

2019 Lake Erie Ambient Stations - Water Quality

300892 Lake Erie Near Conneaut

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/15/2019	95.7	95.7U-	95.7	<5.0U-	20	1.88	280	No Sample	0.307	<0.02U-	0.0039	8.18PS	1.13J	19.5	<0.3U-	150	0.0309	17.5	19
6/18/2019	96.5	96.5	96.5	<5.0U-	20.8	0.793	285	No Sample	0.351	<0.02U-	0.0052	8.15PS	<0.2UJ,U-	20.7	<0.3U+	174	0.0143	<5.0U-	3.75
7/15/2019	95.7	95.7U-	95.7	<5.0U-	18.9	1.47	281	No Sample	0.262	<0.02U+	0.0034	8.41PS	0.554J	19.8	<0.3U+	186	0.0174	<5.0U-	1.32
8/12/2019	91.5	91.5U-	90.4	<5.0U-	19.6	2.16	281	No Sample	0.166	<0.02U-	<0.001U-	8.52PS	1.18J	19.6	0.312	154	<0.01U+	<5.0U-	<1.0U+
9/18/2019	92.3	92.3U+	92.3	<5.0U-	19.3	5.24	279	No Sample	0.106	<0.02U-	0.0012	8.49PS	0.461J	19	0.4	176	<0.01U-	<5.0U-	3.77

300895 Lake Erie Near Rocky River

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/30/2019	95.2	<0.05U-	95.2	<5.0U-	17.1	7.35	264	No Sample	0.433	<0.02U-	0.0011	8.48PS	0.61J	18.9	0.318	154	0.0131	<5.0U-	2.76
6/19/2019	98.8	0.0625	98.8	<5.0U-	17.7	1.07	283	No Sample	0.621	<0.02U+	0.0078	8.19PS	0.617J	20.4	0.321	172	0.0162	<5.0U-	2.21
7/10/2019	98	<0.05U+	98	<5.0U-	19.7	2.8	288	No Sample	0.375	0.0231	0.0022	8.05PS	0.398J	19.2	0.475	168	<0.01U+	<5.0U-	1.63
8/19/2019	92.5	<0.05U-	90.3	<5.0U-	19.3	4.33	284	No Sample	<0.1U+	<0.02U+	<0.001U-	8.63PS	0.706J	19.9	0.309	158	<0.01U-	<5.0U-	<1.0U+
9/25/2019	92.5	<0.05U-	92.5	<5.0U-	19.3	15.6	276	No Sample	<0.1U-	<0.02U-	0.0013	8.58	<2.59J	20.2	0.314	164	0.0283	<5.0U-	3.26

300900 Sandusky Bay off Johnson's Island

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/13/2019	124	<0.05U-	111	<5.0U-	23.8	172	406	No Sample	2.37	0.0229	Rejected	8.98PS	51.4J	53	1.25	260	0.186	48.5	51.9
5/21/2019	107	<0.05U-	97.1	<5.0U-	23.8	84.3	376	No Sample	1.87	<0.02U+	<0.001U+	9.02PS	14.1J	50.7	0.833	242	0.0844	27.5	2.26
6/6/2019	106	<0.05U-	98.9	<5.0U-	24.2	66.6	385	No Sample	0.803	<0.02U+	0.0018	8.87PS	32.8J	61.1	1.5	252	0.13	27	21.6
6/13/2019	110	<0.05U+	97.3	<5.0U-	24.8	86.3	397	No Sample	0.462	<0.02U-	0.0022	9.01PS	<14.0UJ,U-	63	1.52J-	280	0.123	34	34.4
6/27/2019	132	0.414	132	<5.0U-	20.8	14.7	417	No Sample	1.62	0.0592	0.045	8.19PS	4.05J	50.1	1.26	294	1.16	5.5	21.1
7/15/2019	107	<0.05U-	101	<5.0U-	20.5	43.9	349	3.54	0.415	<0.02U+	0.001U+	8.84PS	20.1J	40.5	0.959	220	0.0631	14	13.6
7/29/2019	98.7	<0.05U-	98.7	<5.0U-	20.1	55.1	367	3.23	<0.1U-	<0.02U-	0.0013	8.56PS	23.1J	56.1	1.12	226	0.118	19.5	15.3
8/12/2019	97.1	<0.05U-	93.7	<5.0U-	21.8	42.2	353	1.76	<0.1U-	<0.02U-	0.0213	8.74PS	22.5J	46.3	1.16	208	0.147	24	21.1
8/20/2019	99.7	<0.05U-	95.8	<5.0U-	20.5	34.3	345	1.02	<0.1U-	<0.02U-	0.0175	8.76PS	24.6J	41.6	0.758	230	0.101	17	13.8
9/24/2019	103	<0.05U-	100	<5.0U-	20	36.8	352	3.14	<0.1U-	<0.02U-	0.0214	8.7PS	<9.33UJ,U-	45	0.711	214	0.108	15	11.9

301254 Lake Erie near Geneva

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/15/2019	96.9	<0.05U-	96.9	<5.0U-	27.2	2.35	310	No Sample	0.533	<0.02U-	0.0064	8.17PS	0.502J	22	<0.3U-	166	0.0482	<5.0U-	5.57
6/18/2019	97	0.0549	97	<5.0U-	20.8	1.15	290	No Sample	0.6	<0.02U+	0.0023	8.21PS	0.562J	21.5	0.362	176	0.0287	<5.0U-	1.38
7/15/2019	97.4	<0.05U+	97.4	<5.0U-	18.6	1.42	284	No Sample	0.248	<0.02U+	<0.001U-	8.12PS	0.605J	19.1	<0.3U-	192	0.0105	<5.0U-	1.04
8/12/2019	91.4	<0.05U-	91.4	<5.0U-	19.4	2.75	282	No Sample	0.185	<0.02U-	<0.001U-	8.54PS	1.26J	19.9	0.386	156	0.0103	<5.0U-	1.46
9/18/2019	93.1	0.126	93.1	<5.0U-	19	5.15	278	No Sample	<0.1U-	<0.02U-	<0.001U+	8.52PS	0.48J	19.1	0.396	166	<0.01U-	<5.0U-	3.1

2019 Lake Erie Ambient Stations - Water Quality

301255 Lake Erie near Fairport Harbor

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/29/2019	100	<0.05U+	100	<5.0U-	26	16.3	309	No Sample	0.859	<0.02U+	<0.001U+	8.67PS	6.26J	23.2	0.5	178	0.0212	5.5	4.21
6/18/2019	80	0.0928	80	<5.0U-	21.4	1.38	254	No Sample	0.651	<0.02U+	0.0172	7.94PS	0.871J	19	0.528	158	0.0501	10	15.9
7/15/2019	97.6	<0.05U-	97.6	<5.0U-	20.7	5.89	291	No Sample	0.394	0.0237	0.0012	8.3PS	1.08J	19.1	0.397	194	0.0177	<5.0U-	2.36
8/12/2019	91.4	<0.05U-	91.4	<5.0U-	19.6	4.7	283	No Sample	0.188	<0.02U+	<0.001U-	8.54PS	0.851J	20	0.374	154	0.0147	<5.0U-	1.52
9/18/2019	93.1	0.0731	93.1	<5.0U-	20.2	5.39	282	No Sample	<0.1U-	<0.02U+	0.0019	8.49PS	0.658J	19.4	0.387	172	0.0125	<5.0U-	1.56

301256 Lake Erie near Wildwood

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/29/2019	97.6	<0.05U+	97.6	<5.0U-	17.2	13.2	292	No Sample	0.705	<0.02U+	<0.001U+	8.66PS	<2.8UJ,U-	22.6	<0.3U+	166	0.0135	<5.0U-	4.34
6/19/2019	96.1	0.0696	96.1	<5.0U-	18.4		281	No Sample	0.815	<0.02U+	0.006	8.12PS		20.9	<0.3U+	168	0.0152	<5.0U-	2.22
7/10/2019	98.6	0.0628	98.6	<5.0U-	19.6	2.41	286	No Sample	0.43	<0.02U+	0.0037	7.9PS	0.528J	20	0.312	166	0.0117	<5.0U-	2.74
8/19/2019	91.5	<0.05U+	89.7	<5.0U-	18.4	4.13	279	No Sample	0.146	<0.02U+	<0.001U-	8.61PS	0.686J	19.4	0.339	160	<0.01U-	<5.0U-	<1.0U+
9/25/2019	92.6	<0.05U-	92.6	<5.0U-	20	13.9	280	No Sample	<0.1U-	<0.02U-	0.0017	8.56	<2.77UJ,U-	19.7	0.552	164	0.0151	<5.0U-	3.45

301257 Lake Erie near Lorin

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/30/2019	95.9	<0.05U-	95.9	<5.0U-	17.2	8.17	264	No Sample	0.46	<0.02U-	0.001U+	8.57PS	1.07J	19.2	<0.3U+	154	0.0153	<5.0U-	2.21
6/19/2019	99	<0.05U+	99	<5.0U-	18	3.21	285	No Sample	0.736	<0.02U+	0.0056	8.31PS	0.356J	19.7	0.302	168	0.016	<5.0U-	2.46
7/10/2019	99.7	<0.05U-	99.7	<5.0U-	17.7	6.07	283	No Sample	0.677	0.0372	0.0045	8.06PS	<1.75UJ,U-	19.6	<0.3U+	164	0.014	<5.0U-	5.54
8/19/2019	92.5	<0.05U+	90.2	<5.0U-	18.9	4.85	283	No Sample	0.163	<0.02U+	<0.001U-	8.66PS	0.855J	19.9	<0.3U-	160	<0.01U-	<5.0U-	1.11

301258 Lake Erie near Toledo Harbor Lighthouse

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
4/24/2019	95.7	0.075	95.7	<5.0U-	19.1	4.44	281	No Sample	0.507	<0.02U-	0.0057	8.17PS	<1.4UJ,U-	18.5	<0.3U+	164	0.0269	6.5	9.35
5/15/2019	125	<0.05U-	125	<5.0U-	26.7	1.94	371	No Sample	2.51	0.0444	0.0672	8.15PS	1.5J	30.2	0.672	242	0.211	22.5	86
5/30/2019	118	0.0582	118	<5.0U-	24.5	9.82	336	No Sample	1.49	0.0246	0.0277	8.34PS	3.19J	24.8	0.51	212	0.102	<5.0U-	14.4
6/11/2019	117	0.0902	117	<5.0U-	23.7	2.28	337	No Sample	1.52	0.0206	0.042	8.25PS	1.42J	25.1	0.51	202	0.0744	10.5	25.6
6/18/2019	117	0.0835	117	<5.0U-	21.1	2.68	331	No Sample	1.58	0.0437	0.0595	8.2PS	<0.7UJ,U-	24.9	0.64	210	0.111	6	23.8
7/10/2019	120	0.077	116	<5.0U-	20.9	10.4	334	<0.3	1.29	0.0396	0.0117	8.77PS	2.22J	23.2	0.705	200	0.0481	<5.0U-	6.56
7/17/2019	108	<0.05U+	104	<5.0U-	18.6	15.3	301	1.67	0.774	0.0246	0.0039	8.7PS	<0.56UJ,U-	21.5	0.457	174	0.0311	<5.0U-	4.3
7/24/2019	104	<0.05U-	98.7	<5.0U-	17.1	30	288	4.14	0.457	<0.02U+	0.0034	8.87PS	<5.6UJ,U-	20	0.679	166	0.0621	6.5	9.96
8/08/2019	83.9	<0.05UJ,	76.8	<5.0U-	16.6	35.1	256	3.84	<0.1U-	<0.02U-	<0.001U-	9.09PS	<5.6UJ,U-	20.2	0.698	158	0.033	8	10.1
8/14/2019	80.6	<0.05U-	68.7	<5.0U-	16.1	36.5	243	4.48	<0.1U-	<0.02U-	<0.001U-	9.17PS	<7.0UJ,U-	19	0.662	144	0.0422	10	15.1
8/22/2019	79.1	<0.05U-	72.7	<5.0U-	12.6	34.6	231	1.55	<0.1U-	<0.02U-	<0.001U-	9.03PS	<5.6J,U-	16.3	1.15	146	0.0512	8	9.53
9/18/2019	90.5	0.146	90.5	<5.0U-	21.1	5.06	292	<0.3	0.279	<0.02U+	0.0202	8.26PS	3.71J	25.7	0.666	182	0.0634	8	15.4

2019 Lake Erie Ambient Stations - Water Quality

301641 Maumee River Downstream I-280

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Sp. Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
4/24/2019	106	0.0575	106	<5.0U-	19.1	3.96	310	No Sample	3.33	0.0295	0.133	7.88PS	3.63J	26.8	1.35	278	0.387	48	221
5/15/2019	166	0.0699	166	<5.0U-	25.1	7.85	452	No Sample	2.89	0.0348	0.0715	8.08PS	2.2J	37.8	0.841	288	0.202	26.5	80.2
5/30/2019	125	0.0715	125	<5.0U-	20.6	2.63	329	No Sample	2.59	<0.12UJ,U-	0.0976	7.85PS	2.4J	32.9	1.3	280	0.387	98	250
6/11/2019	159	0.116	159	<5.0U-	22.6	10.8	414	No Sample	2.7	0.027	0.141	8.03PS	6.92J	29.3	0.972	270	0.233	37.5	81.5
6/18/2019	185	0.0793	185	<5.0U-	27.1	17.1	488	No Sample	3.4	<0.02U+	0.0843	8.08PS	3.65J	37.1	0.948	320	0.182	41	60.4
7/10/2019	183	0.114	177	<5.0U-	28.9	52.9	484	<0.3	1.79	0.0415	0.0319	8.64PS	37.6J	37.6	1.39	306	0.144	22	28.8
7/17/2019	164	0.505	164	<5.0U-	39.7	18.2	531	<0.3UJ	2.7	0.0883	0.0663	7.99PS	14.2J	48.3	1.67	310	0.182	29.5	32.5
7/24/2019	123	0.112	123	<5.0U-	23	73	389	<0.3	4.84	0.0793	0.114	8.02PS	<14.0UJ,U-	33.1	1.49	256	0.291	60.5	88.3
7/31/2019	131	0.197	131	<5.0U-	24.6	15.2	410	<0.3	4.35	0.0843	0.1	7.88PS	14.7J	31.9	1.21	280	0.243	30.5	62.1
8/14/2019	134	0.291	134	<5.0U-	37.7	4.29J	468	<0.3	3.1	0.406	0.0877	7.84PS	4.9J	39.1	1.32	296	0.186	22.5	56.1
8/22/2019	137	0.127	137	<5.0U-	35.2	60.2	473	<0.3	2.85	0.0255	0.07	8.08PS	<14.0J,U-	39.3	1.02	310	0.196	37.5	55
9/18/2019	144	0.0979	144	<5.0U-	39.9	25.9	492	<0.3	2.46	0.312	0.0579	8.02PS	4.87J	43	0.995	316	0.149	18.5	27.8

301788 Maumee Bay off Woodtick Peninsula

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
4/24/2019	151	<0.05U+	150	<5.0U-	67.5	49.1	597	No Sample	3.53	0.0238	0.0102	8.34PS	<14.0UJ,U-	47.7	1.23	376	0.134	18	59.6
5/15/2019	160	<0.05U-	160	<5.0U-	38.7	25.8	486	No Sample	2.95	0.0443	0.0411	8.41PS	3.26J	40.7	0.798	296	0.151	17.5	47.2
5/30/2019	161	0.133	161	<5.0U-	25.5	4.7	429	No Sample	2.83	0.0454	0.11	7.98PS	<0.933UJ,U-	33	1.26	292	0.214	10.5	37.6
6/11/2019	146	0.0587	146	<5.0U-	36.7	12.3	440	No Sample	2.49	0.0412	0.0873	8.2PS	6.93J	34.7	0.843	294	0.157	16	65.8
6/18/2019	163	0.163	163	<5.0U-	28	7.3	447	No Sample	2.61	0.04	0.102	8.04PS	3.39J	33.8	0.904	298	0.173	18.5	49.4
7/10/2019	158	0.254	158	<5.0U-	32.2	25.1	456	<0.3	1.94	0.0519	0.0826	8.34PS	<5.6UJ,U-	33.8	1.17	290	0.141	6.5	17.9
7/17/2019	168	0.285	166	<5.0U-	34.8	31.5	496	<0.3UJ	1.95	0.0513	0.0399	8.52PS	26.3J	43.2	1.22	300	0.133	12	16.6
7/24/2019	97.1	<0.05U-	88.3	<5.0U-	23.5	122	305	18.1	0.331	<0.02U+	0.0012	9.17PS	<5.6UJ,U-	25.2	2.12	178	0.128	34.5	43
8/14/2019	80.4	<0.05U-	62.2	<5.0U-	22	45.2	270	10.0E	<0.1U-	<0.02U-	<0.001U-	9.42PS	16.5J	25.2	1.24	166	0.0749	20.5	30.4
8/22/2019	83.2	<0.05U-	72.6	<5.0U-	21.9	45	280	4.76	<0.1U-	<0.02U-	0.0014	9.21PS	20.4J	24	0.893	174	0.0772	22	27.7
9/18/2019	106	0.135	106	<5.0U-	33.3	19.5	393	<0.3	1.44	0.0746	0.041	8.11PS	3.07J	38.3	0.92	244	0.121	18	26.5

302142 Maumee Bay off Maumee Bay State Park

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
4/24/2019	104	0.093	104	<5.0U-	21.8	5.81	316	No Sample	3.46	0.0301	0.0909	7.95PS	1.88J	28.4	1.5	276	0.354	46	221
5/15/2019	162	<0.05U+	162	<5.0U-	28.7	8.5	456	No Sample	2.9	0.0353	0.0716	8.16PS	4.41J	34.6	0.734	276	0.145	8.5	26.1
5/30/2019	126	0.151	126	<5.0U-	20.2	4.08	344	No Sample	2.23	0.045	0.112	7.97PS	<0.933UJ,U-	27.1	0.885	238	0.232	5.5	41.4
6/11/2019	133	0.0915	133	<5.0U-	26	3.57	378	No Sample	2.46	0.0523	0.124	8.11PS	<1.4UJ,U-	28.4	0.72	256	0.176	11.5	58.3
6/18/2019	122	0.054	122	<5.0U-	21.9	1.61	345	No Sample	2	0.034	0.0867	8.22PS	<0.7UJ,U-	27.6	0.652	238	0.149	16	56.1
7/10/2019	131	<0.05U-	123	<5.0U-	22.5	36.3	365	0.371	2.06	0.0455	0.0389	8.92PS	23.8J	27.5	0.939	240	0.106	10	14.8
7/17/2019	139	0.0502	126	<5.0U-	26.9	32.8	394	2.6	1.76	0.038	0.0245	8.95PS	25.8J	30.6	0.852	238	0.086	7	13.9
7/24/2019	151	0.285	151	<5.0U-	29.5	18.2	463	0.74	3.5	0.0854	0.0724PT	8.16PS	8.94J	39.9	1.56	302	0.16	7	16.1
8/14/2019	79.1	<0.05U-	59.8	<5.0U-	24.3	81.9	280	25.0E	<0.1U-	<0.02U-	<0.001U-	9.46PS	19.1J	27.2	1.81	170	0.0913	30	61.5
8/22/2019	102	0.0844	102	<5.0U-	32.4	32.3	385	2.66	1.3	0.144	0.0287	8.51PS	<5.6J,U-	35.2	1.01	250	0.103	20.5	26.8
9/18/2019	97.4	0.186	97.4	<5.0U-	27	11	334	<0.3	0.678	<0.02U+	0.029	8.3PS	3.69J	30.7	0.823	218	0.0943	15	30.2

2019 Lake Erie Ambient Stations - Water Quality

302502 Lake Erie North of Port Clinton

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/13/2019	97.2	<0.05U-	97.2	<5.0U-	17.8	5.89	278	No Sample	0.741	<0.02U-	0.0133	8.2PS	<1.4UJ,U-	19.6	0.303	166	0.0712	20	23.2
5/21/2019	107	0.0634	107	<5.0U-	23.2	3.13	322	No Sample	1.48	<0.02U+	0.0667	8.19PS	<0.56UJ,U-	23.7	0.382	196	0.1	5	12.3
6/13/2019	110	0.0913	110	<5.0U-	22.6	7.58	320	No Sample	1.36	<0.02U+	0.0106	8.45PS	1.69J	21.9	0.49	198	0.0331	<5.0U-	4.68
6/27/2019	108	<0.05U-	104	<5.0U-	19.2	5.63	308	No Sample	0.918	0.0203	0.0018	8.79PS	1.4J	21.1	0.335	194	0.0226	<5.0U-	1.86
7/15/2019	103	<0.05U-	103	<5.0U-	18.2	6.62	294	<0.3UJ	0.687	<0.02U+	0.0013	8.49PS	1.31J	20.6	0.366	176	0.0279	<5.0U-	2.88
8/12/2019	84.7	<0.05U-	74.4	<5.0U-	19.7	18	271	10.0E	<0.1U-	<0.02U-	<0.001U-	9.21PS	4.16J	21.3	0.691	154	0.0342	11	17.5
8/20/2019	87	<0.05U+	77	<5.0U-	19	38	272	7.32	<0.1U-	<0.02U+	0.001U+	9.14PS	<5.6UJ,U-	21.7	0.792	166	0.0567	12	14.9
8/29/2019	87.3	<0.05U-	78.1	<5.0U-	14.9	25.5	254	1.02	<0.1U-	<0.02U-	0.0016	9.01PS	4.98J	17.7	0.505	148	0.0478	9.5	10.6

302821 Lake Erie Toledo/Oregon WTP Intakes

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
4/25/2019	117	0.0605	117	<5.0U-	25.6	5.74	357	No Sample	1.64	<0.02U+	0.0174	8.23PS	1.4J	26.5	0.512	210	0.0583	7.5	19.9
5/16/2019	109	<0.05U-	109	<5.0U-	22.3	2.69	324	No Sample	1.58	0.021	0.0409	8.19PS	<0.933UJ,U-	24.5	0.614	194	0.112	13	45.1
5/29/2019	119	0.0923	119	<5.0U-	22.8	2.17	338	No Sample	1.64	0.0334	0.068	8.17PS	<0.56UJ,U-	26.8	0.527	224	0.112	<5.0U-	36.4
6/12/2019	120	0.0862	120	<5.0U-	21.7	1.23	342	No Sample	1.95	0.0376	0.0699	8.15PS	<0.56UJ,U-	26.7	0.612	224	0.122	9	43.4
6/26/2019	113	<0.05U-	113	<5.0U-	20.7	9.28	323	No Sample	1.22	0.0401	0.0126	8.51PS	4.28J	22.9	0.353	196	0.0474	<5.0U-	7.03
7/11/2019	108	<0.05U+	108	<5.0U-	19.2	7.26	308	<0.3	0.89	<0.02U+	0.0052	8.46PS	<1.4UJ,U-	21.4	0.441	208	0.028	<5.0U-	5.63PT
7/18/2019	109	0.066	109	<5.0U-	18.7	7.95	310	0.608J	0.786	<0.02U+	0.006	8.49PS	1.17J	21.3	0.422	180	0.0327	<5.0U-	5.21
7/25/2019	118	<0.05U-	110	<5.0U-	21.2	34.8	333	4.2	0.683	<0.02U+	0.0045	9.02PS	<5.6UJ,U-	23.8	0.849	198	0.0516	7	16.6
8/08/2019	87.9	<0.05U-	83	<5.0U-	18.5	34.7	275	8.14	0.268	<0.02U+	<0.001U-	9.02PS	<5.6UJ,U-	22.6	0.88	170	0.0434	10	10.8
8/15/2019	83.9	<0.05U-	69.3	<5.0U-	19.7	52.2	268	10.0E	0.11	<0.02U-	<0.001U+	9.29PS	<14.0UJ,U-	23.1	1.02	174	0.0396	13.5	26.2
8/28/2019	84.1	<0.05U-	74	<5.0U-	16.6	34.8	258	3.2	<0.1U-	<0.02U-	0.0022	9.1PS	7.11J	20.7	0.707	158	0.0664	14.5	22.5
9/19/2019	87.7	0.145	87.7	<5.0U-	19.8	8.21	280	<0.3	0.152	<0.02U+	0.0185	8.42PS	1.68J	23.5	0.622	170	0.0599	7	10.5

303465 Lake Erie @ City of Sandusky WTP Intake

Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/14/2019	92.8	<0.05U-	92.8	<5.0U-	14.1	7.23	254	No Sample	0.514	<0.02U-	0.0034	8.22PS	1.95J	17.2	<0.3U-	138	0.0542	14	19.5
6/06/2019	104	<0.05U-	104	<5.0U-	20.8	5.21	301	No Sample	0.994	<0.02U+	0.0025	8.57PS	2.64J	22.2	0.515	174	0.0277	<5.0U-	2.67
6/17/2019	102	0.12	102	<5.0U-	19.5	2.87	298	No Sample	0.95	<0.02U+	0.0162	8.16PS	1.53J	23.2	0.44	180	0.0401	8.5	7.58
7/01/2019	106	0.203	106	<5.0U-	18.4	3.39	317	<0.3	0.733	<0.02U+	0.0167	8.13PS	0.92J	29.7	0.564	190	0.0446	<5.0U-	4.98
7/16/2019	103	0.103	103	<5.0U-	18	14.1	294	<0.3UJ	0.441	<0.02U+	0.0015	8.41PS	<2.8UJ,U-	22.1	0.448	164	<0.01U-	5	4.99
7/30/2019	101	<0.05U-	102	<5.0U-	18.1	10.9	292	<0.3	0.379	<0.02U+	<0.001U-	8.21PS	<2.8UJ,U-	20.5	0.474	170	0.0615	<5.0U-	2.82
8/13/2019	92.5	<0.05U+	92.5	<5.0U-	18.8	14.3	282	<0.3	0.18	<0.02U+	<0.001U-	8.56PS	<2.8UJ,U-	19.7	0.407	160	0.0258	5	3.86
9/24/2019	91.6	0.0559	91.6	<5.0U-	17.8	10.8	272	<0.3	<0.1U-	<0.02U-	0.0132	8.46PS	1.86J	19.8	0.484	156	0.0575	<5.0U-	3.48

2019 Lake Erie Ambient Stations - Water Quality

303466 Lake Erie @ City of Huron WTP Intake																			
Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/14/2019	101	<0.05U-	101	<5.0U-	18.8	43.4	300	No Sample	0.874	<0.02U-	0.0021	8.44PS	4.62J	26.8	0.442	170	0.0938	33	40.6
5/23/2019	96.1	<0.05U-	96.1	<5.0U-	15.5	24.1	270	No Sample	0.492	<0.02U+	0.0043	8.43PS	<5.6UJ,U-	22.9	0.458	170	0.0289	8	10.8
6/17/2019	102	0.147	102	<5.0U-	20.4	2.14	306	No Sample	1.14	0.0233	0.0304	8.03PS	0.806J	24	0.698	198	0.0567	9	14.8
7/01/2019	102	0.125	102	<5.0U-	17.7	4	297	0.326	0.664	<0.02U+	0.0064	8.24PS	0.771J	25.3	0.634	172	0.0229	<5.0U-	2.91
7/16/2019	104	0.108	104	<5.0U-	18.9	12.4	304	<0.3UJ	0.59	<0.02U+	0.003	8.44PS	<2.8UJ,U-	24.2	0.449	172	0.0323	<5.0U-	6.69
7/30/2019	101	0.0522	101	<5.0U-	18.3	13.1	293	<0.3	0.463	0.0216	<0.001U-	8.2PS	<2.8UJ,U-	21.3	0.515	172	0.0514	<5.0U-	2.17
8/13/2019	92.9	0.0596	92.9	<5.0U-	18.9	6.76	284	<0.3	0.217	<0.02U+	<0.001U-	8.5PS	1.63J	19.5	0.431	156	0.0254	<5.0U-	3.27
8/21/2019	95.1	0.1	95.1	<5.0U-	19.2	9.74	290	<0.3	0.134	<0.02U+	0.0022	8.36PS	3.42J	20.5	0.35	168	0.0298	<5.0U-	4.22
9/17/2019	93	<0.05U+	93	<5.0U-	19.4	18.8	280	<0.3	<0.1U-	<0.02U-	0.0047	8.61PS	<5.6UJ,U-	20.6	0.377	162	0.0476	12.5	10.2

303467 Lake Erie @ City of Vermilion WTP Intake																			
Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/14/2019	106	<0.05U-	106	<5.0U-	26.2	27.9	339	No Sample	1.26	<0.02U-	0.009	8.42PS	4.03J	27.9	0.432	214	0.0835	25.5	30.7
5/23/2019	95	<0.05U+	95	<5.0U-	15	3.56	269	No Sample	0.541	<0.02U+	<0.001U+	8.2PS	3.33J	22.2	0.318	164	0.0198	6	10.7
6/17/2019	94.5	0.127	94.5	<5.0U-	19	2.21J	290	No Sample	2.31	0.0253	0.06	7.96PS	4.11J	25.3	0.919	200	0.174	69	90.9
7/1/2019	101	0.101	101	<5.0U-	18	8.18	300	<0.3	0.803	<0.02U+	0.0071	8.23PS	<1.87UJ,U-	24.8	0.465	170	0.0236	<5.0U-	6.12
7/16/2019	98.7	0.447	98.7	<5.0U-	18	2.86	288	<0.3UJ	0.599	<0.02U+	0.0032	8.45PS	1.5J	22.2	0.349	160	0.0206	<5.0U-	2.75
7/30/2019	99	<0.05U-	99	<5.0U-	18	4.95	289	<0.3	0.44	<0.02U+	<0.001U-	8.56PS	0.693J	21.8	0.324	172	0.0214	<5.0U-	2.26
8/13/2019	92.6	<0.05U-	92.6	<5.0U-	19	6.71	286	<0.3	0.352	<0.02U+	<0.001U-	8.46PS	0.987J	20.4	0.391	164	0.0197	<5.0U-	1.93
8/21/2019	90.3	<0.05U-	90.3	<5.0U-	19	10.3	276	0.469	0.141	<0.02U+	<0.001U-	8.59PS	<1.87UJ,U-	19.6	<0.3U-	162	0.0206	<5.0U-	1.91
9/17/2019	92.4	<0.05U+	92.4	<5.0U-	19.4	20.1	278	<0.3	<0.1U-	<0.02U-	0.0024	8.6PS	<5.6UJ,U-	20.6	<0.3U-	162	0.0333	10	9.16

303468 Lake Erie Off Lake Side																			
Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
5/13/2019	92.3	<0.05U-	92.3	<5.0U-	14.7	3.31	254	No Sample	0.449	<0.02U-	0.0031	8.17PS	3.52J	17.6	<0.3U-	152	0.0518	23	24
5/21/2019	105	<0.05U-	106	<5.0U-	22	3.6	315	No Sample	1.27	<0.02U+	0.0477	7.97PS	2.62J	23	0.455	192	0.0536	6	11.7
6/6/2019	108	0.0798	108	<5.0U-	22.1	5.15	312	No Sample	1.44	<0.02U+	0.0088	8.49PS	2.18J	22.6	0.562	186	0.101	<5.0U-	3.58
6/13/2019	99.9	0.0898	99.9	<5.0U-	19.6	1.86	288	No Sample	0.908	<0.02U+	0.0141	8.25PS	<0.56UJ,U-	20.2	0.324	174	0.0271	<5.0U-	5.76
6/27/2019	105	0.0566	105	<5.0U-	19.4	2.18	302	No Sample	0.834	<0.02U+	0.0073	8.55PS	2.08J	22.2	0.511	192	0.0691	<5.0U-	3.81
7/15/2019	101	<0.05U-	101	<5.0U-	17.1	10.2	286	<0.3UJ	0.559	<0.02U+	<0.001U-	8.58PS	1.41J	20	0.33	170	0.0251	<5.0U-	2.36
7/29/2019	105	0.0699	105	<5.0U-	17.7	5.22	294	<0.3	0.262	0.101	0.0029	7.83PS	1.15J	19.6	0.329	174	0.027	<5.0U-	2.38
8/12/2019	96.8	0.0509	96.8	<5.0U-	18.2	26.2	290	0.39	0.28	<0.02U+	0.0017	8.3PS	<5.6UJ,U-	20.3	0.369	166	0.0298	5.5	4.25
8/20/2019	94.3	<0.05U-	92.3	<5.0U-	18	23.2	283	0.808	<0.1U-	<0.02U+	<0.001U-	8.68PS	<5.6UJ,U-	19.9	0.343	172	0.0282	<5.0U-	3.27
8/29/2019	93	<0.05U-	89.8	<5.0U-	17.7	22.8	284	<0.3	<0.1U-	<0.02U-	0.0033	8.73PS	9.6J	20.7	0.575	164	0.0871	7.5	6.41
9/26/2019	89.2	0.0692	89.2	<5.0U-	16.3	8.8	267	No Sample	<0.1U-	<0.02U-	0.019	8.34PS	1.78J	20.6	0.509	158	0.0413	<5.0U-	4.76

2019 Lake Erie Ambient Stations - Water Quality

303470 Lake Erie near Crane Reef																			
Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
04/25/19	104	0.0789	104	<5.0U-	25.1	1.37	325	No Sample	0.938	<0.02U+	0.0272	8.17PS	0.857J	21.6	0.456	182	0.0521	<5.0U-	17.3
05/16/19	115	0.0612	115	<5.0U-	23.4	1.32	346	No Sample	2.33	0.0333	0.0614	8.17PS	<0.933UJ,U-	27.4	0.538	212	0.0199	8.5	38.8
05/29/19	121	<0.05U+	121	<5.0U-	26	2.82	353	No Sample	2	0.0271	0.0457	8.27PS	1.05J	25.7	0.395	216	0.0608	<5.0U-	9.26
06/12/19	119	0.109	119	<5.0U-	20.6	1.16	336	No Sample	1.61	0.0312	0.0506	8.18PS	<0.56UJ,U-	22.9	0.578	210	0.0741	<5.0U-	10.6
06/26/19	106	<0.05U-	106	<5.0U-	19.3	9.33	302	No Sample	0.912	<0.02U+	0.0015	8.69PS	<1.87UJ,U-	21.4	0.429	174	0.024	<5.0U-	1.85
07/11/19	104	<0.05U-	104	<5.0U-	18.4	6.29	296	<0.3	0.74	<0.02U+	<0.001U+	8.51PS	<1.4UJ,U-	20.9	0.4	194	0.0222	<5.0U-	2.11PT
07/18/19	106	<0.05U-	106	<5.0U-	18.1	5.42	301	<0.3UJ	0.74	<0.02U+	<0.001U-	8.54PS	0.935J	20.4	0.377	174	0.0186	<5.0U-	1.68
7/25/2019	98.7	<0.05U-	98.7	<5.0U-	15.7	8.01	276	0.447	0.471	<0.02U+	0.0036	8.58PS	1.32J	19	0.362	162	0.0248	<5.0U-	4.14
8/28/2019	86.9	<0.05U-	79.9	<5.0U-	17.5	32.1	269	4.9	<0.1U-	<0.02U-	<0.001U-	9.03PS	15.8J	21	0.75	166	0.0756	13.5	20.4
9/19/2019	82.4	<0.05U-	82.4	<5.0U-	13.4	3.99	240	<0.3	<0.1U-	<0.02U-	0.0051	8.44PS	2.89J	17.6	0.466	138	0.0281	<5.0U-	5.4
P11S32 Maumee River near Mouth																			
Date	Alkalinit ymg/L	NH ₃ mg/L	Bicarbonate mg/L	Carbonate mg/L	Chloride mg/L	Chl-a ug/L	Cond. umhos/cm	Microcystins ug/L	NO ₃ +NO ₂ mg/L	NO ₂ mg/L	PO ₄ mg/L	pH s.u.	Phe-a ug/L	Sulfate mg/L	TKN mg/L	Total Diss. Solids mg/L	Total, P mg/L	Total Susp. Solids mg/L	Turbidity NTU
4/24/2019	106	0.107	106	<5.0U-	20.4	3.28	316	No Sample	3.64	0.0274	0.0987	7.88PS	3.3J	27.1	1.71	290	0.38	43	220
5/15/2019	175	0.0783	175	<5.0U-	27.2	8.16	476	No Sample	3.03	0.0325	0.0687	8.09PS	5.96J	39.6	0.872	296	0.163	19	59.4
5/30/2019	129	0.0646	129	<5.0U-	20.7	2.09	342	No Sample	2.39	<0.02U+	0.0942	7.86PS	1.97J	31.9	1.31	376	0.311	60	207
6/11/2019	154	0.131	154	<5.0U-	25.4	7.56	412	No Sample	2.69	0.0315	0.132	7.95PS	6.96J	28.3	0.896	274	0.223	31	81.9
6/18/2019	187	0.0633	187	<5.0U-	28.6	23.7	499	No Sample	3.11	0.0234	0.0823	8.15PS	4.28J	38.9	0.975	328	0.183	36	52.2
7/10/2019	179	0.358	179	<5.0U-	34.1	17.7	495	<0.3	1.74	0.0478	0.067	8.18PS	17.2J	37	1.36	316	0.216	19.5	31.6
7/17/2019	164	0.431	164	<5.0U-	42.3	29.3	538	<0.3UJ	2.6	0.0771	0.0614	8.09PS	<5.6UJ,U-	51.1	1.41	324	0.165	19.5	27.1
7/24/2019	141	0.0913	141	<5.0U-	28	70.8	443	<0.3	4.54	0.0713	0.0872PT	8.14PS	<14.0UJ,U-	38	1.48	290	0.224	41.5	59.4
7/31/2019	130	0.21	130	<5.0U-	32.5	16.4	454	<0.3	5.14	0.102	0.108	7.88PS	10.5J	39.4	1.41	308	0.22	28.5	54.2
8/14/2019	123	0.188	123	<5.0U-	43.7	20	483	1.89	3.36	0.318	0.0752	7.99PS	3.22J	44.7	1.25	302	0.164	21	43.9
8/22/2019	146	0.122	146	<5.0U-	42.1	68.5	516	<0.3	1.94	0.0235	0.0617	8.21PS	<14.0J,U-	45.4	1.02	336	0.165	28.5	39.9
9/24/2019	128	0.112	128	<5.0U-	41.7	23.8	486	<0.3	2.7	0.241	0.0518	8.0PS	3.11J	48.2	1.17	310	0.12	16	22.8