

Table 1: 1998 Water Withdrawals for Self-Supplied Industrial Facilities in Michigan, by County*

County	Self-Supplied Industries		Water Withdrawn (MGD)			
	Number of Facilities	Number of Employees	Great Lakes	Surface Water	Ground Water	Total
Alger	2	688	5.33	0.00	0.24	5.56
Allegan	16	4,866	0.00	0.70	7.53	8.24
Alpena	4	1,310	7.16	6.05	0.07	13.28
Antrim	2	260	0.00	0.00	0.35	0.35
Arenac	1	52	0.00	0.00	0.23	0.23
Baraga	1	190	0.64	0.00	0.00	0.64
Barry	4	956	0.00	0.00	0.23	0.23
Bay	4	1,841	0.00	0.91	0.00	0.91
Benzie	2	250	0.00	0.00	0.24	0.24
Berrien	17	2,540	0.00	4.21	1.26	5.47
Branch	5	906	0.00	0.15	1.03	1.18
Calhoun	11	5,235	0.00	1.82	6.57	8.39
Cass	4	847	0.00	0.00	1.26	1.26
Charlevoix	5	1,110	4.00	0.00	7.40	11.41
Cheboygan	1	70	0.00	0.62	0.09	0.71
Chippewa	1	30	0.77	0.00	0.00	0.77
Clinton	3	99	0.00	0.00	0.19	0.19
Crawford	4	302	0.00	0.07	0.14	0.21
Delta	4	1,350	44.36	0.23	0.12	44.71
Dickinson	1	20	0.00	18.49	0.45	18.94
Eaton	1	35	0.00	0.00	0.00	0.00
Emmet	3	430	0.09	0.00	0.03	0.11
Genesee	9	11,482	0.00	0.00	0.17	0.17
Gladwin	2	7	0.00	0.00	0.00	0.00
Gogebic	2	150	0.00	0.00	0.07	0.07
Grand Traverse	6	1,405	0.00	0.00	0.62	0.62
Gratiot	3	706	0.00	0.00	0.00	0.00
Hillsdale	3	623	0.00	0.00	1.08	1.08
Huron	3	260	0.00	0.00	0.05	0.05
Ingham	5	9,182	0.00	0.00	0.61	0.61
Ionia	3	938	0.00	0.14	0.05	0.19

County	Self-Supplied Industries		Water Withdrawn (MGD)			
	Number of Facilities	Number of Employees	Great Lakes	Surface Water	Ground Water	Total
Iosco	2	185	0.00	0.08	0.00	0.09
Isabella	1	120	0.00	0.00	0.00	0.00
Jackson	15	1,259	0.00	0.00	0.76	0.76
Kalamazoo	14	11,560	0.00	23.23	33.91	57.13
Kalkaska	1	50	0.00	0.00	0.00	0.00
Kent	25	8,518	0.00	1.08	4.84	5.92
Lapeer	2	255	0.00	0.00	0.16	0.16
Leelanau	4	191	0.00	0.00	0.39	0.39
Lenawee	7	1,102	0.00	0.01	0.23	0.24
Livingston	13	2,405	0.00	0.00	0.19	0.19
Luce	2	111	0.00	0.00	0.02	0.02
Mackinac	1	125	0.60	0.00	0.00	0.60
Macomb	8	899	0.00	0.16	0.58	0.73
Manistee	6	928	36.54	0.00	0.84	37.37
Marquette	2	1,820	0.00	16.17	0.19	16.37
Mason	7	1,674	15.62	0.00	0.46	16.08
Mecosta	1	170	0.00	0.00	0.27	0.27
Menominee	3	925	0.00	3.15	0.02	3.17
Midland	2	4,175	0.00	7.44	0.00	7.44
Missaukee	2	186	0.00	0.00	0.00	0.00
Monroe	11	2,727	0.07	2.50	11.53	14.09
Montcalm	1	500	0.00	0.00	0.21	0.21
Muskegon	23	4,784	20.16	5.89	3.60	29.65
Newaygo	3	619	0.00	0.00	0.24	0.24
Oakland	31	12,198	0.00	0.00	2.40	2.40
Oceana	4	785	0.00	0.00	0.74	0.74
Ontonagon	2	1,430	10.14	0.00	0.00	10.14
Osceola	5	591	0.00	0.00	0.50	0.50
Oscoda	1	48	0.00	0.00	0.01	0.01
Otsego	4	657	0.00	0.00	0.13	0.13
Ottawa	14	3,224	8.69	1.53	0.57	10.79
Presque Isle	2	270	3.49	0.00	0.07	3.55
Roscommon	1	190	0.00	0.00	0.00	0.00
Saginaw	3	1,555	0.00	1.11	0.00	1.12

County	Self-Supplied Industries		Water Withdrawn (MGD)			
	Number of Facilities	Number of Employees	Great Lakes	Surface Water	Ground Water	Total
Saint Clair	4	2,713	12.23	0.00	0.00	12.23
Saint Joseph	14	2,731	0.00	0.11	7.09	7.19
Sanilac	5	1,225	0.00	0.00	0.19	0.19
Schoolcraft	2	220	5.12	5.72	0.00	10.84
Shiawassee	1	60	0.00	0.00	0.09	0.09
Tuscola	2	89	0.00	0.00	0.00	0.00
Van Buren	10	1,501	0.00	2.93	0.78	3.71
Washtenaw	16	5,744	0.00	4.08	1.04	5.13
Wayne	21	17,387	290.02	3.87	0.11	293.99
Wexford	4	1,243	0.00	0.00	2.28	2.28
Total	434	147,289	465.01	112.47	104.50	681.97

* This report is provided by the Michigan Department of Environmental Quality and was generated using data collected for the water use reporting program.

Index Map of Michigan Counties

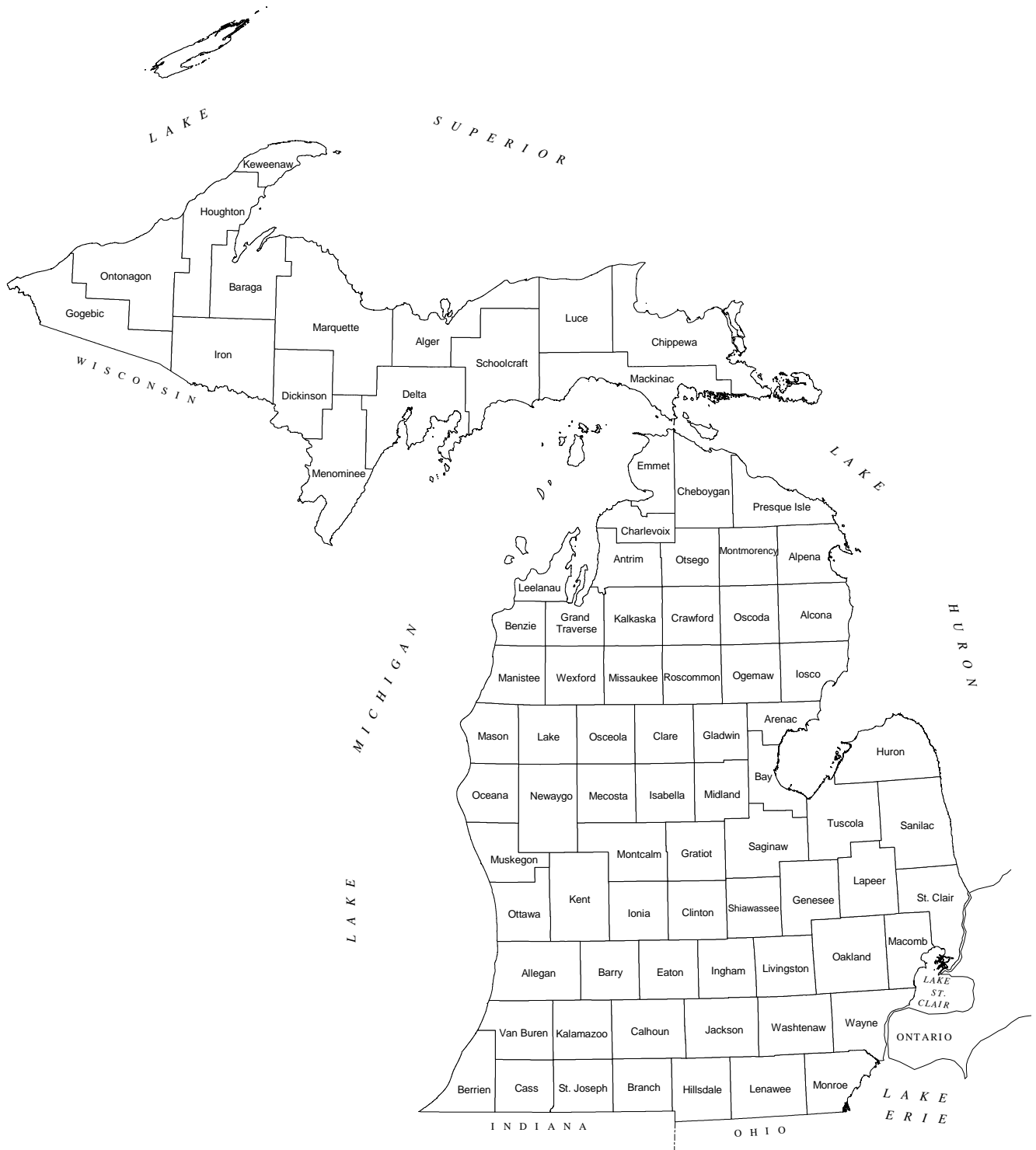


Table 2: 1998 Water Withdrawals for Self-Supplied Industrial Facilities in Michigan, by Hydrologic Basin*

Hydrologic Basin Code	Self-Supplied Industries		Water Withdrawn (MGD)			
	Number of Facilities	Number of Employees	Great Lakes	Surface Water	Ground Water	Total
04010302	1	85	0.00	0.00	0.07	0.07
04020101	2	1,215	3.93	0.00	0.00	3.93
04020102	1	280	6.21	0.00	0.00	6.21
04020105	1	190	0.64	0.00	0.00	0.64
04020201	2	688	5.33	0.00	0.24	5.56
04020202	2	111	0.00	0.00	0.02	0.02
04030108	2	395	0.00	21.65	0.45	22.09
04030109	2	550	0.00	0.00	0.02	0.02
04030110	2	1,820	0.00	16.17	0.19	16.37
04030111	4	1,350	44.36	0.23	0.12	44.71
04040001	1	43	0.00	2.37	0.00	2.37
04050001	53	9,164	0.00	6.37	12.34	18.71
04050002	8	3,758	8.68	0.26	0.21	9.15
04050003	36	19,289	0.00	24.40	47.35	71.75
04050004	21	10,446	0.00	0.00	1.37	1.37
04050005	2	94	0.00	0.00	0.19	0.19
04050006	34	6,238	0.01	2.20	5.46	7.67
04050007	10	6,314	0.00	0.28	0.32	0.61
04060101	17	2,823	15.78	0.00	1.95	17.73
04060102	28	6,895	20.00	5.89	4.75	30.65
04060103	7	953	36.54	0.00	1.93	38.47
04060104	6	780	0.00	0.00	0.78	0.78
04060105	17	2,916	4.09	0.00	8.24	12.34
04060106	1	155	0.00	5.72	0.00	5.72
04060107	1	65	5.12	0.00	0.00	5.12
04070001	1	30	0.77	0.00	0.00	0.77
04070002	1	125	0.60	0.00	0.00	0.60
04070003	3	520	5.62	0.00	0.07	5.68
04070004	3	162	0.00	0.62	0.09	0.71
04070006	3	1,060	5.03	6.05	0.07	11.15
04070007	8	1,105	0.00	0.07	0.27	0.34
04080101	2	185	0.00	0.08	0.00	0.09

Hydrologic Basin Code	Self-Supplied Industries		Water Withdrawn (MGD)			
	Number of Facilities	Number of Employees	Great Lakes	Surface Water	Ground Water	Total
04080102	1	52	0.00	0.00	0.23	0.23
04080103	3	260	0.00	0.00	0.05	0.05
04080104	1	400	0.00	0.00	0.05	0.05
04080201	4	4,182	0.00	7.44	0.00	7.44
04080202	3	890	0.00	0.00	0.27	0.27
04080203	11	1,876	0.00	0.00	0.21	0.21
04080204	10	11,247	0.00	0.00	0.33	0.33
04080205	4	284	0.00	0.00	0.07	0.07
04080206	6	3,346	0.00	2.02	0.00	2.02
04090001	6	3,343	12.23	0.00	0.07	12.29
04090002	1	400	0.00	0.00	0.30	0.30
04090003	17	2,682	0.00	0.16	1.28	1.44
04090004	29	17,798	290.02	3.21	0.24	293.47
04090005	36	16,583	0.00	4.74	2.39	7.13
04100001	5	67	0.00	1.05	2.01	3.06
04100002	14	3,783	0.07	1.46	10.49	12.02
04100003	1	292	0.00	0.00	0.00	0.00
Total	434	147,289	465.01	112.47	104.50	681.97

* This report is provided by the Michigan Department of Environmental Quality and was generated using data collected for the water use reporting program.

Hydrologic Basins in Michigan: U.S. Geological Survey

04010302	Bad-Montreal	04050007	Thornapple	04080104	Birch-Willow
04020101	Black-Presque Isle	04060101	Pere Marquette-White	04080201	Tittabawassee
04020102	Ontonagon	04060102	Muskegon	04080202	Pine
04020105	Dead-Kelsey	04060103	Manistee	04080203	Shiawassee
04020201	Betsy-Chocolay	04060104	Betsie-Platte	04080204	Flint
04020202	Tahquamenon	04060105	Boardman-Charlevoi	04080205	Cass
04030108	Menominee	04060106	Manistique	04080206	Saginaw
04030109	Cedar-Ford	04060107	Brevoort-Millecoquin	04090001	Saint Clair
04030110	Escanaba	04070001	Saint Marys	04090002	Lake Saint Clair
04030111	Tacoosh-Whitefish	04070002	Carp-Pine	04090003	Clinton
04040001	Little Calumet-Galien	04070003	Lone Lake-Ocqueoc	04090004	Detroit
04050001	Saint Joseph	04070004	Cheboygan	04090005	Huron
04050002	Black-Macatawa	04070006	Thunder Bay	04100001	Ottawa-Stony
04050003	Kalamazoo	04070007	Au Sable	04100002	Raisin
04050004	Upper Grand	04080101	Au Gres-Rifle	04100003	St. Joseph- Indiana
04050005	Maple	04080102	Kawkawlin-Pine		
04050006	Lower Grand	04080103	Pigeon-Wiscoggin		

Index Map of Michigan Hydrologic Basins

