

Table A-4: Method Detection Limits for Nutrients: 1983 – 2012

Survey (Units)	Dissolved Reactive Silica (mg Si/L)	Nitrate - Nitrite Nitrogen (mg N/L)	Total Phosphorus (µg P/L)	Total Dissolved Phosphorus (µg P/L)	Reference
Spring 1983	0.011	0.024	2.5	1.4	3
Summer 1983	0.017	0.022	2	3.6	3
Spring 1984	0	0	2.6	1.7	4
Summer 1984	0.018	0.01	2.8	2.7	4
Spring 1985	0.021	0.007	0.8	1	5
Summer 1985	0.01	0.003	1.5	3.6	5
Spring 1986	0.021	0.007	0.8	1	5
Summer 1986	0.01	0.003	1.5	3.6	5
Spring 1987	0.012	0.01	3.2	2.7	1
Summer 1987	0.003	0.009	2.3	2.5	1
Spring 1988	0.04	0.036	4.5	3.1	1
Summer 1988	0.031	0.016	7.6	1.8	1
Spring 1989	NA	NA	NA	NA	18
Summer 1989	0.019	0.007	5.4	5.2	1
Spring 1990	0.02	0.008	5.4	5.2	1
Summer 1990	0.007	0.011	5.9	3.9	1
Spring 1991	0.024	0.007	2.2	4	1
Summer 1991	0.023	0.007	1.8	2.3	1
Spring 1992	NA	NA	NA	NA	18
Summer 1992	NA	NA	NA	NA	18
Spring 1993	0.015	0.03	2.0	2.0	9, 18
Summer 1993	0.015	0.03	2.0	2.0	9, 18
Spring 1994	0.021	0.03	1.0	1.0	10, 18
Summer 1994	0.021	0.03	1.0	1.0	10, 18
Spring 1995	0.021	0.03	1.0	1.0	10, 18
Summer 1995	0.021	0.03	1.0	1.0	10, 18
Spring 1996	0.005	0.03	1.0	1.0	10, 11, 18
Summer 1996	0.005	0.03	1.0	1.0	10, 11, 27, 18
Spring 1997	0.015	0.03	1.0	1.0	10, 12, 18
Summer 1997	0.015	0.03	1.0	1.0	10, 12, 18
Spring 1998	NA	NA	NA	NA	10, 18

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Survey (Units)	Dissolved Reactive Silica (mg Si/L)	Nitrate - Nitrite Nitrogen (mg N/L)	Total Phosphorus (µg P/L)	Total Dissolved Phosphorus (µg P/L)	Reference
Summer 1998	NA	NA	NA	NA	10, 18
Spring 1999	0.015	0.03	1.0	1.0	10, 14, 18
Summer 1999	0.015	0.03	1.0	1.0	10, 14, 18
Spring 2000	0.01	0.03	1.0	1.0	10, 15, 18
Summer 2000	0.01	0.03	1.0	1.0	10, 15, 18
Spring 2001	0.01	0.03	1.0	1.0	10, 16, 18
Summer 2001	0.01	0.03	1.0	1.0	10, 16, 18
Spring 2004	0.01	0.03	1.0	1.0	10, 17, 18
Summer 2004	0.01	0.03	1.0	1.0	10, 17, 18
Spring 2005	0.01	0.03	1.0	1.0	17
Summer 2005	0.01	0.03	1.0	1.0	17
Spring 2006	0.01	0.03	1.0	1.0	17
Summer 2006	0.01	0.03	1.0	1.0	17
Spring 2007	0.01	0.03	1.0	1.0	17
Summer 2007	0.01	0.03	1.0	1.0	17
Spring 2008	0.01	0.03	1.0	1.0	17
Summer 2008	0.01	0.03	1.0	1.0	17
Spring 2009	0.01	0.03	1.0	1.0	17
Summer 2009	0.01	0.03	1.0	1.0	17
Spring 2010	0.01	0.03	1.0	1.0	17
Summer 2010	0.01	0.03	1.0	1.0	17
Spring 2011	0.01	0.03	1.0	1.0	17
Summer 2011	0.01	0.03	1.0	1.0	17
Spring 2012	0.01	0.03	1.0	1.0	17
Summer 2012	0.01	0.03	1.0	1.0	17

Table A-5: Station Summary: 1983 – 2018

Lake (Basin)	Station	Latitude	Longitude	First Year	Last Year	Spring Years (n)	Summer Years (n)
Erie (Central)	ER30	42.43	-81.205	1985	2018	31	30
Erie (Central)	ER31	42.25333333	-81.1066667	1985	2018	31	30
Erie (Central)	ER32	42.08166667	-81.0116667	1985	2018	30	30
Erie (Central)	ER36	41.935	-81.4783333	1985	2018	31	30
Erie (Central)	ER37	42.11	-81.575	1983	2018	33	32
Erie (Central)	ER38	42.28166667	-81.6716667	1985	2018	31	30
Erie (Central)	ER42	41.965	-82.0416667	1983	2018	33	32
Erie (Central)	ER43	41.78833333	-81.945	1985	2018	31	30
Erie (Central)	ER73	41.97777778	-81.7569444	1983	2018	33	32
Erie (Central)	ER78M	42.11666667	-81.25	1983	2018	33	32
Erie (Central)	ER79	42.25	-80.8	1983	1984	2	2
Erie (Eastern)	ER01	42.78985	-79.20135	1996	1997	2	0
Erie (Eastern)	ER09	42.53833333	-79.6166667	1985	2018	31	30
Erie (Eastern)	ER10	42.68	-79.6916667	1985	2018	31	30
Erie (Eastern)	ER15M	42.51666667	-79.8933333	1985	2018	31	30
Erie (Eastern)	ER63	42.4166667	-79.8	1985	2018	31	29
Erie (Western)	ER58	41.685	-82.9333333	1986	2018	30	29
Erie (Western)	ER59	41.72666667	-83.15	1986	2018	30	29
Erie (Western)	ER60	41.89166667	-83.1966667	1986	2018	30	29

Table A-5: Station Summary: 1983 – 2018

Lake (Basin)	Station	Latitude	Longitude	First Year	Last Year	Spring Years (n)	Summer Years (n)
Erie (Western)	ER61	41.94666667	-83.045	1986	2018	30	29
Erie (Western)	ER91M	41.84083333	-82.9166667	1986	2018	30	29
Erie (Western)	ER92	41.95	-82.6866667	1986	2018	30	29
Huron	HU29	44.366667	-81.833333	1983	1991	8	8
Huron	HU32	44.45333333	-82.3416667	1983	2018	33	31
Huron	HU37	44.76166667	-82.7833333	1983	2018	33	31
Huron	HU38	44.74	-82.06	1983	2018	33	32
Huron	HU43	45.013333	-82.008333	1983	1991	8	8
Huron	HU45M	45.13666667	-82.9833333	1983	2018	33	31
Huron	HU48	45.27833333	-82.4516667	1983	2018	33	31
Huron	HU53	45.45	-82.915	1983	2018	33	32
Huron	HU54M	45.51666667	-83.4166667	1983	2018	33	31
Huron	HU57	45.666667	-83.726667	1983	1991	8	8
Huron	HU61	45.75	-83.9166667	1983	2018	33	31
Huron	HU06	43.46666667	-82	1983	2018	33	31
Huron	HU09	43.63333333	-82.2166667	1983	2018	33	31
Huron	HU12	43.89	-82.0566667	1983	2018	33	30
Huron	HU15M	44	-82.35	1983	2018	33	31
Huron	HU27	44.19833333	-82.5033333	1983	2018	33	31
Huron	HU90	43.4	-82.3	1983	1991	8	8
Huron	HU91	43.7	-82.016667	1983	1991	8	8
Huron	HU92	43.808333	-82.366667	1983	1991	8	8
Huron	HU93	44.1	-82.1166667	1983	2018	33	32
Michigan	MI078120	43.708639	-86.682639	1992	1992	1	1
Michigan	MI078130	43.474333	-86.784917	1993	1993	1	1
Michigan	MI081270	44.538861	-86.939444	1992	1992	1	1
Michigan	MI081280	44.304361	-87.042667	1993	1993	1	1
Michigan	MI081290	44.069722	-87.144917	1992	1992	1	1
Michigan	MI081300	43.835	-87.246222	1993	1993	1	1
Michigan	MI081310	43.600139	-87.346611	1992	1992	1	1

Table A-5: Station Summary: 1983 – 2018

Lake (Basin)	Station	Latitude	Longitude	First Year	Last Year	Spring Years (n)	Summer Years (n)
Michigan	MI26	43.6	-87.366667	1983	1984	2	2
Michigan	MI27M	43.6	-86.916667	1983	2018	36	35
Michigan	MI32	44.14	-87.233333	1983	2018	34	33
Michigan	MI34	44.09	-86.766667	1983	2018	33	33
Michigan	MI078040	45.578861	-85.829028	1992	1992	1	1
Michigan	MI078050	45.3455	-85.939278	1993	1993	1	1
Michigan	MI081230	45.475778	-86.51675	1992	1992	1	1
Michigan	MI081250	45.007556	-86.730111	1992	1992	1	1
Michigan	MI081260	44.773278	-86.835278	1993	1993	1	1
Michigan	MI40	44.76	-86.966667	1983	2018	36	36
Michigan	MI41M	44.736667	-86.721667	1983	2018	36	35
Michigan	MI47	45.178333	-86.375	1983	2018	36	36
Michigan	MI56	45.625	-86.3	1983	1984	2	2
Michigan	MI57	45.636667	-86.058333	1983	1984	2	2
Michigan	MI64	45.95	-85.586667	1983	1984	2	2
Michigan	MI01	41.766667	-87.333333	1994	1995	2	1
Michigan	MI05	42	-87.416667	1983	1995	4	5
Michigan	MI06	42	-87	1983	1995	4	3
Michigan	MI075020	42.643889	-86.532361	1993	1993	1	1
Michigan	MI078140	43.239917	-86.886306	1992	1992	1	1
Michigan	MI078150	43.005389	-86.986778	1993	1993	1	1
Michigan	MI078160	42.770722	-87.086333	1992	1992	1	1
Michigan	MI078170	42.535972	-87.185	1993	1993	1	1
Michigan	MI078180	42.301111	-87.282806	1992	1992	1	1
Michigan	MI081320	43.365194	-87.446083	1993	1993	1	1
Michigan	MI081330	43.130139	-87.544667	1992	1992	1	1
Michigan	MI10	42.383333	-87.416667	1983	1984	2	2
Michigan	MI11	42.383333	-87	1983	2018	33	33
Michigan	MI17	42.733333	-87.416667	1983	2018	35	33
Michigan	MI18M	42.733333	-87	1983	2018	36	34
Michigan	MI19	42.733333	-86.583333	1985	2018	33	32
Michigan	MI22	43.133333	-87.416667	1983	1984	2	2

Table A-5: Station Summary: 1983 – 2018

Lake (Basin)	Station	Latitude	Longitude	First Year	Last Year	Spring Years (n)	Summer Years (n)
Michigan	MI23	43.13333333	-87	1983	2018	35	35
Ontario	ON49	43.77166667	-77.43833333	1985	2018	30	30
Ontario	ON55M	43.44333333	-77.43833333	1985	2018	30	30
Ontario	ON60	43.58	-77.2	1985	2018	30	30
Ontario	ON63	43.73166667	-77.01666667	1985	2018	30	30
Ontario	ON12	43.50333333	-79.35333333	1985	2018	30	30
Ontario	ON25	43.51666667	-79.08	1986	2018	30	29
Ontario	ON33M	43.59666667	-78.80166667	1985	2018	30	30
Ontario	ON41	43.71666667	-78.02666667	1985	2018	30	30
Superior	SU06	48.55861111	-86.3769444	1996	2018	23	22
Superior	SU07	48.07416667	-86.5913889	1996	2018	23	22
Superior	SU087590	48.542083	-86.360417	1992	1992	1	0
Superior	SU087610	48.074194	-86.591389	1992	1992	1	0
Superior	SU087620	47.840083	-86.705111	1993	1993	1	1
Superior	SU087630	47.605861	-86.817694	1992	1992	1	0
Superior	SU087640	47.371528	-86.929111	1993	1993	1	1
Superior	SU08M	47.60583333	-86.8177778	1996	2018	23	22
Superior	SU09	48.43666667	-87.0861111	1996	2018	23	22
Superior	SU090900	48.436639	-87.086111	1992	1992	1	0
Superior	SU090910	48.202028	-87.198639	1993	1993	1	1
Superior	SU090930	47.732472	-87.420222	1993	1993	1	1
Superior	SU090940	47.497528	-87.529333	1992	1992	1	0
Superior	SU094240	48.562167	-87.6985	1993	1993	1	1
Superior	SU094250	48.326944	-87.808583	1992	1992	1	0
Superior	SU094260	48.091611	-87.917556	1993	1993	1	1
Superior	SU094270	47.856194	-88.025389	1992	1992	1	0
Superior	SU094280	47.620667	-88.132167	1993	1993	1	1
Superior	SU097640	48.213	-88.52775	1992	1992	1	0
Superior	SU097660	47.740889	-88.737556	1992	1992	1	0
Superior	SU097670	47.504722	-88.840861	1993	1993	1	1
Superior	SU10	47.51416667	-87.5461111	1996	2018	23	23
Superior	SU11	48.34361111	-87.8252778	1996	2018	23	22

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Lake (Basin)	Station	Latitude	Longitude	First Year	Last Year	Spring Years (n)	Summer Years (n)
Superior	SU12	47.85611111	-88.0419444	1996	2018	23	23
Superior	SU13	48.22972222	-88.5444444	1996	2018	23	22
Superior	SU14	47.74083333	-88.7375	1996	2018	23	23
Superior	SU01M	46.99305556	-85.1611111	1996	2018	23	23
Superior	SU02	47.36055556	-85.6205556	1996	2018	23	23
Superior	SU03	46.89444444	-85.8513889	1996	2018	23	22
Superior	SU04	47.25916667	-86.3483333	1996	2018	23	23
Superior	SU05	46.77472222	-86.5555556	1996	2018	23	22
Superior	SU077970	47.208833	-85.02625	1993	1993	1	1
Superior	SU077980	46.976361	-85.144361	1992	1992	1	0
Superior	SU081150	47.344	-85.620667	1992	1992	1	0
Superior	SU081160	47.110889	-85.736611	1993	1993	1	1
Superior	SU081170	46.877667	-85.851389	1992	1992	1	0
Superior	SU084370	47.476361	-86.217833	1993	1993	1	1
Superior	SU084380	47.242639	-86.331528	1992	1992	1	0
Superior	SU084390	47.008778	-86.444111	1993	1993	1	1
Superior	SU084400	46.774833	-86.555556	1992	1992	1	0
Superior	SU087600	48.308194	-86.4765	1993	1993	1	1
Superior	SU087660	46.9025	-87.148667	1993	1993	1	1
Superior	SU101070	48.094833	-89.243556	1992	1992	1	0
Superior	SU101090	47.621444	-89.446389	1992	1992	1	0
Superior	SU101100	47.384611	-89.546278	1993	1993	1	1
Superior	SU101110	47.147722	-89.645167	1992	1992	1	0
Superior	SU104560	47.497889	-90.151806	1992	1992	1	0
Superior	SU108070	47.370222	-90.853778	1992	1992	1	0
Superior	SU15	48.08277778	-89.2533333	1996	2018	23	23
Superior	SU16	47.62138889	-89.4630556	1996	2018	23	23
Superior	SU17M	47.16444444	-89.6619444	1996	2018	23	23
Superior	SU18	47.51444444	-90.1519444	1996	2018	23	23
Superior	SU19	47.37027778	-90.8538889	1996	2018	23	23