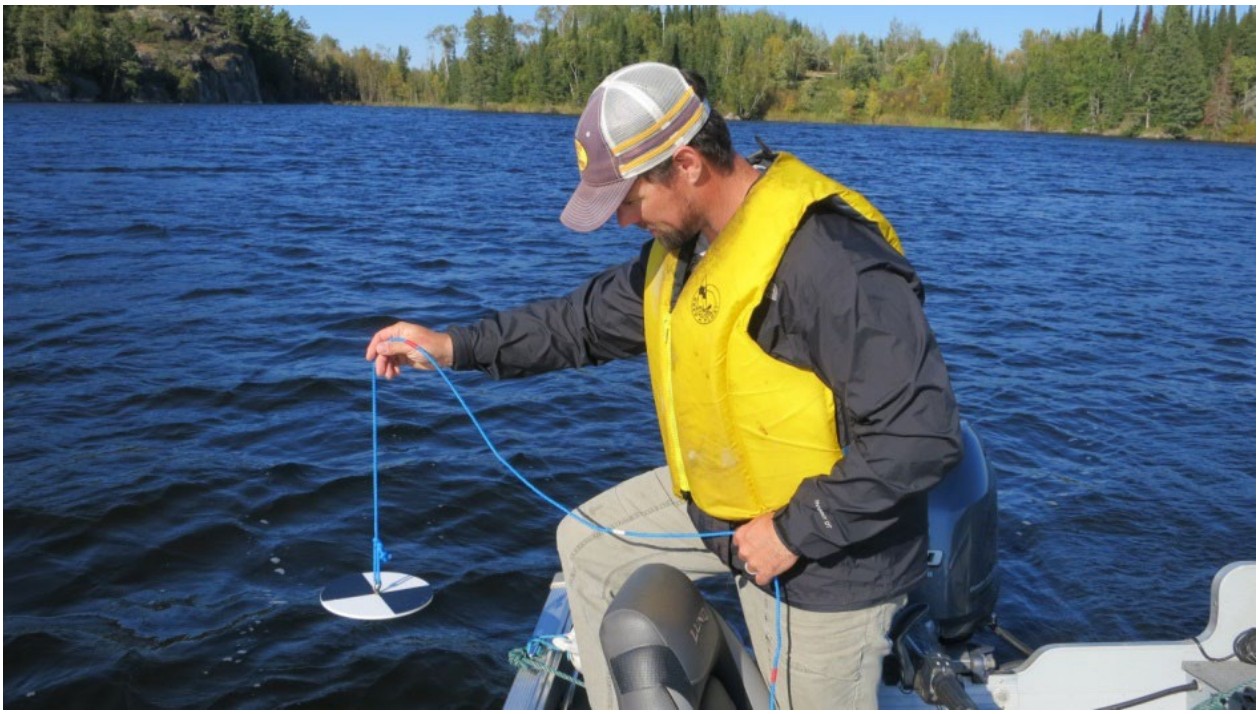


Figure 3 – Lowering of Secchi disk

The euphotic zone is the section of the water column where enough light penetrates to facilitate algae growth (measured as 2X the Secchi depth). In order to obtain a water sample containing water from the euphotic zone, a weighted, 500 mL, small neck bottle was lowered with a rope in the water column to a depth of 2X Secchi depth then quickly brought to the surface. The euphotic composite water was then transferred to the sample bottle provided by the laboratory for shipping (Figure 4). For the two Lake Partner Program sampling sites, the water was filtered with an 80-micron filter as it was poured into the sampling bottles.

Figure 4 – Transferring water sample from euphotic zone composite into lab sample bottle

2.2 Late Summer Sampling

Late summer sampling included all of the fieldwork conducted during the spring (Secchi depths and euphotic zone composite water sampling), but with the addition of temperature/oxygen profiles and bottom water column samples to measure the impacts of the summer thermal stratification and oxygen depletion on water quality.

Temperature/oxygen profiles were obtained at Sites #1, #2, #3, and #4 during the late summer sampling session using a YSI 55 Dissolved Oxygen Meter. These can be found in Appendix 2.

During the later summer sampling session, an additional water sample was taken at sites #2, #3, and #4 approximately one meter from the bottom of the lake using a Beta horizontal water sampler (Figure 5). Both ends of the water sampler were opened prior to lowering it (using a rope) to the desired water depth. At the desired depth, a small weight (messenger) was sent down through the water column along the length of the rope triggering a release mechanism on the sampler and causing the sampler caps to close.

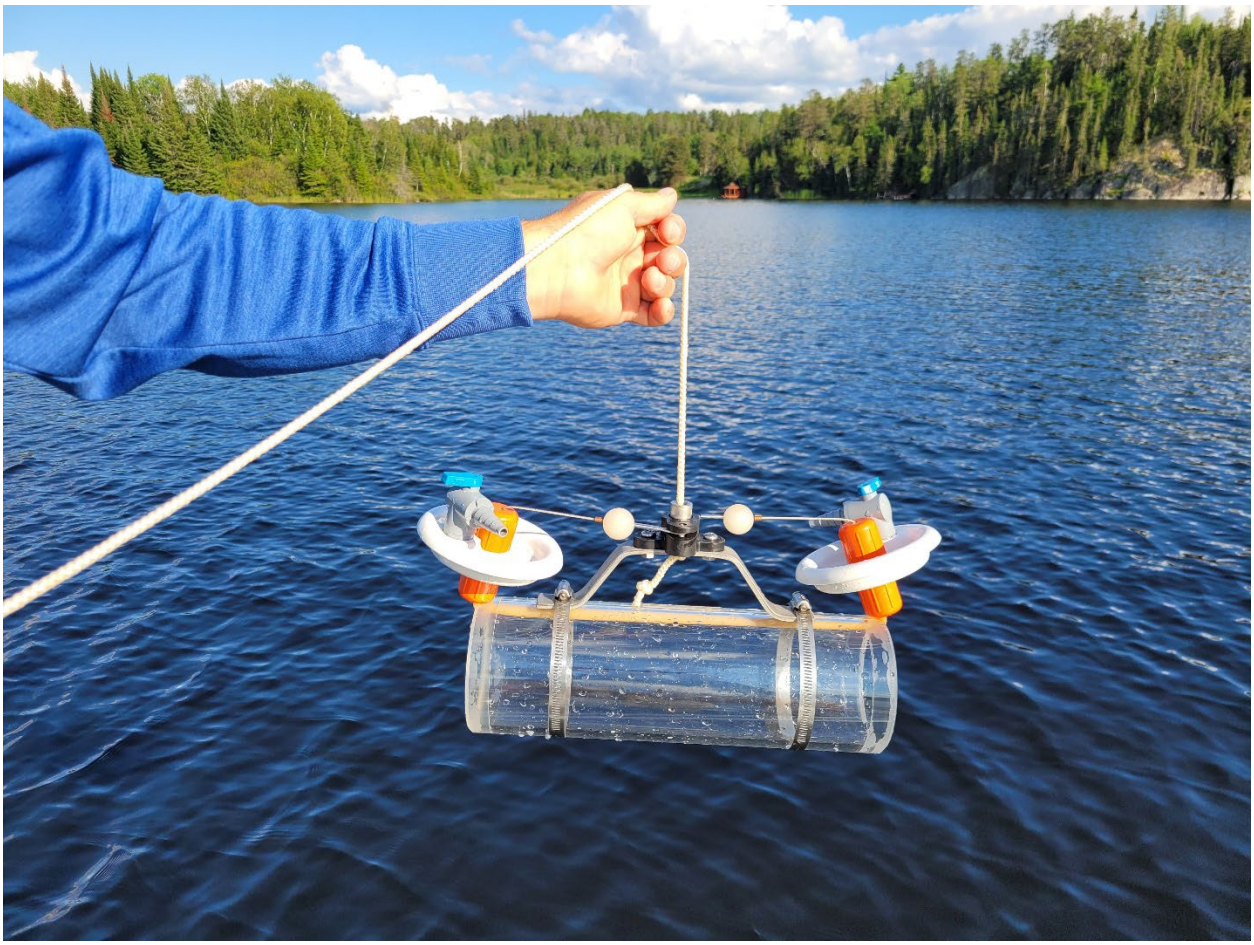


Figure 5 – Horizontal Beta Sampler prior to deployment

All water samples collected were transferred immediately upon collection to sample bottles for analysis at a laboratory. Samples were delivered by vehicle to the ALS Laboratory Group in Winnipeg, MB, for analyses.

3.0 RESULTS

3.1 Sampling Session Dates and Locations

The 2022 sampling sessions were conducted on May 23rd and August 24th. The depth of the sampling sites was 27.8 m for Site #1, 15.4 m for Site #2, 10.1 m for Site #3, and 7.1 m for Site #4.

3.2 Total Phosphorous

During 2022, the spring turnover euphotic zone phosphorous concentrations taken at Site 2 (0.0154 mg/L), Site 3 (0.0182 mg/L), and Site 4 (0.0166 mg/L) were all below the provincial water quality objective (PWQO) of 0.0200 mg/L (Figure 6).

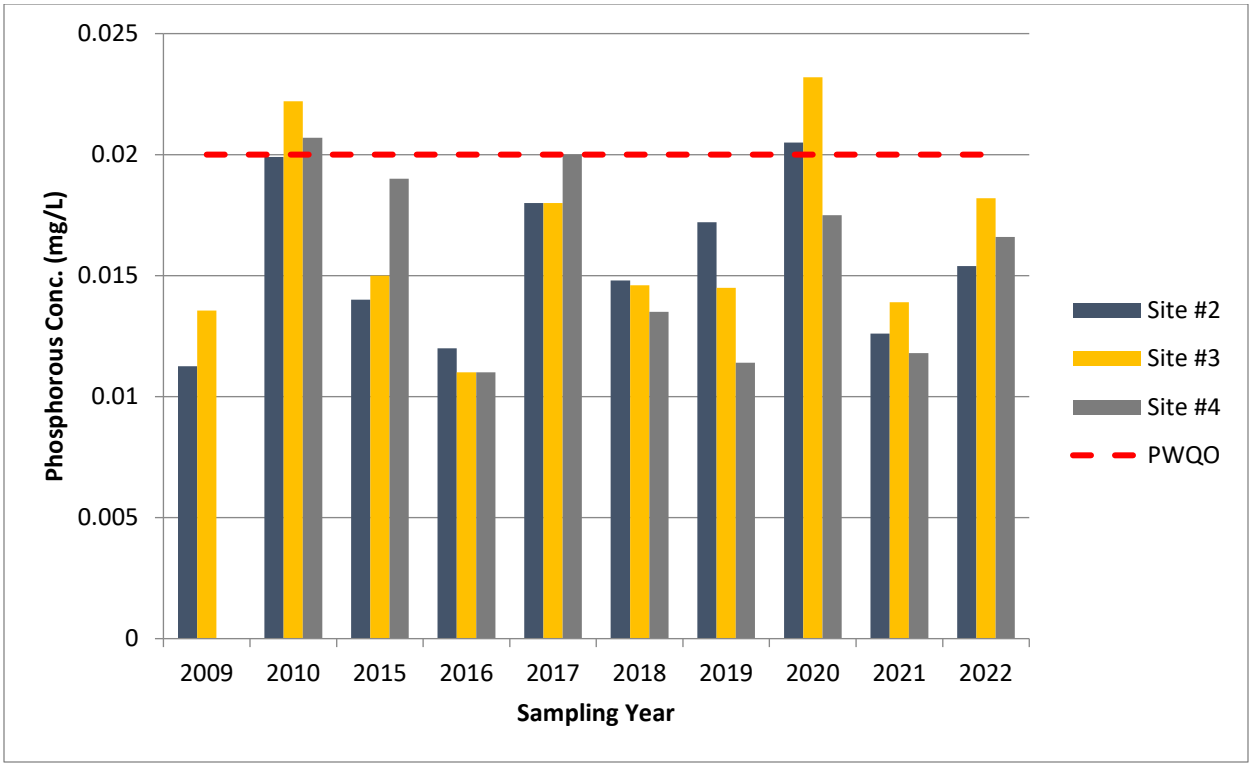


Figure 6 – Spring Turnover Total Phosphorous Concentrations for Three Sampling Sites on Black Sturgeon Lakes from 2009 to 2022.

3.3 Chemical Analyses - Water Quality Characteristics

The spring turnover water samples were analyzed for 54 parameters encompassing dissolved organic carbon, colour, pH, alkalinity, turbidity, and scans for cations/anions and trace metals. The 2022 results for Site 2 (outlet of Black Sturgeon Lakes and downstream of new development activities) were comparable to the results for the 2010, 2015, 2016, 2017, 2018, 2019, 2020 and 2021 analyses and were all within the provincial water quality objectives (PWQO) for the parameters where an objective is provided. The full results can be found in Appendix 1.

The results at Site #2 in 2022 were the lowest to date for three parameters; total alkalinity (15.9 mg/L), potassium (0.885 mg/L), strontium (0.0209 mg/L), and highest for six parameters; fluoride (0.047 mg/L), aluminium (0.0736 mg/L), iron (0.126 mg/L), tellurium (0.00024 mg/L), titanium (0.00202 mg/L), and total organic carbon (8.47 mg/L).

3.4 Thermocline Comparison – 2009 to 2022

The depth of the thermocline in late summer 2022 at Site 1 (deep spot in Lower Black Sturgeon Lake) was between 7 m and 10 m. This was within the range found during the late summer sampling sessions from 2009 to 2021 (Figure 7).

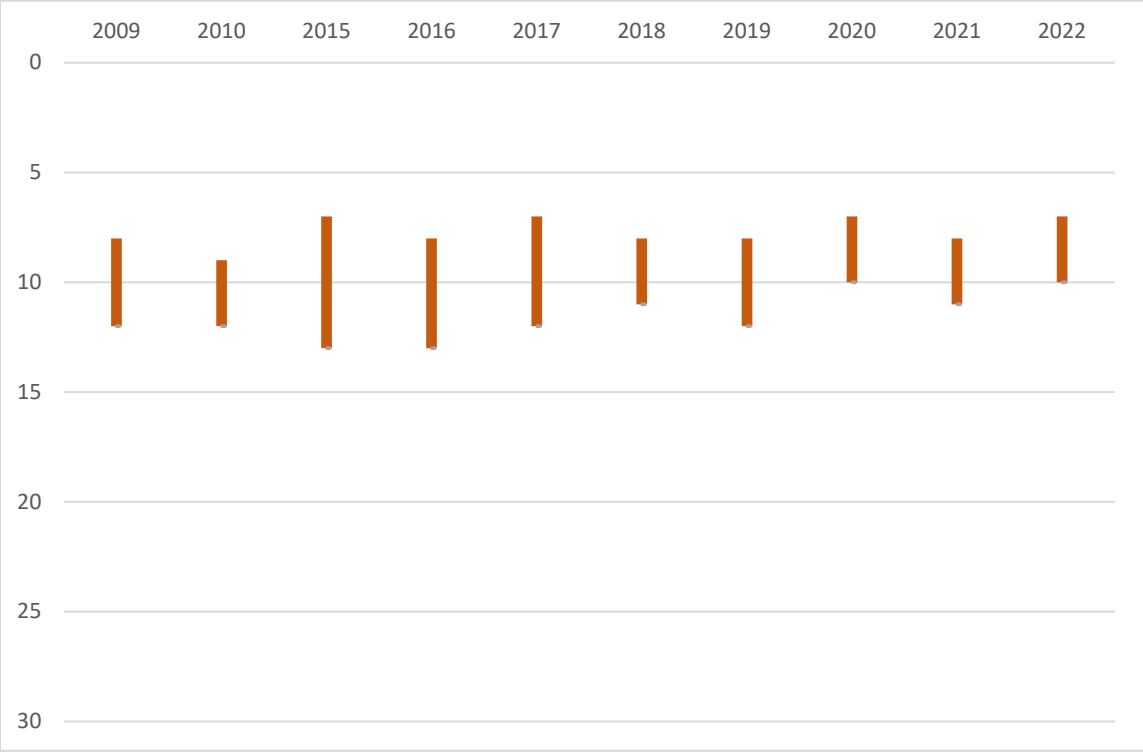


Figure 7 – Depth of thermocline during late summer sampling session at Site 1 – 2009 to 2022

4.0 DISCUSSION

4.1 Total Phosphorous

The total phosphorous readings that are of the most interest for water quality analyses are the ones taken during spring turnover. The reason for this is that turnover is when the phosphorous is mixed throughout the water column and provides an indication of overall phosphorous concentrations in the waterbody. Spring turnover is also when past phosphorous concentrations (i.e. Lake Partner Program) have been measured, which enables analysis of trends over time using a larger database over a longer time period.

The Ontario provincial water quality objective for total phosphorous concentrations is less than 20 µg/L (0.02 mg/L) "to avoid nuisance concentrations of algae in lakes" (MOE 1994). The 2022 spring sampling results for phosphorous concentrations were all below the provincial water quality objective (PWQO) of 0.0200 mg/L: Site #2 (0.0154 mg/L), Site #3 (0.0182 mg/L), and Site 4 (0.0166 mg/L).

The third sampling site on Upper Black Sturgeon Lake (site #4) was added for the 2010 and subsequent sampling seasons to help determine the potential source of higher levels of phosphorous found at the inlet of Black Sturgeon Lake (site #3) when compared to the outlet (site #2). Consistent with previous

years, during the 2022 sampling season it was found that Lower Black Sturgeon had greater concentrations of phosphorous entering the water body at site #3 than leaving it at site #2. This indicates that there was a source of phosphorous in the wetland area and/or development area between Upper and Lower Black Sturgeon Lakes. The data shown in Figure 6 indicates that the area between Upper and Lower Black Sturgeon Lakes was acting as a sink (phosphorous concentrations are higher at the outlet of Upper Black Sturgeon Lake (site #4) when compared to the inlet of Lower Black Sturgeon Lake (site #3)) in 2015 and 2017, as a source (phosphorous concentrations are lower at the outlet of Upper Black Sturgeon Lake (site #4) when compared to the inlet of Lower Black Sturgeon Lake (site #3)) in 2010, 2018. 2019, 2020, and 2021. The inlet and outlet of the area between the two lakes had a neutral balance in 2016.

4.2 Chemical Analyses - Water Quality Characteristics

The spring turnover water samples were analyzed for 54 parameters and these were all within the provincial water quality objectives (PWQO) for the parameters where an objective is provided.

The results at Site #2 in 2022 were the lowest to date for three parameters; total alkalinity (15.9 mg/L), potassium (0.885 mg/L), strontium (0.0209 mg/L), and highest for six parameters; fluoride (0.047 mg/L), aluminium (0.0736 mg/L), iron (0.126 mg/L), tellurium (0.00024 mg/L), titanium (0.00202 mg/L), and total organic carbon (8.47 mg/L). Given the high water levels observed during the spring sampling season, which were definitely significanly higher than the levels observed during previous sampling sessions, it is not surprising that several of the parameters analyzed were also at the extremes of levels found during previous years. It is not felt that the results for the 2022 water quality characteristics are indicative of any impacts due to recent or historical development within the City of Kenora on Black Sturgeon Lakes.

4.3 Thermocline

The establishment of the thermocline in the summer months will restrict mixing and oxygen supply into the hypolimnion (lower depths of the water column). If the length of time that the thermocline persists extends due to climate change, this can result in anoxic (very low oxygen) conditions near the lake bottom. Anoxic conditions will cause a break down of the oxygen microzone at the water-sediment interface, which results in a resuspension nutrients, including phosphrous, stored in the bottom sediment. For this reason, collection of the dissolved oxygen-temperature profile at the deepest part of the lake can provide insights into the potential impacts of climate change on water quality. While the duration of the thermocline persistence throughout the open water season is the best indicator of impact, a snapshot (or point in time) look at the depth and thickness of the thermocline can provide indications of long-term climate change impacts.

An analysis of the depth and thickness of the thermocline observed during the later summer sampling session from 2009 to 2022 indicates that the climate change over this time period is not contributing to negative impacts in water quality in Lower Black Sturgeon Lake.

5.0 SUMMARY

The phosphorous levels at Site #2, Site #3, and Site #4 are below the 0.02 mg/L provincial water quality objective (PWQO). This is the tenth year of water sampling on Black Sturgeon Lakes and the phosphorous results have been below the PWQO for eight of these years, including the past two sampling seasons.

The 2022 sampling results for sites #2, #3, and #4 for the full suite of water quality parameters were all within the PWQO for the parameters where an objective is provided.

The results collected and analyzed as part of the Black Sturgeon Lakes water sampling program from 2009 to 2022 do not provide any indicators of negative impacts of development activities on water quality within Lower Black Sturgeon Lake.

6.0 REFERENCES

Gartner Lee Ltd. and Kelli Saunders Environmental Management. October 2007. *Lake Capacity and Management Study for Black Sturgeon Lake, City of Kenora*.

Ministry of the Environment. 2015a. Lake Partner Total Phosphorous Data. Found on website at: http://desc.ca/programs/lpp

Ministry of the Environment. 2015b. Lake Partner Secchi Depth Data. Found on website at: http://desc.ca/programs/lpp

Ministry of Environment and Energy. July 1994. *Water Management: Policies; Guidelines; Provincial Water Quality Objectives of the Ministry of Environment and Energy.* Found on website at: http://www.ontario.ca/document/water-management-policies-guidelines-provincial-water-quality-objectives

Riemersma, S., Little, J., Ontkean, G., and Moskal-Hébert, T. 2006. Phosphorus sources and sinks in watersheds: A review. 82 pp. In Alberta Soil Phosphorus Limits Project. Volume 5: Background information and reviews. Alberta Agriculture, Food and Rural Development, Lethbridge, Alberta, Canada

APPENDIX 1 – 2010 TO 2022 LABORATORY RESULTS FOR WATER QUALITY CHARACTERISTICS

2010 TO 2022 Laboratory Results for Water Quality Characteristics – SITE #2 (OUTLET OF LOWER BLACK STURGEON LAKE)

Parameter	2010	2015	2016	2017	2018	2019	2020	2021	2022	Unit	PWQO
Alkalinity, Bicarbonate (HCO3)	21.3	16.8	26.5	21.2	20.5	24.4	24	20.5	19.4	mg/L	
Alkalinity, Carbonate (CO3)	<	<	<	<	<	<		<0.60	<0.60	mg/L	
Alkalinity, Hydroxide (OH)	<	<	<	<	<	<		<0.34	<0.34	mg/L	
Total Alkalinity (CaCO3)	17.5	16.8	21.7	17.4	16.8	20	19.7	16.8	15.9	mg/L	
Chloride (Cl)	<	3.76	4.16	3.86	3.83	4.35	4.09	4.37	4.24	mg/L	
Flouride (F)	0.15	0.037	0.044	0.045	0.042	0.043	0.040	0.04	0.047	mg/L	
Sulphate (SO4)	<	1.93	1.97	1.81	1.58	2.34	1.61	1.72	1.73	mg/L	
Colour, True	20	18	24.2	30.1	29	19.7	26.5	19.9	27.0	CU	
Dissolved Organic Carbon	8.7	7.5	7.78	8.14	8.84	7.73	8.17	8.2200	8.66	mg/L	
Turbidity	1.2	1.1	1.31	1.34	1.28	1.81	1.35	1.07	1.28	NTU	
pH	7.3	7.44	6.78	7.11	7.44	7.3	7.58	7.41	7.14	pH units	6.5 - 8.5
Aluminum (Al)-Total	0.044	0.0513	0.0655	0.0641	0.0452	0.0489	0.0591	0.0564	0.0736	mg/L	0.075
Antimony (Sb)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.02
Arsenic (As)-Total	<	0.00032	0.003	0.00037	0.00036	0.00042	0.00038	0.00030	0.00032	mg/L	0.005
Barium (Ba)-Total	0.00832	0.00845	0.00822	0.00808	0.00764	0.00821	0.00780	0.00796	0.00808	mg/L	n/a
Beryllium (Be)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.011
Bismuth (Bi)-Total	<	<	<	<	<	<	<	<	<	mg/L	n/a
Boron (B)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.2

Parameter	2010	2015	2016	2017	2018	2019	2020	2021	2022	Unit	PWQO
Cadmium (Cd)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.0001
Calcium (Ca)-Total	5.05	5.77	5.25	5	4.85	5.01	5.12	5.18	5.25	mg/L	n/a
Cesium (Cs)-Total	<	<	<	<	<	<	<	<	<	mg/L	n/a
Chromium (Cr)-Total	<	<	<	<	0.00023	0.00018	0.00021	0.00021	0.00021	mg/L	0.001
Cobalt (Co)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.0009
Copper (Cu)-Total	0.00073	0.00087	0.00062	0.00116	0.00088	0.00078	0.00081	0.00089	0.00087	mg/L	0.001
Iron (Fe)-Total	0.065	<	0.111	0.119	0.097	0.097	0.104	0.084	0.126	mg/L	0.3
Lead (Pb)-Total	<	0.0001	<	<	<	0.000050	0.000626	<	<	mg/L	0.001
Lithium (Li)-Total	n/a	<	<	<	0.0013	0.0012	0.0013	0.0013	<0.0010	mg/L	n/a
Magnesium (Mg)-Total	1.5	1.79	1.61	1.62	1.63	1.82	1.82	1.65	1.54	mg/L	n/a
Manganese (Mn)-Total	0.00496	0.00529	0.0151	0.0127	0.00929	0.0113	0.00859	0.00695	0.0113	mg/L	n/a
Molybdenum (Mo)-Total	<	<	<	<	0.000066	<	0.000079	<	0.000053	mg/L	0.04
Nickel (Ni)-Total	0.00048	<	<	<	0.00065	0.00057	0.00061	0.00056	0.00060	mg/L	0.025
Phosphorus (P)-Total	0.0157	0.014	0.012	0.018	0.0148	0.0172	0.0205	<0.050	<0.050	mg/L	0.02
Potassium (K)-Total	0.954	1.08	0.995	1.02	0.968	0.980	1.02	0.913	0.885	mg/L	n/a
Rubidium (Rb)-Total	0.00161	0.00202	0.00193	0.00198	0.00194	0.00189	0.00194	0.00200	0.00188	mg/L	n/a
Selenium (Se)-Total	<	<	<	<	0.000131	0.000116	0.000090	0.000098	0.000133	mg/L	0.1
Silicon (Si)-Total	1.16	0.88	1.07	1.43	0.7	0.80	1.31	1.10	1.25	mg/L	n/a
Silver (Ag)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.0001
Sodium (Na)-Total	2.53	3.25	3.07	3.04	3.1	3.27	3.48	3.50	3.12	mg/L	n/a

Parameter	2010	2015	2016	2017	2018	2019	2020	2021	2022	Unit	PWQO
Strontium (Sr)-Total	0.0219	0.0239	0.023	0.0244	0.0234	0.0231	0.0240	0.0225	0.0209	mg/L	n/a
Tellurium (Te)-Total	<	<	<	<	<	<	<	<	0.00024	mg/L	n/a
Thallium (Tl)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.0003
Thorium (Th)-Total	n/a	<	<	<	<	<	<	<	<	mg/L	n/a
Tin (Sn)-Total	<	<	<	<	<	<	<	<	<	mg/L	n/a
Titanium (Ti)-Total	0.00094	0.00124	0.00162	0.00136	0.00099	0.00091	0.00110	0.00106	0.00202	mg/L	n/a
Tungsten (W)-Total	<	<	<	<	<	<	<	<	<	mg/L	0.03
Uranium (U)-Total	<	<	<	<	0.000089	0.000072	0.000087	0.000070	0.000072	mg/L	0.005
Vanadium (V)-Total	<	0.0002	0.00022	0.00023	<	<	0.00059	<	<	mg/L	0.006
Zinc (Zn)-Total	<	<	<	<	<	<	0.0065	<	<	mg/L	0.03
Zirconium (Zr)-Total	<	<	<	<	0.000122	0.000060	<	<	<	mg/L	0.004
Nitrate	n/a	<	0.049	0.0623	<	0.0276	<	0.0074	0.043	mg/L	
Nitrate + Nitrite	0.057	<	n/a	<	<	<				mg/L	
Nitrite	n/a	<	<	<	<	<	<	<	<	mg/L	
Total Kjeldahl Nitrogen	n/a	0.37	0.35	0.38	0.29	0.58	0.42	0.33	0.41	mg/L	
Total Nitrogen Calculated	n/a	0.37	n/a	0.38	0.29	0.58	0.42	0.33	0.41	mg/L	
Total Organic Carbon			8.14	7.84	8.11	7.57	8.41	8.18	8.47	mg/L	
Phosphorus (P)-Total	0.0157	0.014	0.012	0.018	0.0148	0.0172	0.0205	0.0126	0.0154	mg/L	0.02
UV Transmittance			58.6	55.1	54.7	60.3	56.0	60.3	57.4	% T	

Parameter	2010	2015	2016	2017	2018	2019	2020	2021	2022	Unit	PWQO
Total Dissolved Solids			52	42.6	45.3	39	40.9	27.6	32.0	mg/L	
Langelier Index 4C			-2.7	-2.5	-2.2	-2.2	-2	-2.2	-2.5		
Langelier Index 60C			-1.9	-1.7	-1.4	-1.5	-1.2	-1.4	-1.7		
Hardness Calculated	18.8		19.7	19.2	18.9	20	20.3	19.7	19.4	mg/L	
Conductivity	52.6		57.3	56.4	53.2	54.6	53.9	56.3	54.7	umhos/cm	
Ammonia (total)				<	<	<	<	<	<		
Bromide in Water by IC			<		<	<	<	<	<	mg/L	

< - concentrations are below the laboratory detection limit

PWQO – Provincial Water Quality Objective

APPENDIX 2 – DISSOLVED OXYGEN/TEMPERATURE PROFILE RESULTS AND SECCHI DEPTHS FOR 2022 LATE SUMMER SAMPLING SESSION

Site 1

Secchi Depth (m)	B.P. (mmHg)	Time	Depth (m)
	769.0	18:58	29.6

Depth	Temp	DO (%)	DO (mg/L)
0.5	23.6	96.1	8.16
1	23.6	96.1	8.15
2	23.6	95.4	8.10
3	23.2	92.8	7.98
4	22.6	89.3	7.75
5	22.3	82.0	7.03
6	21.7	73.6	6.48
7	20.7	67.4	6.03
8	18.8	56.3	5.23
9	14.9	46.8	4.71
10	13.7	42.9	4.47
11	13.0	42.4	4.51
12	11.6	43.6	4.76
13	11.1	44.2	4.86
14	10.0	44.0	4.98
15	9.4	43.6	5.00
16	9.0	42.7	4.96
17	8.9	42.8	5.01
18	8.5	42.6	4.99
19	8.2	42.2	4.98
20	8.1	41.9	4.95
21	8.0	41.4	4.91
22	7.9	40.5	4.80
23	7.8	40.0	4.74
24	7.8	39.0	4.65
25	7.7	37.2	4.44
26	7.6	34.5	4.11
27	7.6	29.1	3.46
28	7.5	28.1	3.36
29	7.5	27.1	3.24

Site 2

Secchi Depth (m)	B.P. (mmHg)	Time	Depth (m)
3.25	769.1	18:22	15.4

Depth	Temp	DO (%)	DO (mg/L)
0.5	24.0	97.7	8.22
1	24.0	98.1	8.23
2	23.2	93.7	8.00
3	22.6	88.8	7.68
4	22.2	83.0	7.24
5	21.8	77.3	6.79
6	20.9	69.7	6.22
7	20.5	65.9	5.93
8	19.1	59.0	5.46
9	17.1	51.5	4.97
10	14.3	46.0	4.70
11	11.9	41.6	4.46
12	10.6	37.4	4.16
13	10.2	34.6	3.88
14	9.9	29.4	3.30
15	9.7	23.8	2.62

Site 3

Secchi Depth (m)	B.P. (mmHg)	Time	Depth (m)
2.5	768.8	17:05	10.1

Depth	Temp	DO (%)	DO (mg/L)
0.5	23.7	88.8	7.52
1	23.7	88.3	7.49
2	23.6	88.0	7.50
3	23.2	86.1	7.37
4	23.0	78.6	6.79
5	22.7	71.7	6.18
6	21.3	34.6	3.06
7	19.7	9.3	0.84
8	17.8	5.5	0.52
9	14.9	3.8	0.39
10	12.8	3.0	0.32

Site 4

Secchi Depth (m)	B.P. (mmHg)	Time	Depth (m)
3.0	768.7	17:32	7.1

Depth	Temp	DO (%)	DO (mg/L)
0.5	25.5	98.0	7.97
1	25.3	96.8	7.96
2	24.0	95.6	8.00
3	23.7	93.1	7.90
4	23.3	89.9	7.67
5	21.6	67.1	5.91
6	20.6	56.1	5.02
7	19.7	48.0	4.33