

**2019 COOPERATIVE LAKES MONITORING PROGRAM
SPRING TOTAL PHOSPHORUS RESULTS**

Lake	County	Site ID Number	Total Phosphorus (ug/l)	
			Spring Overturn Vol	Rep.
Africa, Big	Gogebic	270231	30	
Africa, Little	Gogebic	270230	19	
Aginaw	Shiawassee	780261	34	
Angela	Oakland	631121	37	
Ann	Benzie	100082	6	
Arbutus (#2)	Grand Traverse	280109	9	8
Arcadia	Manistee	510174	21	
Arnold	Clare	180107	10	
Avery	Montmorency	600023	<=3 W	
Avon	Oakland	631264	*	
Bar, South	Leelanau	450237	12	
Barlow	Barry	080176	9	10
Barton	Kalamazoo	390215	17	
Bass, Big	Lake	430029	11	
Bay, East	Gogebic	270228	32	
Bay, West	Gogebic	270054	28	
Bear	Kalkaska	400026	5	
Bear	Manistee	510122	9	
Beaver	Alpena	040097	<5 T	
Bellaire	Antrim	050052	<=3 W	
Betsie	Benzie	100113	11	
Big	Gogebic	270220	17	21
Big Star	Lake	430022	9 q	
Birch	Cass	140187	6	
Blue	Mecosta	540092	<5 T	
Blue (Big)	Kalkaska	400017	*	
Blue (North)	Kalkaska	400131	*	
Bradford, Big	Otsego	690036	9 k	8
Bristol	Barry	080092	9	10
Brooks	Leelanau	450222	16	
Brooks	Newaygo	620063	*	
Camp	Iron	360180	16	
Cedar	Alcona	010017	6	
Chain	Iosco	350146	13	14
Chemung	Livingston	470597	18 k	20
Chippewa	Mecosta	540050	17	
Christiana	Cass	140055	22 k	
Cisco	Gogebic	270053	15	
Clam	Antrim	050101	5	

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Clear	Jackson	380453	<5 T	
Clear	Ogemaw	650042	7	
Clearwater	Gogebic	270108	19	
Cobb	Barry	080259	*	
Coldwater	Isabella	370063	40	
Cranberry	Oakland	631228	29	
Crockery	Ottawa	700422	100	
Crooked,Big	Kent	410714	24	
Crooked,North	Kalkaska	400133	7	
Crooked,Upper	Barry	080071	16	
Crystal	Benzie	100066	5	
Crystal	Gogebic	270234	25	
Crystal	Montcalm	590105	8	8
Cub	Kalkaska	400031	*	
Deer	Oakland	631128	18	
Devils	Lenawee	460179	6	
Diamond	Cass	140039	9	
Dinner	Gogebic	270126	22 k	
Dixie	Oakland	631266	28	
Duck	Grand Traverse	280110	5	
Duck	Muskegon	610778	12 k	
Duck(N)	Gogebic	270127	14	
Duck(S)	Gogebic	270218	11	
Eagle	Cass	140057	6	
Eagle	Kalkaska	400130	<5 T	
Eagle	Van Buren	800261	8 k	
Earl	Livingston	470554	*	
Ellen	Iron	360050	8	
Emerald	Kent	410709	14	
Fish	Van Buren	800461	7	
Fish Hawk	Gogebic	270190	22	
Fisher	Leelanau	450224	<5 T	
Fishers	St. Joseph	750139	8	
Fortune,First	Iron	360080	7	
Fortune,Second	Iron	360177	9	
Fremont	Newaygo	620029	39	43
George	Clare	180056	7	
Gilbert	Oakland	630411	*	
Glen	Leelanau	450049	5	

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Glen,Little	Leelanau	450050	6	
Gogebic (N)	Ontonagon	660182	17	
Gogebic(S)	Gogebic	270226	18	
Golden	Iron	360082	9	
Gravel	Van Buren	800271	<=3 W	
Green	Grand Traverse	280082	8 k	
Gull	Kalamazoo	390210	<5 T	
Hagerman	Iron	360042	15	
Hamilton	Dickinson	220060	13	
Hamlin(Lower)	Mason	530073	16	
Hamlin(Upper)	Mason	530074	22	
Hannah Webb	Iron	360165	*	
Hawk	Oakland	631115	19 k	
Herendeene	Benzie	100139	8 g	
Herring,Upper	Benzie	100247	10	
Hicks	Osceola	670062	*	
Higgins(N)	Roscommon	720026	6	6
Higgins(S)	Roscommon	720028	5	
Horsehead	Mecosta	540065	10 k	
Huff	Oakland	631261	*	
Hutchins	Allegan	030203	15	
Independence	Marquette	520149	10	11
Indian	Gogebic	270229	32	
Indian	Kalamazoo	390305	<5 T	
Indian	Kalkaska	400015	5 q	
Indianwood	Oakland	631132	22	
Isabella	Isabella	370135	16	
Island	Gladwin	260134	11	
Island	Grand Traverse	280164	<=3 W	
Juno	Cass	140058	24 k	
Kilinger	St.Joseph	750136	<5 T	
Lakeville	Oakland	630670	15	
Lancelot	Gladwin	260104	15	
Lancer	Gladwin	260116	18	
Langford	Gogebic	270227	20	
Leelanau(N)	Leelanau	450236	<=3 W	
Leelanau(S)	Leelanau	450235	5	
Lily	Clare	180066	9 k	
Lindsley	Gogebic	270221	18	

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			Vol	Spring Overturn Rep.
Long	Benzie	100270	6 g	
Long	Cass	140174	8	
Long	Gogebic	270179	9	
Long	Grand Traverse	280084	5 k	
Long	Iosco	350076	8	12
Long	Oakland	631118	18	
Long	Oakland	631271	31	
Long(Cloverdale)	Barry	080210	8	
Long, Little	Barry	080279	6	
Long, Upper	Oakland	631117	21	21
Lost	Oakland	631259	35	
Lotus	Oakland	630414	*	
Louise	Dickinson	220124	10	
Louise	Oakland	631262	27 b	
Maceday	Oakland	630415	*	
Maggie (Big)	Iron	360173	*	
Maggie (West)	Iron	360172	*	
Magician	Cass	140065	10	
Mamie	Gogebic	270233	33	
Manitou	Shiawassee	780233	31	
Margrethe	Crawford	200157	9	
Mary	Dickinson	220039	12	
Mary	Iron	360071	9	
Maston	Kent	410764	27	
Mecosta	Mecosta	540057	13	
Middle	Lapeer	440258	*	
Middle Straits	Oakland	630732	*	
Morely	Gogebic	270222	17	18
Murray	Kent	410268	15	
Muskellunge	Kent	410765	48	
Nepessing	Lapper	440220	18 b	
North	Washtenaw	810276	*	
Ore	Livingston	470100	20	
Orion	Oakland	630554	*	
Osterhout	Allegan	030263	15	
Otter	Oakland	631193	17	
Owasippe	Muskegon	610789	<=3 W	<=3 W
Oxbow	Oakland	630666	*	
Painter	Cass	140108	26 k	

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Papoose	Kalkaska	400134	11	
Park	Clinton	190099	20 k	
Pentwater	Oceana	640089	22	
Perch	Iron	360046	15	
Perrin	St.Joseph	750314	11 k	
Pickerel	Kalkaska	400035	9	
Pickerel	Newaygo	620066	*	
Pine Island (Big)	Kent	410437	*	
Platte,Big	Benzie	100086	7 k	
Pleasant	Washtenaw	810266	*	
Poor	Gogebic	270219	15	17
Portage	St.Joseph	750245	17	
Portage	Washtenaw	810248	12	
Posey	Lenawee	460423	35 g	
Ranger	Otsego	690156	*	
Record	Gogebic	270232	34	
Rennie	Grand Traverse	280430	5	
Robbins	Cass	140202	*	
Round	Mecosta	540073	27	
Round	Oakland	631250	*	
Rounds	Lenawee	460304	11	
Sand	Lenawee	460264	<5 T	
Scram	Kent	410728	16	
Seymour	Oakland	631269	17	
Shingle	Clare	180108	12	
Silver	Lenawee	460457	<5 T	
Silver	Van Buren	800534	18	
South	Lenawee	460456	*	
Spider	Grand Traverse	280395	7 k	
Squaw	Kalkaska	400135	11	
Squaw	Oakland	630418	30	
Stager	Iron	360074	7	
Starvation	Kalkaska	400030	9	
Stony	Oceana	640049	12	11
Straits,Upper	Oakland	631172	16	
Sunset	Iron	360032	15	
Swan	Iron	360035	12	
Sylvan	Oakland	631244	14	
Taylor	Oakland	631114	16 q	

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Theresa	Oakland	631275	10 b	
Thousand Island	Gogebic	270046	17	
Tie	Alger	020168	7	
Torch (North)	Antrim	050055	r r	
Torch(S)	Antrim	050240	<=3 W	
Tull #1	Oakland	631267	19	15
Tull #2	Oakland	631177	39	
Turtle	Benzie	100140	6 g	
Twin	Oakland	631258	46	
Twin,Big	Kalkaska	400025	6	
Twin,East	Montmorency	600013	9	
Twin,Little	Kalkaska	400013	<5 T	
Twin,West	Montmorency	600014	6 k	
Van Etten	Iosco	350201	19	
Viking	Otsego	690136	*	
Vineyard	Jackson	380263	*	
Wahbememe	St.Joseph	750313	<5 T	
Wall	Barry	080294	10	
West Bloomfield	Oakland	631257	28	
White (W)	Muskegon	610349	22	
White(E)	Muskegon	610330	26	
Whitefish (Big)	Montcalm	590131	*	
Willow	Oakland	631253	24	
Winslow	Iron	360178	15	
Woods	Kalamazoo	390542	40	

* No sample received or received too late to process.

a Sample not collected at proper time; may not be comparable to other data

b Data form not submitted with samples

c Sample thawed in shipping; rejected

d Sample not labelled

f Sample not collected at proper time; rejected

g Ice-out date not recorded on data form; unknown whether sample was collected within 2 weeks of ice-out

k Sample collected 2-4 weeks after ice out; may not be comparable to other data

j Sample collected in non-standard sample bottles; rejected

k Sample collected more than 2 weeks after ice out; may not be comparable to other data

m Sample submitted in late summer; results not yet available from laboratory

q Sample labels illegible; used ink that ran when wet

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r Sample collected more than 4 weeks after ice out; rejected

T Value reported is less than the reporting limit (5 ug/l). Result is estimated.

W Value is less than the method detection limit (3 ug/l)