

Water Quality Monitoring on Jack Lake, 1966-2017.

Year	Date(s)	Sample Site	Results	Misc. Details
1966	July 9	Robbins Bay	Water Temperatures (°C) - 5.4 - 22.3 Water Colour – Light Brown pH – 7.0 - 7.2	MNRF Lake Survey
		Sharpe's Bay	Water Temperatures (°C) - 5.1 - 22.0 Water Colour – Colourless pH – 6.7	MNRF Lake Survey
		Sheeps Bay	Water Temperature (°C) – 7.5 – 22.3 Water Colour – Light Brown pH – 8.1	MNRF Lake Survey
1970	Unknown	Brooks Bay	Total Phosphorus (µg/l) - 13	MOECC Program
	July 26-29	Brooks Bay (north)	Fecal Coliform (#/100 ml) – 16 Total Coliform (#/100 ml) - 79	OWRC Program
	July 26-29	Brooks Bay (west)	Fecal Coliform (#/100 ml) – 5	OWRC Program
	July 26-29	Sheeps Bay	Total Coliform (#/100 ml) - 109	OWRC Program
	July 26-29	Sharpe's Bay (north)	Fecal Coliform (#/100 ml) – 4	OWRC Program
	July 26-29	Sharpe's Bay (mid basin)	Total Coliform (#/100 ml) - 2	OWRC Program
	July 26-29	Williams Bay	Total Coliform (#/100 ml) – 4	OWRC Program
1971	Unknown	Brooks Bay	Chlorophyll a (µg/l) - 2.6 Water Clarity (m) - 4.0	MOECC Program

Year	Date(s)	Sample Site	Results	Misc. Details
1971 (cont'd)	September 1	Station 1	Alkalinity (mg/l) – 47.8 – 54.7 Dissolved Oxygen (mg/l) – 6.5 – 7.3 pH – 6.5 – 7.3 Total Dissolved Solids (mg/l) – 65 – 73 Water Colour - Colourless Water Temperatures (°C) – 6.0 - 19.2	MNRF Lake Survey
	September 1	Station 2	Alkalinity (mg/l) - 61.6 Dissolved Oxygen (mg/l) – 1.0 – 7.0 pH - 6.7 – 7.5 Total Dissolved Solids (mg/l) - 52 – 68 Water Colour – Colourless Water Temperatures (°C) – 8.0 – 19.0	MNRF Lake Survey
	September 1	Station 3	Alkalinity (mg/l) – 47.8 – 54.7 Dissolved Oxygen (mg/l) – 1.0 – 8.0 pH – 6.7 – 7.6 Total Dissolved Solids (mg/l) – 68 - 74 Water Colour – Colourless Water Temperatures (°C) – 7.0 – 19.0	MNRF Lake Survey
	September 1	Station 4	Alkalinity - (mg/l) – 47.8 – 54.7 Dissolved Oxygen (mg/l) – 1.0 – 7.0 pH – 6.7 – 8.-0 Total Dissolved Solids (mg/l)– 52 - 69 Water Colour – Colourless Water Temperatures (°C) – 8.0 – 20.0	MNRF Lake Survey
	September 1	Station 5	Alkalinity (mg/l) – 54.7 Dissolved Oxygen (mg/l) – 2.0 – 8.0 pH – 6.5 – 8.0 Total Dissolved Solids (mg/l)– 52 – 78 Water Colour – Colourless Water Temperatures (°C) – 5.0 – 20.0	MNRF Lake Survey

Year	Date(s)	Sample Site	Results	Misc. Details
1971 (cont'd)	September 1	Station 6	Alkalinity (mg/l) – 54.7 Dissolved Oxygen (mg/l) – 6.0 – 8.0 pH – 7.0 – 7.5 Total Dissolved Solids (mg/l) – 68 - 69 Water Colour – Colourless Water Temperatures (°C) – 13.0 – 21.0	MNRF Lake Survey
	September 2	Station 7	Alkalinity (mg/l) – 85.5 – 119.7 Dissolved Oxygen (mg/l) – 1.0 – 9.0 pH – 6.8 – 8.0 Total Dissolved Solids (mg/l) - 0 75 – 109 Water Colour - Colourless Water Temperatures (°C) – 4.0 – 21.0	MNRF Lake Survey
	September 2	Station 8	Alkalinity (mg/l) – 85.5 – 102.6 Dissolved Oxygen (mg/l) – 1.0 – 9.0 pH – 6.6 – 8.5 Total Dissolved Solids (mg/l) – 73 - 86 Water Colour – Colourless Water Temperatures (°C) – 6.0 – 20.3	MNRF Lake Survey
	September 2	Station 9	Alkalinity (mg/l) – 68.4 – 102.6 Dissolved Oxygen (mg/l) – 7.0 – 9.0 pH – 7.0 – 8.5 Total Dissolved Solids (mg/l) – 68 - 78 Water Colour – Colourless Water Temperatures (°C)	MNRF Lake Survey
	September 2	Station 10	Alkalinity (mg/l) – 85.5 – 102.6 Dissolved Oxygen (mg/l) – 7.0 – 9.0 pH – 7.0 – 8.5 Total Dissolved Solids (mg/l) – 70 – 74 Water Colour – Colourless Water Temperatures (°C) – 6.0 – 20.0	MNRF Lake Survey

Year	Date(s)	Sample Site	Results	Misc. Details
1974	Unknown	Brooks Bay	Chlorophyll <i>a</i> ($\mu\text{g/l}$) - 1.9 Water Clarity (m) - 3.4	MOECC Program
	Unknown	Sharpe's Bay	Chlorophyll <i>a</i> ($\mu\text{g/l}$) - 1.4 Water clarity (m) - 4.4	MOECC Program
1978	Unknown	Brooks Bay	Alkalinity (mg/l) - 38 - 45 Calcium (mg/l) - 16.6 - 20.0 Colour (Pazen U) - 30 - 90 Conductivity ($\mu\text{mhos/cm}^3$) - 104-115 Hardness (mg/l) - 48 - 53 pH - 6.71-7.82 Total Organic Carbon (mg/l) - 6.9 - 7.8 Turbidity (FTU) - 1.0 - 2.4	MOECC Program
	Unknown	Sheeps Bay	Alkalinity (mg/l) - 42 - 48 Calcium (mg/l) - 18.2 - 19.4 Colour (Pazen U) - 19 - 49 Conductivity ($\mu\text{mhos/cm}^3$) - 112 - 120 Hardness (mg/l) - 52 - 56 pH - 6.85 - 7.69 Total Organic Carbon (mg/l) - 5.8 - 6.6 Turbidity (FTU) - 1.0 - 1.9	MOECC Program
	Unknown	Robbins Bay	Alkalinity (mg/l) - 43 - 54 Calcium (mg/l) - 18.6 - 22.0 Colour (Pazen U) - 18 - 30 Conductivity ($\mu\text{mhos/cm}^3$) - 112 - 123 Hardness (mg/l) - 53 - 63 pH - 6.85 - 8.12 Total Organic Carbon (mg/l) - 5.8 - 6.3	MOECC Program

Year	Date(s)	Sample Site	Results	Misc. Details
1978 (cont'd)	Unknown	Sharpe's Bay	Alkalinity (mg/l) - 57 - 61 Calcium (mg/l) - 23 - 24 Colour (Pazen U) - 3 - 20 Conductivity (umhos/cm ³) - 131 - 140 Hardness (mg/l) - 64 - 68 pH - 7.06 - 8.43 Total Organic Carbon (mg/l) - 4.4 - 5.5 Turbidity (FTU) - 0.6 - 1.3	MOECC Program
	Unknown	McCoy Bay	Alkalinity (mg/l) - 61 - 91 Calcium (mg/l) - 24 - 35 Colour (Pazen U) - 5 - 84 Hardness (mg/l) - 67 - 98 pH - 6.74 - 8.00 Total Organic Carbon (mg/l) - 4.9 - 5.8 Turbidity (FTU) - 0.1 - 5.2	MOECC Program
	Unknown	Williams Bay	Alkalinity (mg/l) - 60 - 88 Calcium (mg/l) - 23 - 25 Colour (Pazen U) - 5 - 58 Conductivity (umhos/cm ³) - 134 - 160 Hardness (mg/l) - 65 - 70 pH - 6.83 - 8.00 Total Organic Carbon (mg/l) - 4.9 - 5.6 Turbidity (FTU) - 0.7 - 3.4	MOECC Program
1979	April 14-23	Apsley Creek	pH - 6.9 – 7.1 (mean 6.92) Water Temperatures (°C) – 3.5 – 16.4	Corbett and Powles (1986)
1982	September 1	Sharpe's Bay	Dissolved Oxygen (mg/l) - 5.9 - 10.0 MVWHDO (mg/l) – 7.39 Water Temperatures (°C) - 2.5 - 15.8	MNRF Program

Year	Date(s)	Sample Site	Results	Misc. Details
1983	July 24 – August 18	McCoy Bay (Station 3)	Alkalinity (mg/l) – 47.9 – 68.4 Dissolved Oxygen (mg/l) – 0.6 – 8.4 pH – 7.0 – 8.0 Total Dissolved Solids (mg/l) – 101.5 – 134.3 Water Temperatures (°C) – 6.0 – 24.0	MNRF Program
	July 24 – August 18	Robbins Bay (Station 4)	Alkalinity (mg/l) – 41.0 – 47.9 Dissolved Oxygen (mg/l) – 2.9 – 8.0 pH – 7.0 – 8.0 Total Dissolved Solids (mg/l) – 84.9 – 130.1 Water Temperatures (°C) – 6.0 – 25.0	MNRF Program
	July 24 – August 18	Sharpe's Bay (Station 1)	Alkalinity (mg/l) – 41.0 – 61.6 Dissolved Oxygen (mg/l) - 0.3 – 8.2 pH – 7.0 – 8.0 Total Dissolved Solids (mg/l) – 88.6 – 134.3 Water Temperatures (°C) – 5.0 – 22.0	MNRF Program
	July 24 – August 18	Williams Bay (Station 2)	Alkalinity (mg/l) - 41.0 - 54.7 Dissolved Oxygen (mg/l) – 0.8 – 8.0 pH – 7.0 – 8.0 Total Dissolved Solids (mg/l) – 84.9 – 138.7 Water Temperatures (°C) – 5.0 – 24.0	MNRF Program
	August 23	Sharpe's Bay	Dissolved Oxygen (mg/l) - 5.2 - 9.7 MVWHDO (mg/l) - 7.85 Water Temperatures (°C) – 5.0 - 22.2	MNRF Program
1986	April 24 – May 8	Misc. Spawning Sites	Water Temperatures (°C) – 10.0 – 19.0	MNRF Spring Spawning Survey

Year	Date(s)	Sample Site	Results	Misc. Details
1987	July 29	Sharpe's Bay	Dissolved Oxygen (mg/l) - 5.8 - 10.1 Water Temperatures (°C) - 7.0 - 25.0	Sampling by Dr. David Lean
	October 1	Sharpe's Bay	Dissolved Oxygen (mg/l) - 3.6 - 9.6 Water Temperatures (°C) - 5.0 - 14.8	Sampling by Dr. David Lean
1988	April 5 - 17	Apsley Creek	Water Temperatures (°C) - 4.0 - 11.0	MNRF Spring Spawning Survey
	April 6-16	Redmond Creek	Water Temperatures (°C) - 6.0 - 11.0	MNRF Spring Spawning Survey
	May 16	Sharpe's Bay	Dissolved Oxygen (mg/l) - 10.9 - 12.2 Water Temperatures (°C) - 5.0 - 14.8	Sampling by Dr. David Lean
	May 30	Sharpe's Bay	Dissolved Oxygen (mg/l) - 9.4 - 12.2 Water Temperatures (°C) - 4.9 - 19.1	Sampling by Dr. David Lean
	June 13	Sharpe's Bay	Dissolved Oxygen (mg/l) - 10.0 - 12.4 Water Temperatures (°C) - 5.0 - 17.8	Sampling by Dr. David Lean
	June 29	Sharpe's Bay	Dissolved Oxygen (mg/l) - 7.8 - 11.8 Water Temperatures (°C) - 5.0 - 18.9	Sampling by Dr. David Lean
	August 9	Sharpe's Bay	Dissolved Oxygen (mg/l) - 4.7 - 11.2 Water Temperatures (°C) - 5.1 - 25.3	Sampling by Dr. David Lean
1989	August 23	Station 1 (Sharpe's Bay)	Dissolved Oxygen (mg/l) - 5.2 - 9.3 pH - 7.0 - 9.0 Water Clarity (m) - 5.5 Water Temperatures (°C) - 5.0 - 22.2	MNRF Program

Year	Date(s)	Sample Site	Results	Misc. Details
1989 (cont'd)	August 23	Station 2	Dissolved Oxygen (mg/l) – 0.2 – 9.1 pH – 6.5 – 8.5 Water Clarity (m) – 5.0 Water Temperatures (°C) – 5.9 – 22.1	MNRF Program
	August 23	Station 3	Dissolved Oxygen (mg/l) – 0.0 – 10.0 pH – 6.5 – 8.0 Water Clarity (m) – 6.0 Water Temperatures (°C) – 4.5 - 23.0	MNRF Program
	August 23	Station 4	Dissolved Oxygen (mg/l) – 2.4 – 9.0 pH – 6.5 – 8.0 Water Temperatures (°C) – 6.0 – 22.9	MNRF Program
	August	Station 5	Dissolved Oxygen (mg/l) – 0.0 – 9.0 pH – 6.5 – 8.0 Water Clarity (m) – 5.5 Water Temperatures (°C) – 9.9 – 24.0	MNRF Program
1995	August 2	Sharpe's Bay	Dissolved Oxygen (mg/l) - 2.41 - 10.12 Water Temperatures (°C) - 5.7 - 25.3	MOECC Program
	August 19	Sharpe's Bay	Dissolved Oxygen (mg/l) - 0.78 - 10.07 MVWHDO (mg/l) – 8.74 Water Temperatures (°C) - 5.7 - 25.8	MOECC Program
	September 16	Sharpe's Bay	Dissolved Oxygen (mg/l) - 0.11 - 8.56 MVWHDO (mg/l) – 6.35 Water Temperatures (°C) - 5.7 - 18.3	MOECC Program

Year	Date(s)	Sample Site	Results	Misc. Details
1996	Spring	North end basin	Total Phosphorus ($\mu\text{g/l}$) - 8.0 Water Clarity (m) - 3.3	Lake Partner Program
		Sharpe's Bay	Total Phosphorus ($\mu\text{g/l}$) - 6.0 Water Clarity (m) - 4.6	Lake Partner Program
1997	Spring	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 8.0 Water Clarity (m) - 3.0	Lake Partner Program
1998	Spring	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 14.0 Water Clarity (m) - 3.4	Lake Partner Program
1999	Spring	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 8.0 Water Clarity (m) - 3.8	Lake Partner Program
2000	Spring	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 8.0 Water Clarity (m) - 5.3	Lake Partner Program
2001	Spring	North end basin	Total Phosphorus ($\mu\text{g/l}$) - 9.0 Water Clarity (m) - 2.9	Lake Partner Program
		Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 8.0 Water Clarity (m) - 3.5	Lake Partner Program
2002	May 5	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 14.1 - 14.3 Water Clarity (m) - 3.4	Lake Partner Program
2003	June 8	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 10.3 - 10.5 Water Clarity (m) - 2.8	Lake Partner Program
2004	June 4	Brooks Bay (Snake Island)	Total Phosphorus ($\mu\text{g/l}$) - 11.3 - 12.7 Water Clarity (m) - 4.5	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2004 (cont'd)	July 2	Sharpe's Bay	Total Phosphorus (mg/l) - 7.8 - 8.0	Lake Partner Program
	August 2	North end basin	Total Phosphorus (mg/l) - 6.8 - 8.0	Lake Partner Program
2005	May 8	Brooks Bay Snake Island)	Total Phosphorus (µg/l) - 12.7 - 17.0 Water Clarity (m) - 2.0 Water Temperature (°C) - 10.0	Lake Partner Program
	May 8	Sharpe's Bay	Total Phosphorus (µg/l) - N/A Water Clarity (m) - 6.1	Lake Partner Program
	June 11	Brooks Bay	Water Clarity (m) - 4.7 Water Temperature (°C) - 24.0	Lake Partner Program
	June 26	Brooks Bay	Water Clarity (m) - 4.5 Water Temperature (°C) - 24.0	Lake Partner Program
	June 26	Sharpe's Bay	Water Clarity (m) - 7.0	Lake Partner Program
	July 9	Brooks Bay	Water Clarity (m) - 5.25 Water Temperature (°C) - 24.0	Lake Partner Program
	July 9	Sharpe's Bay	Water Clarity (m) - 7.0	Lake Partner Program
	July 30	Brooks Bay	Water Clarity (m) - 6.5 Water Temperature (°C) - 26.0	Lake Partner Program
	July 30	Sharpe's Bay	Water Clarity (m) - 5.5	Lake Partner Program
	August 4	Sharpe's Bay	Water Clarity (m) - 6.0	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2005 (cont'd)	August 9	Brooks Bay	Water Clarity (m) – 5.5 Water Temperature (°C) – 27.0	Lake Partner Program
	September 4	Brooks Bay	Water Clarity (m) – 6.0 Water Temperature (°C) – 22.0	Lake Partner Program
	September 4	Sharpe's Bay	Water Clarity (m) – 6.5	Lake Partner Program
	September 30	Brooks Bay	Water Clarity (m) – 3.1 Water Temperature (°C) – 8.5	Lake Partner Program
	October 30	Sharpe's Bay	Water Clarity (m) – 5.25	Lake Partner Program
2006	April 26	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 12.0 - 13.6 Water Clarity (m) - N/A	Lake Partner Program
	April 26	Callahan Bay	Total Phosphorus (µg/l) - 10.9 - 11.6 Water Clarity (m) - 4.8	Lake Partner Program
	April 26	Sharpe's Bay	Total Phosphorus (µg/l) - 8.3 Water Clarity (m) - 6.5	Lake Partner Program
2007	April 28	Brooks Bay	Water Clarity (m) – 3.0 Water Temperature (°C) – 10.5	Lake Partner Program
	April 28	Sharpe's Bay	Water Clarity (m) – 6.25 Water Temperature (°C) – 7.9	Lake Partner Program
	May 13	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 6.9 - 7.2 Water Clarity (m) - 5.1	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2007 (cont'd)	May 13	Sharpe's Bay	Total Phosphorus (µg/l) - 8.0 Water Clarity (m) - 6.8	Lake Partner Program
	May 21	Brooks Bay	Water Clarity (m) - 4.5 Water Temperature (°C) - 16.0	Lake Partner Program
	May 21	Sharpe's Bay	Water Clarity (m) - 5.1 Water Temperature (°C) - 14.5	Lake Partner Program
	June 2	Brooks Bay	Water Clarity (m) - 5.5 Water Temperature (°C) - 23.5	Lake Partner Program
	June 2	Sharpe's Bay	Water Clarity (m) - 7.5 Water Temperature (°C) - 22.5	Lake Partner Program
	June 2	Williams Bay	Water Clarity (m) - 7.2 Water Temperature (°C) - 23.5	Lake Partner Program
	June 10	Brooks Bay	Water Clarity (m) - 4.7 Water Temperature (°C) - 22.0	Lake Partner Program
	June 10	Sharpe's Bay	Water Clarity (m) - 7.5 Water Temperature (°C) - 21.0	Lake Partner Program
	June 24	Brooks Bay	Water Clarity (m) - 4.5 Water Temperature (°C) - 20.5	Lake Partner Program
	June 24	Sharpe's Bay	Water Clarity (m) - 6.5 Water Temperature (°C) - 20.5	Lake Partner Program
	July 2	Brooks Bay	Water Clarity (m) - 5.5 Water Temperature (°C) - 22.0	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2007 (cont'd)	July 2	Sharpe's Bay	Water Clarity (m) – 6.0 Water Temperature (°C) – 21.0	Lake Partner Program
	July 2	Williams Bay	Water Clarity (m) – 6.0	Lake Partner Program
	July 7	Brooks Bay	Water Clarity (m) – 4.0 Water Temperature (°C) – 25.5	Lake Partner Program
	July 7	Sharpe's Bay	Water Clarity (m) – 6.9 Water Temperature (°C) – 24.1	Lake Partner Program
	July 7	Williams Bay	Water Clarity (m) – 7.0 Water Temperature (°C) – 25.5	Lake Partner Program
	July 9	Sharpe's Bay	Water Clarity (m) – 6.3	Lake Partner Program
	July 22	Brooks Bay	Water Clarity (m) – 5.1 Water Temperature (°C) – 23.0	Lake Partner Program
	July 22	Sharpe's Bay	Water Clarity (m) – 7.1 Water Temperature (°C) – 23.0	Lake Partner Program
	July 22	Williams Bay	Water Clarity (m) – 6.2 Water Temperature (°C) – 24.0	Lake Partner Program
	July 28	Brooks Bay	Water Clarity (m) – 5.5 Water Temperature (°C) – 24.0	Lake Partner Program
	July 28	Sharpe's Bay	Water Clarity (m) – 7.2 Water Temperature (°C) – 24.2	Lake Partner Program
	July 28	Williams Bay	Water Clarity (m) – 5.2 Water Temperature (°C) – 24.4	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2007 (cont'd)	July 30	Brooks Bay	Water Clarity (m) – 4.0 Water Temperature (°C) – 25.5	Lake Partner Program
	July 30	Sharpe's Bay	Water Clarity (m) – 6.9 Water Temperature (°C) – 24.1	Lake Partner Program
	July 30	Williams Bay	Water Clarity (m) – 7.0 Water Temperature (°C) – 25.5	Lake Partner Program
	August 19	Brooks Bay	Water Clarity (m) – 5.75 Water Temperature (°C) – 22.0	Lake Partner Program
	August 19	Sharpe's Bay	Water Clarity (m) – 7.0 Water Temperature (°C) – 23.0	Lake Partner Program
	August 19	Williams Bay	Water Clarity (m) – 7.0 Water Temperature (°C) – 23.0	Lake Partner Program
	September 9	Brooks Bay	Water Clarity (m) – 6.5 Water Temperature (°C) – 22.0	Lake Partner Program
	September 9	Sharpe's Bay	Water Clarity (m) – 7.75 Water Temperature (°C) – 21.0	Lake Partner Program
	September 9	Williams Bay	Water Clarity (m) – 7.5 Water Temperature (°C) – 22.0	Lake Partner Program
	September 28	Brooks Bay	Water Clarity (m) – 7.75 Water Temperature (°C) – 18.5	Lake Partner Program
	September 28	Sharpe's Bay	Water Clarity (m) – 7.2 Water Temperature (°C) – 19.0	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2007 (cont'd)	September 28	Williams Bay	Water Clarity (m) – 7.9 Water Temperature (°C) – 19.0	Lake Partner Program
	October 8	Brooks Bay	Water Clarity (m) – 5.1 Water Temperature (°C) – 17.0	Lake Partner Program
	October 8	Sharpe's Bay	Water Clarity (m) – 8.0 Water Temperature (°C) – 17.1	Lake Partner Program
	October 8	Williams Bay	Water Clarity (m) – 8.0 Water Temperature (°C) – 17.5	Lake Partner Program
2008	May 19	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 10.0 - 26.2 Water Clarity (m) - N/A	Lake Partner Program
	May 19	Sharpe's Bay	Total Phosphorus (µg/l) - 7.8 - 9.4 Water Clarity (m) - N/A	Lake Partner Program
	July 19	Sharpe's Bay	Dissolved Oxygen (mg/l) - 5.68 - 12.00 Water Temperatures (°C) - 5.26 - 23.50	MOECC Program
	October 20 - 27	Sharpe's Bay	Water Temperatures (°C) – 8.0 – 12.0	NHHS Study
2009	May 18	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 10.0 - 11.6 Water Clarity (m) - 5.1	Lake Partner Program
	May 18	Sharpe's Bay	Total Phosphorus (µg/l) - 8.5 - 9.4 Water Clarity (m) - 6.6	Lake Partner Program
	July 23	Sharpe's Bay	Dissolved Oxygen (mg/l) - 3.7 - 9.4 Water Temperatures (°C) - 6.1 - 21.1	MNRF Broad Scale Monitoring Program

Year	Date(s)	Sample Site	Results	Misc. Details
2009 (cont'd)	July 23	Williams Bay	Dissolved Oxygen (mg/l) - 0.3 - 8.9 Water Temperatures (°C) - 6.3 - 22.0	MNRF Program
	July 23	Robbins Bay	Dissolved Oxygen (mg/l) - 1.1 - 8.6 Water Temperatures (°C) - 5.7 - 21.4	MNRF Program
	September 2	Sharpe's Bay	Dissolved Oxygen (mg/l) - 2.4 - 8.7 MVWHDO (mg/l) - 5.58 Water Temperatures (°C) - 6.1 - 20.6	MOECC Program
	September 2	Robbins Bay	Dissolved Oxygen (mg/l) - 0.2 - 7.7 Water Temperatures (°C) - 5.5 - 20.5	MNRF Program
2010	April 2	Sharpe's Bay	Water Clarity (m) - 6.4 Water Temperature (°C) - 5.0	Lake Partner Program
	April 2	Williams Bay	Water Clarity (m) - 5.2 Water Temperature (°C) - 8.0	Lake Partner Program
	April 10	Brooks Bay	Water Clarity (m) - 4.7 Water Temperature (°C) - 7.5	Lake Partner Program
	April 11	Sharpe's Bay	Water Clarity (m) - 7.5 Water Temperature (°C) - 6.0	Lake Partner Program
	May 2	Mid lake (deep spot)	Total Phosphorus (µg/l) - 8.2 - 10.4	MOECC Program
	May 16	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 8.4 - 8.6 Water Clarity (m) - 4.2 Water Temperature (°C) - 13.5	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2010 (cont'd)	May 16	Sharpe's Bay	Total Phosphorus (µg/l) - 6.2 - 6.6 Water Clarity (m) - 5.4 Water Temperature (°C) - 12.5	Lake Partner Program
	May 24	Sharpe's Bay	Dissolved Oxygen (mg/l) - 8.9 - 18.8 Water Clarity (m) - 7.0 Water Temperatures (°C) - 8.9 - 12.9	Lake Partner Program
	June 20	Brooks Bay	Water Clarity (m) - 6.0 Water Temperature (°C) - 21.1	Lake Partner Program
	June 20	Sharpe's Bay	Dissolved Oxygen (mg/l) - 10.2 - 14.4 Water Clarity (m) - 6.0 Water Temperatures (°C) - 4.0 - 19.9	Lake Partner Program
	July 3	Brooks Bay	Water Clarity (m) - 3.7 Water Temperature (°C) - 21.0	Lake Partner Program
	July 4	Sharpe's Bay	Dissolved Oxygen (mg/l) - 9.8 - 14.2 Water Clarity (m) - 7.4 Water Temperatures (°C) - 4.0 - 19.2	Lake Partner Program
	July 25	Brooks Bay	Water Clarity (m) - 4.0 Water Temperature (°C) - 23.2	Lake Partner Program
	July 25	Sharpe's Bay	Dissolved Oxygen (mg/l) - 10.6 - 12.8 Water Clarity (m) - 5.5 Water Temperatures (°C) - 4.3 - 23.0	Lake Partner Program
	July 28	Sharpe's Bay	Dissolved Oxygen (mg/l) - 0.54 - 10.18 Water Temperatures (°C) - 5.90 - 24.48	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2010 (cont'd)	July 28	Williams Bay	Dissolved Oxygen (mg/l) - 0.24 - 8.41 Water Temperatures (°C) - 6.51 - 25.17	Lake Partner Program
	July 28	Robbins Bay	Dissolved Oxygen (mg/l) - 2.04 - 8.27 Water Temperatures - 5.50 - 24.65	Lake Partner Program
	August 5	Brooks Bay	Water Clarity (m) – 3.1 Water Temperature (°C) – 23.5	Lake Partner Program
	August 7	Sharpe's Bay	Dissolved Oxygen (mg/l) - 9.0 - 13.0 Water Clarity (m) – 5.3 Water Temperatures (°C) - 4.0 - 22.2	Lake Partner Program
	September 5	Brooks Bay	Water Clarity (m) – 6.8 Water Temperature (°C) – 19.0	Lake Partner Program
	September 7	Sharpe's Bay	Dissolved Oxygen (mg/l) - 5.55 - 10.86 MVWHDO (mg/l) - 7.28 Water Temperatures (°C) - 6.16 - 20.90	Lake Partner Program
	September 8	Robbins Bay	Dissolved Oxygen (mg/l) - 0.45 - 10.17 Water Temperatures (°C)	MOECC Program
2011	May 29	Brooks Bay (Snake Island)	Dissolved Oxygen (mg/l) – 9.9 – 12.7 Total Phosphorus (µg/l) - 8.2 - 10.6 Water Clarity (m) - 4.2 Water Temperature (°C) – 15.0	Lake Partner Program
	May 28	Sharpe's Bay	Dissolved Oxygen (mg/l) – 12.7 – 13.2 Total Phosphorus (µg/l) - 7.4 - 8.6 Water Clarity (m) - 6.1 Water Temperature (°C) – 15.7	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2011 (cont'd)	June 19	Brooks Bay	Dissolved Oxygen (mg/l) – 5.0 – 12.1 Water Clarity (m) – 4.7 Water Temperature (°C) – 15.4	Lake Partner Program
	June 19	Sharpe's Bay	Dissolved Oxygen (mg/l) – 12.0 – 15.2 Water Clarity (m) – 6.0 Water Temperature (°C) – 13.8	Lake Partner Program
	July 3	Sharpe's Bay	Dissolved Oxygen (mg/l) – 11.9-14.4 Water Clarity (m) – 6.0 Water Temperature (°C) – 22.9	Lake Partner Program
	July 3	Williams Bay	Dissolved Oxygen (mg/l) – 1.5 – 13.2	Lake Partner Program
	July 4	Brooks Bay	Dissolved Oxygen (mg/l) – 3.8 - 11.2 Water Clarity (m) – 3.6 Water Temperature (°C) – 24.5	Lake Partner Program
	August 3	Sharpe's Bay	Dissolved Oxygen (mg/l) – 8.0 – 15.1 Water Clarity (m) – 6.4 Water Temperature (°C) – 24.3	Lake Partner Program
	August 3	Williams Bay	Dissolved Oxygen (mg/l) – 1.75 – 14.2	Lake Partner Program
	August 4	Brooks Bay	Dissolved Oxygen (mg/l) – 1.7 – 11.2 Water Clarity (m) – 4.0 Water Temperature (°C) – 25.8	Lake Partner Program
	September 4	Sharpe's Bay	Dissolved Oxygen (mg/l) – 8.8 – 13.0 Water Clarity (m) – 6.0 Water Temperature (°C) – 21.6	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2011 (cont'd)	October 9	Brooks Bay	Dissolved Oxygen (mg/l) – 2.0 – 12.6 Water Clarity (m) – 5.4 Water Temperature (°C) – 15.1	Lake Partner Program
	October 9	Sharpe's Bay	Dissolved Oxygen (mg/l) – 8.7 – 12.6 Water Clarity (m) – 7.6 Water Temperature (°C) – 15.6	Lake Partner Program
	October 9	Williams Bay	Disssolved Oxygen (mg/l) – 12.2 – 13.6	Lake Partner Program
	November 6	Brooks Bay	Dissolved Oxygen (mg/l) – 13.0 – 15.4 Water Clarity (m) – 3.1 Water Temperature (°C) – 9.1	Lake Partner Program
	November 6	Sharpe's Bay	Disssolved Oxygen (mg/l) – 12.2 – 13.5 Water Clarity (m) – 4.5 Water Temperature (°C) – 9.5	Lake Partner Program
2012	May 21	Brooks Bay (Snake Island)	Dissolved Oxygen (mg/l) – 9.3 – 15.2 Total Phosphorus (µg/l) - 7.8 Water Clarity (m) - 4.0 Water Temperature (°C) – 16.2	Lake Partner Program
	May 21	Sharpe's Bay	Dissolved Oxygen (mg/l) – 13.8 – 17.8 Total Phosphorus (µg/l) - 4.8 Water Clarity (m) - N/A Water Temperature (°C) – 14.0	Lake Partner Program
	August 22	Main Basin (Sharpe's Bay)	Water Temperature (°C) – 6.2 – 21.6 Conductivity (µs/m) – 146 – 154 Dissolved Oxygen (mg/l) – 3.17 – 7.67 pH - 5.92 – 6.99	MOECC Program

Year	Date(s)	Sample Site	Results	Misc. Details
201 (cont'd)	September 20	Main Basin (Sharpe's Bay)	Water Temperature (°C) – 6.25 – 18.4 Dissolved Oxygen (mg/l) – 1.73 – 9.11	MOECC Program
2013	May 20	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 8.4 - 9.0 Water Clarity (m) - 2.2 Water Temperature (°C) – 18.0	Lake Partner Program
	May 20	Sharpe's Bay	Total Phosphorus (µg/l) - 6.6 - 7.2 Water Clarity (m) - 6.4 Water Temperature (°C) – 16.0	Lake Partner Program
	May 29	Brooks Bay	Water Clarity (m) - 3.7 Water Temperature (°C) – 15.0	Lake Partner Program
	May 29	Sharpe's Bay	Water Clarity (m) - 4.5 Water Temperature (°C) – 15.7	Lake Partner Program
	July 6	Brooks Bay	Dissolved Oxygen (mg/l) - 0.0 - 11.0 Water Clarity (m) – 6.0 Water Temperature (°C) - 4.0 - 23.0	JLA Project (Sheelagh Hysenaj)
		Sharpe's Bay	Dissolved Oxygen (mg/l) - 7.1 - 15.0 Water Clarity (°C) – 9.5 Water Temperature (°C) - 4.0 - 22.7	JLA Project (Sheelagh Hysenaj)
		Williams Bay	Dissolved Oxygen (mg/l) - 0.0 - 12.6 Water Clarity (m) – 7.9 Water Temperature (°C) - 4.0 - 23.0	JLA Project (Sheelagh Hysenaj)
	September	Brooks Bay	Water Clarity (m) – 3.6 Water Temperature (°C) - 17.3	Lake Partner Program

Year	Date(s)	Sample Sitet	Results	Misc. Details
2013 (cont'd)	September	Sharpe's Bay	Water Clarity (m) – 5.2 Water Temperature (°C) - 18.3	Lake Partner Program
	September	Williams Bay	Water Clarity (m) – 5.0 Water Temperature (°C) - 18.0	Lake Partner Program
2014	June 9	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 8.6 - 9.0 Water Clarity (m) - 4.0 Water Temperature (°C) – 20.5	Lake Partner Program
	June 9	Sharpe's Bay	Total Phosphorus (µg/l) - 4.2 Water Clarity (m) - 7.4	Lake Partner Program
	August 4	Brooks Bay	Water Clarity (m) – 4.0 Water Temperature (°C) – 23.5	Lake Partner Program
	August 8	Brooks Bay	Water Clarity (m) – 5.8 Water Temperature (°C) – 20.0	Lake Partner Program
	August 8	Sharpe's Bay	Water Clarity (m) – 7.4 Water Temperature (°C) – 20.0	Lake Partner Program
	August 8	Williams Bay	Water Clarity (m) – 6.7 Water Temperature (°C) – 21.0	Lake Partner Program
	August 22	Brooks Bay	Water Clarity (m) – 5.5 Water Temperature (°C) – 24.0	Lake Partner Program
		Sharpe's Bay	Water Clarity (m) – 7.8 Water Temperature (°C) – 23.8	Lake Partner Program

Year	Date(s)	Sample Site	Results	Misc. Details
2014 (cont'd)	September 9	Brooks Bay	Water Clarity (m) – 5.0 Water Temperature (°C) – 19.0	Lake Partner Program
	September 9	Sharpe's Bay	Water Clarity (m) – 7.8 Water Temperature (°C) – 19.5	Lake Partner Program
2015	May 17	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 9.0 - 9.4 Water Clarity (m) - 4.6	Lake Partner Program
	May 17	Sharpe's Bay	Total Phosphorus (µg/l) - 6.8 - 7.0 Water Clarity (m) - N/A	Lake Partner Program
	August 5	Brooks Bay	Water Clarity (m) – 4.3	Lake Partner Program
	August 8	Brooks Bay	Water Clarity (m) – 4.3	Lake Partner Program
2016	Unknown	Brooks Bay (Snake Island)	Total Phosphorus (µg/l) - 6.2 - 6.6 Water Clarity (m) - 5.0	Lake Partner Program
2017	Unknown	-	Total Phosphorus (µg/l) - Not yet available Water Clarity (m) – Not yet available	Lake Partner Program
	July 26	Sharpe's Bay	Conductivity (µS/m) – 142.2 - 142.9 Dissolved Organic Carbon (mgC/l) - 4.76 - 4.96 Dissolved Oxygen (mg/l) - 4.31 - 9.08 Dissolved Oxygen % Saturation – 31.6 - 103.0 Particulate Phosphorus (µP/l) - 1.75 - 3.39 - pH – 7.59 - 8.23 Soluble Reactive Phosphorus (µgP/l) - 2.04- 2.41 Suspended Chlorophyll (µg/l) - 1.59 - 3.48 Total Phosphorus (µgP/l) - 6.58 - 7.37 Total Suspended Solids (mg/l) - 1.31 - 3.30 Water Clarity (m) - 4.38 Water Temperatures (°C) – 3.8 - 24.3	Trent University Study

Legend

JLA – Jack Lake Association
MNRF - Ministry of Natural Resources and Forestry
MOECC – Ministry of the Environment and Climate Change
MVWHDO – Mean volume weighted hypolimnetic dissolved oxygen
NHHS – North Hastings High School
OWRC – Ontario Water Resources Commission

Interpretation of Results

Total Phosphorus - Less than 10 µg/l – Oligotrophic
10-20 µg/l – Mesotrophic
Greater than 20 µg/l - Eutrophic

References

Corbett, B. W. and P. M. Powles. 1986. Spawning and larval drift of sympatric walleye and white suckers in an Ontario stream. Transactions of the American Fisheries Society 115:41-46.