

MICHIGAN DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT
WATER BUREAU
APRIL 2010

STAFF REPORT

MICHIGAN BEACH MONITORING
YEAR 2009 ANNUAL REPORT

INTRODUCTION

The Michigan Department of Natural Resources and Environment (DNRE), Surface Water Quality Monitoring Program, is summarized in the January 1997 report entitled, "A Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters" (Strategy) (MDEQ, 1997). The objectives of the beach monitoring component of the Strategy are listed below:

1. Assist local health departments to implement and strengthen beach monitoring programs.
2. Determine whether waters of the state are safe for total body contact recreation.
3. Create and maintain a statewide database.
4. Compile data to determine overall water quality.
5. Evaluate the effectiveness of DNRE programs in attaining Water Quality Standards (WQS) for pathogen indicators.

1. ASSIST LOCAL HEALTH DEPARTMENTS TO IMPLEMENT AND STRENGTHEN BEACH MONITORING PROGRAMS

Beach Monitoring

The monitoring of beaches in Michigan is voluntary and is conducted by the local health departments. Health departments are required to comply with Michigan's WQS according to R 333.12544 of the Public Health Code, 1978 PA 368 (Act 368), as amended. According to R 333.12541 of Act 368, a local health officer or an authorized representative of a local health department that conducts tests at bathing beaches is required to notify the DNRE and other entities of the test results within 36 hours of conducting a test or evaluation. This rule also states that the local health department may petition the circuit court for an injunction ordering the owners of a beach to close the beach. Owners of public bathing beaches must post a sign that states whether or not the bathing beach has been tested, and if so, the location of the test results.

The DNRE awards grants to local health departments to monitor and report levels of *E. coli* in the swimming areas of public beaches. In selecting recipients for grant awards, the DNRE considers all of the following:

- Location and frequency of beach use.
- History of beach monitoring and bacterial contamination.
- Ability to communicate results to the public in an efficient manner.
- Ability to respond and take appropriate action in the event of beach contamination.
- Proximity of beach to a known bacterial contamination source.
- Innovativeness and feasibility of proposed project.
- Ability to reduce time delay between sampling and results.

Since 2000, the number of counties with a beach monitoring program has more than doubled with the assistance of state and federal grants. A history of Michigan's beach monitoring program is shown below in Table 1.

Table 1. The number of counties where at least one beach was monitored and the total number of beaches that were monitored each year.

Year	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Number of Counties that Monitored	57	57	57	58	52	53	38	26	36	24
Number of Beaches Monitored	414	467	474	440	406	494	392	210	250	<50

Funding for Beach Monitoring

Prior to 2000, health departments relied on local funding to conduct beach monitoring programs. Local funding was often not sufficient to execute a comprehensive monitoring program. Beginning in 2000, funding became available from the Clean Michigan Initiative-Clean Water Fund (CMI-CWF). In 2003, the United States Environmental Protection Agency (USEPA) also began awarding funds from the Beaches Environmental Assessment and Coastal Health Act (BEACH Act) for monitoring Great Lakes beaches.

CMI-CWF Grants

The DNRE currently distributes CMI-CWF funds to aid in the development and implementation of inland lake beach monitoring programs throughout the state. In 2000 and 2001, CMI-CWF funds were distributed for inland lakes and Great Lakes beach monitoring programs. In 2002, no CMI-CWF funds were distributed, but future funding was designated for inland beaches only due to the availability of BEACH Act funding for Great Lakes beaches.

The CMI-CWF grant funds are awarded by the DNRE to local health departments and nonprofit entities, which include county, city, township, and village agencies, watershed and environmental action councils, universities, regional planning agencies, and incorporated nonprofit organizations. The majority of grants are awarded to local health departments. If a group other than a local health department is awarded a grant, the DNRE requires the group to work closely with their local health department.

The CMI-CWF offers reliable funding for the monitoring of surface water over a period of approximately 15 years. Since 2000, the DNRE has awarded \$1,122,267 including 14 awards totaling \$187,423 in 2009. A list of the most recent grant awards is shown in Appendix A.

BEACH Act Grants

The DNRE distributes BEACH Act funds to aid in the development and implementation of Great Lakes beach monitoring programs. State, local, and tribal governments having coastal waters are eligible to apply for the BEACH Act grants. The USEPA (2002) has published performance criteria that must be met by grant recipients. Since the BEACH Act was initiated in 2003, the DNRE has allocated \$1,925,538 including 24 awards totaling \$437,986 in 2009 (the DNRE provided \$160,000 of state funds in 2009). A list of the most recent grant awards is shown in Appendix B.

2. DETERMINE WHETHER WATERS OF THE STATE ARE SAFE FOR TOTAL BODY CONTACT RECREATION

Pathogens

Pathogens are microorganisms (bacteria, protozoans, or viruses) that cause disease. Most waterborne pathogens are readily found in the feces of humans and other warm-blooded animals. Gastroenteritis is the most common illness associated with swimming in contaminated water although other illnesses can occur. The severity of the disease or illness depends on the amount of exposure and the type of pathogen [(Appendix C) USEPA, 2001]. The USEPA (1986 and 2002) has determined that *E. coli* and *Enterococci* are appropriate indicators for the presence of waterborne pathogens in fresh water.

Sources of Bacterial Contamination

Combined Sewer Overflows (CSOs) are discharges of raw or inadequately treated sewage from sewer systems that are designed to carry both domestic sewage and storm water to Wastewater Treatment Plants (WWTPs). When a storm event occurs and the volume of the wastewater is larger than the WWTP can process, the excess untreated sewage and storm water are discharged into local waterways.

Sanitary Sewer Overflows (SSOs) are discharges of raw or inadequately treated sewage from municipal sanitary sewer systems, which are designed to carry domestic sanitary sewage but not storm water. Systems that contain cracks, obstructions, storm water connections, or that are undersized with sewers and pumps too small to carry all the sewage may leak or overflow raw sewage from manholes, bypass pump stations, and WWTPs into the surrounding waters, particularly during extreme hydrologic events.

Failing septic systems can cause leaching and/or runoff into the waterways, causing bacterial contamination. Urban storm water runoff from roads, roofs, construction sites, parking lots, etc., may contain fecal matter from pets and wildlife. Excessive waterfowl near the beaches and animal waste runoff from farms and fields can contribute to elevated bacterial levels. Illicit connections of pipes containing sewage to storm sewers or surface waters are also a potential source of bacterial contamination.

E. coli Standard

The DNRE requires beaches to be monitored according to the Part 4 rules, WQS, promulgated under Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, as follows:

R 323.1062 Microorganisms

Rule 62(1): All waters of the state protected for total body contact recreation shall not contain more than 130 *E. coli* per 100 milliliters (ml), as a 30-day geometric mean. Compliance shall be based on the geometric mean of all individual samples taken during 5 or more sampling events representatively spread over a 30-day period. Each sampling event shall consist of 3 or more samples taken at representative locations within a defined sampling area. At no time shall the waters of the state protected for total body contact recreation contain more than a maximum of 300 *E. coli* per 100 ml. Compliance shall be based on the geometric mean of 3 or more samples taken during the same sampling event at representative locations within a defined sampling area.

All surface waters of the state are protected for total body contact according to the Part 4 rules, as follows:

R 323.1100 Designated Uses

Rule 100(2): All surface waters of the state are designated and protected for total body contact recreation from May 1 to October 31 in accordance with the provisions of R 323.1062. Total body contact recreation immediately downstream of wastewater discharges, areas of significant urban runoff, CSOs, and areas influenced by certain agricultural practices is contrary to prudent public health and safety practices, even though WQS may be met.

Beach Closures

Beach advisories or closures in Michigan are most commonly issued because of elevated counts of *E. coli* in water samples collected from the shoreline of a water body. Health departments use the daily and the 30-day geometric mean to determine if a beach closure or an advisory should be issued. The health department notifies the owner of the beach when a beach should be closed. If necessary, the health department can petition the court for an injunction to force the owner to close the beach. The beach closure or advisory remains in effect until additional tests meet the WQS.

3. CREATE AND MAINTAIN A STATEWIDE DATABASE

The DNRE developed a centralized statewide database to track bathing beach monitoring *E. coli* test results. These results are available electronically to the public via the DNRE's Web site. The Web site includes information about individual beaches (by county or lake name), frequency of testing, monitoring history, beach closures, and monitoring efforts. The Web site also provides information for beach monitoring procedures and methods, additional links to beach monitoring resources, and contact information for federal, state, and local beach monitoring staff.

Reporting Beach Monitoring Data

According to R 333.12541(2), all local health departments are required to report their beach monitoring test results to the DNRE within 36 hours of conducting the test or evaluation. Health departments receiving beach monitoring grants are required to enter their data on the DNRE's Web site, while other health departments are encouraged to report their data on the Web site.

As a requirement of the BEACH Act, the DNRE submits beach monitoring data to the USEPA. The USEPA has created several Web pages for beach information that can be found at <http://www.epa.gov/beaches/>, along with an online directory of information regarding the water quality at our nation's beaches entitled, "Beach Advisory Closing Online Notification," that can be found at <http://www.epa.gov/waterdata/beacon-20-beach-advisory-and-closing-online-notification>.

4. COMPILE DATA TO DETERMINE OVERALL WATER QUALITY

List of Beaches

Michigan beaches identified by local health departments and the DNRE are listed in Appendices D.1 (inland lakes-monitored), D.2 (inland lakes-not monitored), E.1 (Great Lakes-monitored), and E.2 (Great Lakes-not monitored). They are also listed on the DNRE's beach Web site. The beaches are arranged alphabetically by county, then water body, then location

(site name). There are 569 identified public beaches on inland lakes and rivers and 613 identified public beaches on the Great Lakes.

Synopsis of Data

In 2009, monitoring was conducted at 414 (189 inland and 225 Great Lake) public beaches in 57 Michigan counties. Out of 5,921 daily samples collected, 212 (3.6 percent) exceeded Michigan’s WQS (Appendix F).

The exceedances were reported from 83 beaches (20 percent of all monitored beaches), 82 of which reported beach closures or advisories (125 incidents lasting a total of 1,596 days). The number of beaches with exceedances differed from the number of beaches with closures or advisories due to any of the following: (1) water samples were tested before or after the swimming season; (2) delays in receiving test results; (3) a second test (follow-up sample) was used to confirm an exceedance; or (4) preemptive closures or advisories were issued. A summary of beach closures or advisories for inland and Great Lakes beaches from 2000 to 2009 is provided in Table 2.

Table 2. Beach closures or advisories, total number of days closed, percent of monitored beaches with a closure, and percent of samples exceeding WQS for all public beaches in Michigan.

Year	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Closures or Advisories	125	108	89	110	80	92	140	117	119	276
Total Days Closed	1,596	697	1,568	886	474	578	>140	211	122	*
Percent of Monitored Beaches with Closure	19.8	14.8	12.9	18.4	19.0	13.5	10.2	*	*	*
Percent of Samples Exceeding WQS	3.6	2.8	2.6	3.6	2.8	3.1	3.0	4.2	3.9	9.2

*data not available

Synopsis of Data from Great Lakes Beaches

In 2009, monitoring was conducted at 225 Great Lakes public beaches in 37 counties in Michigan. Out of 3,396 daily samples collected, 118 (3.5 percent) exceeded Michigan’s WQS (Appendix F). The exceedances were reported from 44 beaches (19.6 percent of monitored Great Lakes beaches), 41 of which reported beach closures or advisories (62 incidents lasting a total of 661 days). A summary of the exceedances of the *E. coli* WQS for Great Lakes beaches is provided in Table 3.

Table 3. Number of exceedances and closures/advisories for Great Lakes beaches monitored in 2009.

a. Number of Exceedances Reported per Beach	b. Number of Beaches with Exceedance(s)	Total Number of Exceedances (a x b)	c. Number of Closures or Advisories per Beach	d. Number of Beaches with Closures or Advisories	Total Number of Closures or Advisories (c x d)
1	30	30	1	29	29
2	4	8	2	8	16
3	3	9	3	1	3
5	2	10	4	1	4
6	1	6	5	2	10
7	1	7			
8	1	8			
17	1	17			
23	1	23			
TOTAL	44	118		41	62

A summary of the 2009 beach monitoring and beach closure/advisory data for each of the Great Lakes, Lake St. Clair, and connecting channels is provided in Table 4. A summary of sources of contamination reported for beach closures and advisories for the Great Lakes, Lake St. Clair, and connecting channels is provided in Table 5.

Table 4. Number of public beaches and closures/advisories for the Great Lakes, Lake St. Clair, and connecting channels.

Water Body	Number of Public Beaches	Number of Beaches that were Monitored	Number of Beaches reporting a closure	Number of Beach Closures or Advisories	Total Number of Days with Closures or Advisories
Lake Erie	2	2	0	0	0
Lake Huron	165	77	22	31	240
Lake Michigan	308	114	11	12	25
Lake Superior	118	20	0	0	0
Lake St. Clair	6	6	5	15	319
Great Lakes Connecting Channels	14	6	3	4	77
TOTAL	613	225	41	62	661

Table 5. Contamination sources reported for closures and advisories, days affected, and the number of beaches for the Great Lakes, Lake St. Clair, and connecting channels for the specific cause of the beach closure/advisory.

Contamination Source	Number of Closures Reporting Source	Number of Days Affected by Source	Number of Beaches Reporting Source
Wildlife	5	57	2
Agriculture	1	1	1
Storm	4	4	4
Runoff	4	7	4
CSO	2	8	2*
SSO	0	0	0
Other	1	8	1
Unknown	45	576	28*
TOTAL	62	661	42*

*One beach reported two separate closures due to two different sources.

Synopsis of Data from Inland Beaches

In 2009, monitoring was conducted at 189 inland lake public beaches in 37 counties in Michigan. Out of 2,525 daily samples collected, 94 (3.7 percent) exceeded Michigan's WQS (Appendix F). The exceedances were reported from 39 beaches (21 percent of monitored inland beaches) and 41 beaches reported closures or advisories (63 incidents lasting a total of 935 days). A summary of the exceedances of the *E. coli* WQS for inland lakes beaches is provided in Table 6. A summary of sources of contamination reported for beach closures and advisories for inland lakes is provided in Table 7.

Table 6. Number of exceedances and closures/advisories for inland beaches monitored in 2009.

a. Number of Exceedances Reported per Beach	b. Number of Beaches with Exceedance(s)	Total Number of Exceedances (a x b)	c. Number of Closures or Advisories per Beach	d. Number of Beaches with Closures or Advisories	Total Number of Closures or Advisories (c x d)
1	23	23	1	24	24
2	4	8	2	13	26
3	6	18	3	3	9
4	1	4	4	1	4
7	2	14			
8	1	8			
9	1	9			
10	1	10			
TOTAL	39	94		41	63

Table 7. Contamination sources reported for closures and advisories, days affected, and the number of beaches reporting the specific cause of closure/advisory for inland lakes.

Contamination Source	Number of Closures Reporting Source	Number of Days Affected by Source	Number of Beaches Reporting Source
Wildlife	10	155	8*
Agriculture	0	0	0
Storm	3	12	3*
Runoff	4	18	4*
CSO	0	0	0
SSO	3	28	3
Other	2	26	2*
Unknown	41	696	28*
TOTAL	63	935	48*

*Seven beaches reported separate closures due to different sources.

5. EVALUATE THE EFFECTIVENESS OF DNRE PROGRAMS IN ATTAINING WQS FOR PATHOGEN INDICATORS

Beach Water Quality Data that do not Meet WQS

Water quality protection continues to be a great concern in Michigan and depends on the collective efforts of multiple pollution prevention programs. As part of the beach monitoring program, health departments and the DNRE review beach water quality data including the number of beach closures or advisories. This information is used in federal, state, and local pollution prevention programs to determine which water bodies are not meeting WQS and to help identify sources of pollution that affect beach water quality.

Section 303(d) of the federal Clean Water Act and the USEPA's Water Quality Planning and Management Regulations (Title 40 of the Code of Federal Regulations, Part 130) require states to develop Total Maximum Daily Loads (TMDLs) for water bodies that are not meeting WQS. The TMDL process establishes the allowable loadings of pollutants to a water body based on the relationship between pollution sources and water quality conditions. TMDLs provide a basis for determining the pollutant reductions necessary from both point and nonpoint sources to restore and maintain the quality of the water resources.

Waters associated with public beaches are considered to not attain WQS when *E. coli* monitoring data collected by county health departments during the total body contact recreation season of May 1 to October 31 (as described by R 323.1100(2)) meet one or more of the following decision elements:

- *E. coli* concentrations exceed the geometric mean WQS of 130 *E. coli* per 100 ml based on weekly samples collected over a minimum of 16 weeks.
- Ten percent of the sample results exceed the daily maximum WQS of 300 *E. coli* per 100 ml based on weekly samples collected over a minimum of 16 weeks.
- Two or more sample results collected at any time during the total body contact recreation season of May 1 to October 31 exceed the partial body WQS of 1,000 *E. coli* per 100 ml.

The water bodies that exceed WQS and require a TMDL are placed on the Section 303(d) list and TMDL development schedule. A water body is not placed on the TMDL development schedule if a remedial action plan is already in place. The beaches that exceed WQS per the

decision elements are listed on the Section 303(d) list that is available in the most recent “Water Quality and Pollution Control in Michigan Sections 303(d), 305(b), and 314 Integrated Report.”

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REFERENCES

MDEQ. 1997. A Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters. Michigan Department of Natural Resources and Environment. Staff Report #MI/DEQ/SWQ-96/152. January 1997.

USEPA. 1986. Ambient Water Quality Criteria for Bacteria-1986. EPA 440/5-84/002.

USEPA. 2001. Protocol for Developing Pathogen TMDLs. January 2001. EPA 84/R-00-002.

USEPA. 2002. National Beach Guidance and Required Performance Criteria for Grants. EPA-823-B-02-004.

Table 1. 2009-2010 CMI-CWF Grants.

2009-2010 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Barry-Eaton District Health Department	\$21,368	\$8,030	4
Central Michigan District Health Department	\$27,028	\$22,424	23
Chippewa County Health Department	\$22,524	\$9,545	6
District Health Department #2	\$63,199	\$24,697	26
District Health Department #4	\$14,477	\$10,303	7
Genesee County Health Department	\$62,915	\$17,121	16
Luce-Mackinaw-Alger-Schoolcraft District Health Department	\$17,397	\$12,576	4
Macomb County Health Department	\$23,677	\$6,515	2
Muskegon County Health Department	\$23,239	\$16,364	15
Northwest Michigan Community Health Agency	\$21,030	\$19,394	19
Ottawa County Health Department	\$17,629	\$11,061	8
Wayne County Health Department	\$12,273	\$10,303	7
Western Upper Peninsula District Health Department	\$13,348	\$9,545	6
Wexford County Drain Commission	\$14,798	\$9,545	6
TOTAL	\$354,902	\$187,424	149

Appendix B. BEACH Act Grants for Great Lakes Beaches.

Table 1. 2009 BEACH Act Grants.

Local Health Department	Allocated Amount	Total Monitored Beaches
Allegan County Health Department	\$9,388	4
Bay County Health Department	\$11,111	5
Berrien County Health Department	\$26,609	14
Central Michigan District Health Department	\$21,443	8
Chippewa County Health Department	\$18,000	9
Delta-Menominee District Health Department	\$9,388	4
Detroit, City of	\$2,500	1
District Health Department #2	\$18,000	9
District Health Department #4	\$23,165	12
District Health Department #10	\$40,386	22
Huron County Health Department	\$24,887	12
Luce-Mackinac-Alger-Schoolcraft District Health Department	\$9,388	4
Macomb County Health Department	\$9,388	4
Marquette (city of Marquette)	\$11,111	5
Monroe County Health Department	\$9,388	4
Muskegon County Health Department	\$23,165	12
Northwest Michigan Community Health Agency	\$54,230	30
Ottawa County Health Department	\$18,000	9
St. Clair County Health Department	\$28,332	15
Sanilac County Health Department	\$11,111	4
Van Buren/Cass District Health Department	\$9,388	4
Watershed Center (Grand Traverse & Benzie-Leelanau)	\$20,499	9
Wayne County Health Department	\$5,944	2
Western Upper Peninsula District Health Department	\$23,165	12
Total	\$437,986	214

Appendix C. Waterborne Pathogens

Pathogen		Disease	Effects
Bacteria	Escherichia coli (enteropathogenic)	Gastroenteritis	Vomiting, diarrhea, death in susceptible populations
	Helicobacter pylori	Gastritis	Diarrhea. Peptic ulcers are a long-term sequela
	Legionella pneumophila	Legionellosis	Acute respiratory illness
	Leptospira	Leptospirosis	Jaundice, fever
	Pseudomonas	Infections in immunocompromised individuals	Urinary tract infections, respiratory system infections, dermatitis, soft tissue infections, bacteremia, and a variety of systemic infections
	Salmonella typhi	Typhoid fever	High fever, diarrhea, ulceration of the small intestine
	Salmonella	Salmonellosis	Diarrhea, dehydration
	Shigella		Bacterial dysentery
	Vibrio cholera	Cholera	Extremely heavy diarrhea, dehydration
	Yersinia enterocolitica	Yersinosis	Diarrhea
Protozoans	Balantidium coli	Balantidiasis	Diarrhea, dysentery
	Cryptosporidium	Cryptosporidiosis	Diarrhea
	Entamoeba histolytica	Ameobiasis (amoebic dysentery)	Prolonged diarrhea with bleeding, abscesses of the liver and small intestine
	Giardia lamblia	Giardiasis	Mild to severe diarrhea, nausea, indigestion
	Naegleria fowleri	Amoebic meningoencephalitis	Fatal disease; inflammation of the brain
Viruses	Adenovirus (31 types)	Respiratory disease	Eye infections, diarrhea
	Astroviruses	Gastroenteritis	Vomiting, diarrhea
	Enteroviruses (67 types, e.g., polio, echo, and Coxsackie viruses)	Gastroenteritis	Diarrhea. Heart anomalies and meningitis are long-term sequela and are very rare
	Hepatitis A and E	Infectious hepatitis	Jaundice, fever
	Caliciviruses (Norwalk- and Sapporo-like viruses)	Gastroenteritis	Vomiting, diarrhea
	Reovirus	Gastroenteritis	Vomiting, diarrhea
	Rotavirus	Gastroenteritis	Vomiting, diarrhea

Source: USEPA, 2001

Appendix D.1. 2009 Michigan List of Inland Beaches Monitored

		County	Water Body	Location
<u>1</u>	1	Alcona	Alcona Pond	1 Alcona Park East Campground
	2	Alcona	Brownlee Lake	2 Village of Lincoln Park
	3	Alcona	Hubbard Lake	3 Caledonia Township Park
<u>2</u>	4	Alpena	Beaver Lake	1 Beaver Lake Park
	5	Alpena	Lake Avalon	2 Lake Avalon Public Access
<u>3</u>	6	Antrim	Central Lake	1 Thurston Park
	7	Antrim	Elsworth Lake	2 Wooden Shoe Park
	8	Antrim	Lake Bellaire	3 Richardi Park
		Antrim	Torch Lake	4 Day Park
	9			
<u>4</u>	10	Arenac	Oasis Lake	1 Oasis Lake County Park
<u>5</u>	11	Barry	Gun Lake	1 Main Beach - Day Use Area
	12	Barry	Gun Lake	2 Yankee Springs Recreation Area Campground Beach
	13	Barry	Thornapple Lake	3 Charlton Park
<u>6</u>	14	Bay	Kawkawlin River	1 Boat Launch on Kawkawlin River
	15	Bay	Saginaw River	2 Vet's Park South River Rd.
	16	Bay	Saginaw River	3 Vet's Park North Bay City
<u>7</u>	17	Charlevoix	Thumb Lake	1 Thumb Lake Beach
	18	Charlevoix	Walloon Lake	2 Melrose Township Park
<u>8</u>	19	Chippewa	Dukes Lake	1 Dukes Lake
	20	Chippewa	Kinross Lake	2 Kinross Lake
	21	Chippewa	Monocle Lake	3 Monocle Lake
<u>9</u>	22	Clare	Bertha Lake	1 Bertha Lake Beach
	23	Clare	Borrow Pit	2 Herrick County Park
	24	Clare	Budd Lake	3 Wilson Lake State Park
	25	Clare	Shingle Lake	4 Shingle Lake Park
	26	Clare	Silver Lake	5 Silver Lake Park
<u>10</u>	27	Crawford	Higgins Lake	1 North Higgins State Park
<u>11</u>	28	Eaton	Fox Memorial Park Beach	1 Fox Memorial Park
<u>12</u>	29	Emmet	Crooked Lake	1 Little Traverse Township Beach
	30	Emmet	Larks Lake	2 Pioneer Picnic Park
	31	Emmet	Pickarel Lake	3 Camp Petosega
	32	Emmet	Pickarel Lake	4 Channel Beach
	33	Emmet	Walloon Lake	5 Resort Pike Road Beach
<u>13</u>	34	Genesee	Buell Lake	1 Boat Ramp at Buell Lake
	35	Genesee	Byram Lake	2 Clover Beach
	36	Genesee	Copneconic Lake	3 Copneconic Day Beach
	37	Genesee	Copneconic Lake	4 Camp Copneconic

Appendix D.1. 2009 Michigan List of Inland Beaches Monitored

	38	Genesee	Covenant Hill Camp	5	Covenant Hill Camp
	39	Genesee	Crooked Lake	6	Crooked Lake
	40	Genesee	Dollar lake	7	Dollar Lake
	41	Genesee	Fenton Lake	8	Township Hall
	42	Genesee	Hasler Lake	9	Hasler Lake Campground
	43	Genesee	Hasler Lake	10	Beach at Hasler Lake
	44	Genesee	Holloway Reservoir	11	Buttercup Beach
	45	Genesee	Kelly Lake	12	Kelly Lake
	46	Genesee	Lake Linda	13	Lake Linda
	47	Genesee	Mott Lake	14	Mott Lake Beach
	48	Genesee	Mott Lake	15	Bluebell Beach
	49	Genesee	Myers Lake	16	Myers Lake
	50	Genesee	Otter Lake	17	Griswold Park
	51	Genesee	Pinewood Lake	18	Beach at Pinewood Lake
	52	Genesee	Silver Lake	19	City Park Beach
	53	Genesee	West Sister Lake	20	West Sister Lake
<u>14</u>	54	<u>Gladwin</u>	Cedar River	1	Gladwin City Park
	55	Gladwin	Pratt Lake	2	Pratt Lake
	56	Gladwin	Ross Lake	3	Beaverton City Park
<u>15</u>	57	<u>Gogebic</u>	Lake Gogebic	1	Gogebic County Park
	58	Gogebic	Lake Gogebic	2	Lake Gogebic State Park Beach
	59	Gogebic	Sunday Lake	3	Sunday Lake Beach
<u>16</u>	60	<u>Houghton</u>	Lake Roland	1	Twin Lakes State Park
<u>17</u>	61	<u>Ingham</u>	Valhalla Pond	1	Valhalla Park
	62	Ingham	Lake Lansing	2	Lake Lansing Park South
	63	Ingham	Burchfield Pond	3	Burchfield Park
	64	Ingham	Hawk Island	4	Hawk Island County Park
<u>18</u>	65	<u>Iosco</u>	Cedar Lake	1	Greenbush Township beach
	66	Iosco	Foote Pond	2	Old Orchard Park
	67	Iosco	Long Lake	3	Long Lake Public Access
	68	Iosco	Van Ettan Lake	4	Oscoda Township Park- Van Ettan Lake
<u>19</u>	69	<u>Isabella</u>	Chippewa River	1	Deerfield County Park
	70	Isabella	Coldwater Lake	2	Coldwater Park
	71	Isabella	Halls Lake	3	Halls Lake
<u>20</u>	72	<u>Kalamazoo</u>	Blue Lake	1	Cold Brook County Park
	73	Kalamazoo	Campbell Lake	2	Robert Morris Park
	74	Kalamazoo	Eagle Lake	3	Fort Custer Recreation Area Beach
	75	Kalamazoo	Gull Lake	4	Ross Township Park
	76	Kalamazoo	Hogsett Lake	5	Prairie View County Park
	77	Kalamazoo	Long Lake	6	Ramona Park
	78	Kalamazoo	Sunset Lake	7	Sunset Lake Park
	79	Kalamazoo	Swimmers Lake	8	Markin Glen County Park
	80	Kalamazoo	Woods Lake	9	Woods Lake Beach

Appendix D.1. 2009 Michigan List of Inland Beaches Monitored

<u>21</u>	81	Livingston	Bentley Lake	1	Camp Innisfree
	82	Livingston	Bishop Lake	2	Brighton State Recreation Area
	83	Livingston	Chenago Lake	3	Camp Talahi
	84	Livingston	Church Lake	4	Wildwood Ranch
	85	Livingston	Cook Lake	5	Taylor's Beach
	86	Livingston	Kent Lake	6	Island Lake Recreation Area - Kent Lake
	87	Livingston	Lake Chemung	7	Lake Chemung Outdoor Resort
	88	Livingston	Lake Walden	8	Waldenwoods Resort
	89	Livingston	Pleasant Lake	9	Howell Nature Center
	90	Livingston	Sandy Bottom Lake	10	Nazarene Camp
	91	Livingston	Spring Mill Pond	11	Island Lake Recreation Area
	92	Livingston	Thompson Lake	12	Howell City Park
<u>22</u>	93	Mackinac	Brevort Lake	1	Brevort Lake Campground Beach
<u>23</u>	94	Macomb	Stoney Creek Lake-Impoundment	1	Stoney Creek Metropark-Baypoint Beach
	95	Macomb	Stoney Creek Lake-Impoundment	2	Stoney Creek Metropark-Eastwood Beach
<u>24</u>	96	Montmorency	Clear Lake	1	Clear Lake State Park
<u>25</u>	97	Muskegon	Bear Lake	1	Laketon Township Beach
	98	Muskegon	Big Blue Lake	2	Blue Lake County Park Beach
	99	Muskegon	Fox Lake	3	Fox Lake Park Beach
	100	Muskegon	Half Moon Lake	4	Moore County Park Beach
	101	Muskegon	Mona Lake	5	Mona Lake Park Beach
	102	Muskegon	Muskegon Lake	6	Water Sports Park
	103	Muskegon	Muskegon Lake	7	Harbor Towne Beach
	104	Muskegon	Twin Lake	8	Twin Lake County Park Beach
	105	Muskegon	White Lake	9	Maple Park
	106	Muskegon	Wolf Lake	10	Wolf Lake County Park
<u>26</u>	107	Oakland	Adams Lake	1	Addison Oaks Co. Park
	108	Oakland	Big Seven Lake	2	Seven Lakes Park
	109	Oakland	Bush Lake	3	Holly Township Beach
	110	Oakland	Cass Lake	4	Pontiac Yacht Club
	111	Oakland	Cass Lake	5	Keego Harbor City Beach
	112	Oakland	Cass Lake	6	Dodge Park #4
	113	Oakland	Crooked Lake	7	Independence Oaks County Park
	114	Oakland	Fish Lake	8	Camp Ohiyesa - North
	115	Oakland	Green Lake	9	Bay Court Park
	116	Oakland	Haas Lake	10	Haas Lake Park #1
	117	Oakland	Heron Lake	11	Holly Recreation Area - Heron Beach
	118	Oakland	Kent Lake	12	Kensington - Maple beach
	119	Oakland	Kent Lake	13	Kensington - Martindale Beach
	120	Oakland	Lower Trout	14	Bald Mountain Recreation Area
	121	Oakland	Mill Pond	15	Davisburg Village Beach (Hart Community Center)
	122	Oakland	No Name	16	Thelma Spencer Park
	123	Oakland	Orchard lake	17	Country Club (500 W. Shore Dr)
	124	Oakland	Phillips Lake	18	Camp Dearborn - Lake #1

Appendix D.1. 2009 Michigan List of Inland Beaches Monitored

	125	Oakland	Phillips Lake	19	Camp Dearborn - Lake #5
	126	Oakland	Pontiac Lake	20	Pontiac Recreation Area
	127	Oakland	Proud Lake	21	Proud Lake Recreation Area Campground
	128	Oakland	Stewart Lake	22	Groveland Oaks County Park - Paradise Beach
	129	Oakland	Stony Lake	23	Stony Lake Park
	130	Oakland	Sun Lake	24	Finnish Day Camp
	131	Oakland	Sylvan Lake	25	Ferndale
	132	Oakland	Teeple Lake	26	Teeple Lake Recreation Area - Highland State Park
	133	Oakland	Tommys Lake	27	Camp Agawam Boy Scout Camp
	134	Oakland	Walled Lake	28	E.V. Mercer City Beach
	135	Oakland	Walnut Lake	29	Bloomfield Parks & Recreation/West Hills H.S.
	136	Oakland	Walnut Lake	30	Walnut Lake Estates
<u>27</u>	137	Ogemaw	Devoe Lake	1	Rifle River Recreation Area
	138	Ogemaw	Grousehaven Lake	2	Rifle River Recreation Area Campground Beach
	139	Ogemaw	Rifle Lake	3	Shady Shores Park Subdivision Beach
	140	Ogemaw	Skidway Lake	4	Skidway Lake
<u>28</u>	141	Ontonagon	Lake Gogebic	1	Ontonagon County Park
	142	Ontonagon	Lake Gogebic	2	Bergland Township Park
<u>29</u>	143	Osceola	Big Lake	1	Crittenden Park
	144	Osceola	Center Lake	2	Center Lake Park
	145	Osceola	Muskegon River	3	Crawford Park
	146	Osceola	Rose Lake	4	Rose Lake County Park
	147	Osceola	Sunrise Lake	5	Sunrise Lake Park
<u>30</u>	148	Oscoda	Perry Lake	1	Comins Township. Park
	149	Oscoda	Smith Lake	2	Oscoda County Park
<u>31</u>	150	Otsego	Bear Lake	1	Bear Lake State Forest Campground
	151	Otsego	Big lake	2	Big Lake
	152	Otsego	Otsego Lake	3	Otsego State Park
	153	Otsego	Otsego Lake	4	Otsego County Park
	154	Otsego	Otsego Lake	5	Arbutus Beach
	155	Otsego	Otsego Lake	6	Otsego Lake State Park North
	156	Otsego	Otsego Lake	7	WahWahSoo Beach
	157	Otsego	Pickeral Lake	8	Pickeral Lake State Forest Campground
<u>32</u>	158	Ottawa	Crockery Lake	1	Grose Park
	159	Ottawa	Georgetown Lake	2	Georgetown Community Park
	160	Ottawa	Lake Macatawa	3	Dunton Park
	161	Ottawa	Lake Macatawa	4	Holland State Park
	162	Ottawa	Lake Macatawa	5	Fallen Leaf Park
	163	Ottawa	Maplewood Lake	6	Maplewood Lake Park
	164	Ottawa	Pottawattomie Bayou	7	Pottawattomie Park
	165	Ottawa	Spring Lake	8	Lakeside Beach
<u>33</u>	166	Roscommon	Higgins Lake	1	South Higgins Lake State Park
	167	Roscommon	Higgins Lake	2	Gerrish Township Park

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	168	Roscommon	Houghton Lake	3	Denton Township Public Beach
	169	Roscommon	Houghton Lake	4	Houghton Lake Heights
	170	Roscommon	Lake St. Helen	5	Richfield Township Public Fishing Site
<u>34</u>	171	St. Clair	Emmett K.O.A. Pond	1	Emmett K.O.A.
	172	St. Clair	Fort Trodd Lake	2	Fort Trodd South
	173	St. Clair	Fort Trodd Lake	3	Fort Trodd Campground North
	174	St. Clair	Kimball Pond	4	Kimball Township Pond
	175	St. Clair	Ruby Campground Pond	5	Ruby Campground
<u>35</u>	176	Washtenaw	Bruin Lake	1	Pinckney Recreation Area
	177	Washtenaw	Half Moon Lake	2	Pinckney Recreation Area
	178	Washtenaw	Independence Lake	3	Independence Lake County Park
	179	Washtenaw	Silver Lake	4	Pinckney Recreation Area
	180	Washtenaw	Sugarloaf Lake	5	Waterloo Recreation Area
<u>36</u>	181	Wayne	Belleville Lake	1	Van Buren Township Park
	182	Wayne	Rouge River	2	Wilcox Lake
	183	Wayne	Rouge River	3	Phoenix Lake
<u>37</u>	184	Wexford	Billings Lake	1	Manton Park
	185	Wexford	Lake Cadillac	2	Cadillac City Dock
	186	Wexford	Lake Cadillac	3	Kenwood Park
	187	Wexford	Lake Cadillac	4	City Park
	188	Wexford	Lake Meauwataka	5	Colfax Township Park
	189	Wexford	Lake Mitchell	6	Mitchell State Park

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	County	Water Body	Location
<u>1</u>	1 Alcona	Hubbard Lake	1 Alcona Township Park
	2 Alcona	Brownlee Lake	2 Brownlee Lake - Village of Lincoln Park
	3 Alcona	Alcona Pond	3 Alcona Pond West Campground
<u>2</u>	4 Allegan	Gun Lake	1 Gun Lake County Park Beach
	5 Allegan	Dumont Lake	2 Dumont Lake County Park Beach
	6 Allegan	Little John Lake	3 Little John Lake County Park Beach
	7 Allegan	Swan Creek Pond	4 Pine Point Campground Beach
	8 Allegan	Ely Lake	5 Ely Lake Campground Beach
<u>3</u>	9 Alpena	Long Lake	1 Long Lake Day Use
	10 Alpena	Long Lake	2 Long Lake Park
<u>4</u>	11 Antrim	Torch Lake	1 Eastport
	12 Antrim	Torch River	2 Torch River Sand Bar
	13 Antrim	Torch Lake	3 Torch River Bridge
<u>5</u>	14 Arenac	Au Gres River	1 DNR Access-Au Gres River
	15 Arenac	Pine River	2 Pine River Public Access
	16 Arenac	Man made Pond	3 Big Bend Campground
	17 Arenac	Man made Pond	4 Outdoor Adventures
	18 Arenac	Flint Park Hunt Club Lake	5 Flint Park Hunt Club
<u>6</u>	19 Barry	Gun Lake	1 Old Beach - Day Use Area
	20 Barry	Gull Lake	2 Prairieville Township Park
<u>7</u>	21 Benzie	Crystal Lake	1 Bellows
	22 Benzie	Crystal Lake	2 South Shore near Beulah
	23 Benzie	Otter Creek	3 Sleeping Bear Dunes-Otter Creek
<u>8</u>	24 Berrien	Paw Paw Lake	1 Paw Paw Lake
	25 Berrien	St. Joseph River	2 Bertrand Park
	26 Berrien	St. Joseph River	3 Niles - Marmont
	27 Berrien	St. Joseph River	4 Niles - French Paper
<u>9</u>	28 Branch	Messenger Lake	1 Memorial Park
	29 Branch	First Lake	2 Quincy Park
<u>10</u>	30 Calhoun	Gogzac Lake	1 Willard Beach in Battle Creek
	31 Calhoun	Duck Lake	2 Springport
<u>11</u>	32 Charlevoix	Huffman Lake	1 Hudson Township Park
<u>12</u>	33 Cheboygan	Mullett Lake	1 Foot Road Park
	34 Cheboygan	Mullett Lake	2 Topinabee Park
	35 Cheboygan	Douglass Lake	3 Ryder's Landing
	36 Cheboygan	Mullett Lake	4 Boy Scout Launch
	37 Cheboygan	Mullett Lake	5 Polish Line Beach
	38 Cheboygan	Mullett Lake	6 Aloha State Park

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	39	Cheboygan	Black Lake	7	Black Lake S.F.C.G.
	40	Cheboygan	Black Lake	8	Bluffs Beach
	41	Cheboygan	Mullett Lake	9	Hobert's Launch
	42	Cheboygan	Burt Lake	10	Burt Lake State Park
	43	Cheboygan	Burt Lake	11	Hoppie's Launch
	44	Cheboygan	Mullett Lake	12	Grand View Beach
	45	Cheboygan	Burt Lake	13	Devoe Beach
	46	Cheboygan	Burt Lake	14	Maple Bay Park
	47	Cheboygan	Webber Lake	15	Webber Lake State Park
	48	Cheboygan	Mullett Lake	16	Orchard Beach
<u>13</u>	49	Chippewa	Caribou Lake	1	Caribou Lake
	50	Chippewa	Carp Lake	2	Trout Lake
	51	Chippewa	Soldiers Lake	3	Soldiers Lake
<u>14</u>	52	Clare	Crooked Lake	1	Hillcrest Public Landing
	53	Clare	Doc and Tom Lake	2	Lake of the Pines
	54	Clare	Arnold Lake	3	Arnold Lake Beach
	55	Clare	George Lake	4	Lake George Public Landing
	56	Clare	Lilly Lake	5	Lilly Lake Beach
	57	Clare	Sand Lake	6	Sand Lake Beach
	58	Clare	Crooked Lake	7	Crooked Lake Beach
	59	Clare	Hayes Lake (Cranberry Lake)	8	Oak Hills Children's Camp
	60	Clare	Long Lake	9	Long Lake Beach
	61	Clare	Muskegon River	10	Muskegon River Township Park
	62	Clare	Dodge Lake	11	Dodge Lake Beach
	63	Clare	Townline Lake	12	Cedar Shores Beach
	64	Clare	Shamrock Lake	13	City of Clare Park
	65	Clare	Grass Lake	14	Sandy Shores Beach
	66	Clare	Cranberry lake	15	Cranberry Lake South
<u>15</u>	67	Clinton	Lake Ovid	1	Sleepy Hollow State Park Beach
<u>16</u>	68	Eaton	Grand River	1	Lincoln Brick Park
	69	Emmet	Crooked Lake	2	Oden Beach
<u>17</u>	70	Genesee	Barnum Lake	1	Barnum Lake
	71	Genesee	Thread Lake	2	Thread Lake Beach
	72	Genesee	McKane Lake	3	McKane Lake Beach
	73	Genesee	Lake Shinangaug	4	Lake Shinangaug
	74	Genesee	Mott Lake	5	Bluegill Boat Ramp
	75	Genesee	Mott Lake Stepping Stone	6	Mott Lake Stepping Stone Beach
	76	Genesee	Golden Rod Lake	7	Golden Rod Beach
	77	Genesee	Smokerise Lake	8	Smokerise Beach
	78	Genesee	Crane Lake	9	Crane Lake Beach
	79	Genesee	Flagstone Point	10	Flagstone Point Beach
	80	Genesee	Linden Mill Pond	11	Linden Mill Pond Beach
	81	Genesee	Loon Lake	12	Loon Lake Beach
	82	Genesee	Lobdell Lake	13	DNR Boat Launch at Lobdell Lake
	83	Genesee	Lake Ponemah	14	DNR Boat Launch at Lake Ponemah

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	84	Genesee	Marl Lake	15	Marl Lake Beach
	85	Genesee	Lake Helene	16	Lake Helene Beach
	86	Genesee	Fenton Lake	17	DNR Boat Dock-Fenton Lake
	87	Genesee	McCaslin Lake	18	McCaslin Lake Beach
	88	Genesee	Fenton Lake	19	Fenton Lake Marina
	89	Genesee	Lake Ponemah	20	at Drain
	90	Genesee	Pine Lake	21	Pine Lake Beach
	91	Genesee	Silver Lake	22	Silver Lake Marina
	92	Genesee	Squaw Lake	23	Squaw Lake Beach
	93	Genesee	Kearsley Reservoir	24	Kearsley Reservoir Beach
	94	Genesee	Holloway Reservoir	25	Walleye Pike Dock
<u>18</u>	95	Gladwin	House Lake	1	House Lake
	96	Gladwin	Tittabawassee River	2	Pine Street Public Access
	97	Gladwin	Secord Lake	3	Secord Lake
	98	Gladwin	Wixon Lake	4	Wixon Lake - West
	99	Gladwin	Hoister Lake	5	Hoister Lake Beach
	100	Gladwin	Lake Four	6	Lake Four
	101	Gladwin	Trout Lake	7	Trout Lake SFCG
	102	Gladwin	Wiggins Lake North	8	Wiggins Lake DNR Boat Launch
	103	Gladwin	Lake Lancer	9	Sugar Springs/Lake Lancer
	104	Gladwin	Wiggins Lake South	10	Wiggins Lake - at Clendening Road
	105	Gladwin	Cedar River	11	Gladwin North Park
	106	Gladwin	Tittabawassee River	12	Gilman Springs Canoe Launch
	107	Gladwin	Lyle Drain/Tobacco River	13	Lost Haven Beach
	108	Gladwin	Flowing well/pond	14	Gilman Springs Swimming Area
	109	Gladwin	Tittabawassee River	15	Estey Road Access
	110	Gladwin	Tittabawassee River	16	Good News Camp
	111	Gladwin	Secord Lake	17	Secord Lake - East
	112	Gladwin	Secord Lake	18	West River Drive Boat Launch
	113	Gladwin	Cedar River	19	Cedar River Campground Beach
<u>19</u>	114	Grand	Long Lake (AKA: Mickey Lake)	1	Gilbert Beach
	115	Grand Traverse	Long Lake (AKA: Mickey Lake)	2	Taylor Park
<u>20</u>	116	Hillsdale	Baw Beese Lake	1	Sandy Beach
	117	Hillsdale	Bird lake	2	Bird Lake Beach
<u>21</u>	118	Iosco	Sand Lake	1	Sand Lake - Sand Lake Road Access
	119	Iosco	Loon Lake	2	Loon Lake Park
	120	Iosco	Foot Pond	3	Footsite Park
	121	Iosco	Chain Lake	4	Chain Lake Beach
<u>22</u>	122	Isabella	Millpond	1	Millpond Park
<u>23</u>	123	Jackson	Clark Lake	1	Clark Lake County Park
	124	Jackson	Swains Lake	2	Swains Lake County Park
	125	Jackson	Portage Lake	3	Portage Lake County Park
	126	Jackson	Grass Lake	4	Grass Lake County Park
	127	Jackson	Round Lake	5	Round Lake County Park

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	128	Jackson	Vineyard Lake	6	Vineyard Lake County Park
	129	Jackson	Lime Lake	7	Lime Lake County Park
	130	Jackson	Pleasant Lake	8	Pleasant Lake County Park & Campground
	131	Jackson	Little Wolf Lake	9	Little Wolf Lake County Park
	132	Jackson	Gilletts Lake	10	Gilletts Lake County Park
	133	Jackson	Vandercook Lake	11	Vandercook Lake County Park
	134	Jackson	Clear Lake	12	Clear Lake County Park
<u>24</u>	135	<u>Kalamazoo</u>	Timber Lake	1	Timber Lake Campground
<u>25</u>	136	<u>Kent</u>	Wabasis Lake	1	Wabasis Lake County Park
	137	Kent	Reeds Lake	2	Collins Park
	138	Kent	Myers Lake	3	Myers Lake County Park
	139	Kent	Long Lake	4	Long Lake County Park
	140	Kent	Versluis Lake	5	Versluis Park
	141	Kent	Lincoln Lake	6	Lincoln Lake Baptist Camp
	142	Kent	Scalley Lake	7	Scalley Lake Park
	143	Kent	Lincoln Lake	8	Lincoln Pines Resort
<u>26</u>	144	<u>Leelanau</u>	South Bar Lake	1	South Bar Lake - South End
	145	Leelanau	Lake Leelanau	2	Popp Road End
	146	Leelanau	inland lake	3	Sleeping Bear Dunes-North Bar Lake
	147	Leelanau	inland lake	4	Sleeping Bear Dunes-Little Glen Lake
	148	Leelanau	Lake Leelanau	5	Leelanau Township Park Beach
	149	Leelanau	Lake Leelanau	6	Nedow's (Barthalomew) Beach
<u>27</u>	150	<u>Livingston</u>	Dibrova Lake	1	Green Valley Camp
<u>28</u>	151	<u>Luce</u>	Quarry Beach	1	Quarry Beach
<u>29</u>	152	<u>Marquette</u>	Shiras Pool	1	Shiras Swimming Area
	153	Marquette	Dead River Reservoir	2	Marquette Tourist Park Beach
<u>30</u>	154	<u>Menominee</u>	Shakey Lakes	1	Shakey Lakes Campground
	155	Menominee	Hermansville lake	2	Hermansville Beach
<u>31</u>	156	<u>Midland</u>	Sanford Lake	1	Sanford Lake Park
<u>32</u>	157	<u>Monroe</u>	Monroe KOA Campground Pond	1	Monroe K.O.A. Campground
	158	Monroe	Camp Lord Willing Pond	2	Camp Lord Willing
	159	Monroe	Pond	3	Covered Wagon Campground
	160	Monroe	Heath Beach Pond	4	Heath Beach
	161	Monroe	K.C. Campground Pond	5	K.C. Campground
	162	Monroe	Pond	6	Wilderness Retreat Campground
	163	Monroe	The Vine campground pond	7	The Vine
	164	Monroe	(man-made pond)	8	Totem Pole Campground Pond
	165	Monroe	Pirollis Campground Pond	9	Pirolli's Campground
<u>33</u>	166	<u>Montmorency</u>	Crooked Lake	1	Crooked Lake Beach
	167	Montmorency	East Twin Lake	2	East Twin Beach/Albert Township Park

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	168	Montmorency	Clear Lake	3	Clear Lake Day Use
	169	Montmorency	Ess Lake	4	Ess Lake State Campground
34	170	Muskegon	Duck Lake	1	Duck Lake State Park Beach
	171	Muskegon	Muskegon Lake	2	Muskegon State Park - Muskegon Lake Side
	172	Muskegon	Mona Lake	3	Ross Park Beach
	173	Muskegon	Wolf Lake	4	Sunset Park
	174	Muskegon	West Lake	5	Paddley Park
35	175	Oakland	Lakeville Lake	1	Doll's Dock (Skip's Landing)
	176	Oakland	Deer Lake	2	Independence Township Village Beach
	177	Oakland	Mud Lake	3	Rose Hill Center
	178	Oakland	Big Peat Lake	4	Haas Lake Park #2
	179	Oakland	Long Lake	5	Christ the King Church Camp
	180	Oakland	Prince Lake	6	Upland Hills Farm
	181	Oakland	Phipps Lake	7	Camp Maas- Sobell Beach
	182	Oakland	Wildwood Lake	8	Holly Recreation Area - Wildwood Beach
	183	Oakland	Orion Lake	9	Greens Park Village Beach
	184	Oakland	Round Lake	10	Scripter Village Park Township Beach
	185	Oakland	Charnwood Lake	11	Charnwood
	186	Oakland	Woodhull Lake	12	Woodhull Lake Civic Association
	187	Oakland	Green Lake	13	Camp Wathana
	188	Oakland	Elizabeth Lake	14	Terrace
	189	Oakland	Pine Lake	15	Pine Lake Manor
	190	Oakland	Green Lake	16	Clear Water Resort
	191	Oakland	Walled Lake	17	Lakeshore Park
	192	Oakland	Handsome Lake	18	Camp Oakland - summer
	193	Oakland	Lower Straits	19	Maple Point
	194	Oakland	Ekelund Lake	20	Camp Gordanwood
	195	Oakland	Narrin Lake	21	Camp Narrin
	196	Oakland	Heather Lake	22	Heather Lake Estates
	197	Oakland	Maceday Lake	23	Moutain View C.C. Subdivision
	198	Oakland	Silver Lake	24	Silver Hill Road
	199	Oakland	Clear Lake	25	Lakeland Improvement Association - Keith Street
	200	Oakland	Maceday Lake	26	Whitfield-Maceday Association - North
	201	Oakland	Meadow Lake	27	Meadow Lake Association
	202	Oakland	Square Lake	28	Pleasant View Subdivision
	203	Oakland	Round Lake	29	Family Park
	204	Oakland	Cass Lake	30	Cass Lake Woods
	205	Oakland	Deer Lake	31	Deer Lake Estates
	206	Oakland	Sylvan Lake	32	Cunningham Park
	207	Oakland	Sylvan Lake	33	Lakeview
	208	Oakland	Elizabeth Lake	34	Walters
	209	Oakland	Elizabeth Lake	35	Bloomfield
	210	Oakland	Scotch Lake	36	Scotch Lake Residents
	211	Oakland	Voorheis Lake	37	Keatington Subdivision - Joslyn Ct.
	212	Oakland	Walnut Lake	38	Walnut Lake Hills Corporation
	213	Oakland	Eagle Lake	39	Eagle Lake Road
	214	Oakland	Long Lake	40	Bunny Run C.C.
	215	Oakland	Avon Lake	41	Avon Lakes Beach #1

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216	Oakland	Loon Lake	42	Indianwood
217	Oakland	Eagle Lake	43	Lakeland Estates
218	Oakland	Elizabeth Lake	44	Rangate Park
219	Oakland	Huntoon Lake	45	Broadway Civic Association
220	Oakland	Huntoon Lake	46	Burlingham Lake Park II
221	Oakland	Sylvan Lake	47	Sylvan Shores Improvement Association
222	Oakland	Tipsico Lake	48	Brown's Landing Mobile Home Park
223	Oakland	Watkins Lake	49	Heitch Street
224	Oakland	Elizabeth Lake	50	Elizabeth Shores
225	Oakland	Haas Lake	51	Haas Lake Park #3
226	Oakland	Huntoon Lake	52	Burlingham Lake Park I
227	Oakland	Marion Lake	53	Locklin Pines Association
228	Oakland	Square Lake	54	Pleasant View Subdivision - Kempster St
229	Oakland	Sylvan Lake	55	Pioneer Highlands
230	Oakland	Voorheis Lake	56	Keatington Subdivision - Eaton Gate - off Baldwin
231	Oakland	Brendel Lake	57	Lakewood Village
232	Oakland	Carpenter Lake	58	Silver Valley Subdivision
233	Oakland	Avon Lake	59	Avon Lakes Beach #2
234	Oakland	Indian Lake	60	Indian Lake Improvement Association
235	Oakland	Cass Lake	61	Sylvan-on-the-Lakes
236	Oakland	Cass Lake	62	Willow Beach Subdivision
237	Oakland	Geneva Lake	63	Lakewood Farms - Crocus Street
238	Oakland	Hammond Lake	64	Hammond Estates
239	Oakland	Middle Straits Lake	65	Twin Beach Park
240	Oakland	Middle Straits Lake	66	Crystal Echo (the point)
241	Oakland	Pleasant Lake	67	Pleasant Lake Highlands
242	Oakland	Reed Lake	68	Reed Lake Property Owners
243	Oakland	Sugden Lake	69	Oakridge Subdivision
244	Oakland	Walnut Lake	70	Shenandoah Farms Association
245	Oakland	Walters Lake	71	Sunny Beach #1 - Eston Road
246	Oakland	Wing Lake	72	Westwood Manor
247	Oakland	Cedar Island Lake	73	Cedar Crest Subdivision
248	Oakland	Darb Lake	74	Mission Springs Subdivision
249	Oakland	Morgan Lake	75	Lake Angelus Lakeview Estates
250	Oakland	Oakland Lake	76	Bird Island Subdivision
251	Oakland	Orion Lake	77	Sunset Club
252	Oakland	Union Lake	78	Union Lake Heights Subdivision #2
253	Oakland	Union Lake	79	Burley & Barnsbury Streets
254	Oakland	Van Norman Lake	80	Waterford Hill
255	Oakland	Walnut Lake	81	North Cove
256	Oakland	Cass Lake	82	Keego Harbor Trailer Park
257	Oakland	Geneva Lake	83	Lakewood Farms - Sharon Street
258	Oakland	Green Lake	84	Green Acres / Green Valley Park
259	Oakland	Middle Straits Lake	85	Stony Beach
260	Oakland	Middle Straits Lake	86	Tripps Sub. Park
261	Oakland	Pleasant Lake	87	Pleasant Lake Manor
262	Oakland	Pleasant Lake	88	Pleasant Lake Woods
263	Oakland	Tan Lake	89	Mary K. Subdivision
264	Oakland	Union Lake	90	Union Lake Beach Club
265	Oakland	Walnut Lake	91	Walnut Lake Park

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266	Oakland	Walters Lake	92	Sunny Beach #2 - Clarkston Road
267	Oakland	Bogie Lake	93	Pinecrest Shores
268	Oakland	Cranberry Lake	94	Cranberry Lake Village
269	Oakland	Loon Lake	95	Birch Park
270	Oakland	Lotus Lake	96	Mountain View
271	Oakland	Orchard Lake	97	St. Mary's Park
272	Oakland	Sherwood Lake	98	Ravinewood West
273	Oakland	Upper Pettibone Lake	99	Oak Heights Improvement Association, 3015 Lakeview
274	Oakland	Upper Straits Lake	100	Shady Beach
275	Oakland	Long Lake	101	Twin Shores Subdivision
276	Oakland	Sand Lake	102	Seven Lakes State Park - Campground
277	Oakland	Long Lake	103	Annex 1
278	Oakland	Loon Lake	104	Sandy Beach
279	Oakland	Walnut Lake	105	Bloomfield Square Beach Association
280	Oakland	Commerce Lake	106	Log Cabin Sub.
281	Oakland	Emerald Lake	107	Emerald Lake
282	Oakland	Brendel Lake	108	Pawlaks Campground
283	Oakland	Carpenter Lake	109	Lakeview Recreation
284	Oakland	Harvey Lake	110	Harvey Lake Heights
285	Oakland	Lower Straits Lake	111	Shores at Bay Point
286	Oakland	Middle Straits Lake	112	Crystal Echo
287	Oakland	Sherwood Lake	113	Ledgewood
288	Oakland	Watkins Lake	114	Lakeland Association #1
289	Oakland	Watkins Lake	115	Whitney Street
290	Oakland	Wing Lake	116	Wing Lake Farms Association
291	Oakland	Cranberry Lake	117	Cranberry Lake Village
292	Oakland	Cedar Island Lake	118	Sunset Subdivision
293	Oakland	Davis Lake	119	Meagher Park/Woodland Manor
294	Oakland	Harvey Lake	120	Harvey Lake Estates
295	Oakland	Middle Straits Lake	121	West Acres
296	Oakland	Neva Lake	122	Lakewood Village Subdivision
297	Oakland	Rowe Lake	123	Jacksina Subdivision
298	Oakland	Sherwood Lake	124	Sherwood Boat Ramp
299	Oakland	Upper Pettibone Lake	125	657 Dunleavy
300	Oakland	Walnut Lake	126	Finnish American Club of Detroit
301	Oakland	Watkins Lake	127	Lakeland Association #2
302	Oakland	Wing Lake	128	Wing Lake Property Owners Association
303	Oakland	Elizabeth Lake	129	Cass-Elizabeth Heights
304	Oakland	Huntoon Lake	130	Huntoon Village
305	Oakland	Maceday Lake	131	Whitfield-Maceday Association - South
306	Oakland	Walnut Lake	132	Lone Pine Association
307	Oakland	Elizabeth Lake	133	Elizabeth Lake Estates Improvement Assoc.
308	Oakland	Elizabeth Lake	134	Elizabeth Lakeshore
309	Oakland	Phipps Lake	135	Camp Maas - Rodecker
310	Oakland	Walnut Lake	136	Walnut Lake Property Owners Sub #1
311	Oakland	Walled Lake	137	Beachwalk Apartments
312	Oakland	Bass Lake	138	Idlewild Subdivision
313	Oakland	Bogie Lake	139	Bogie Lake Property Owners - Beryl Drive
314	Oakland	Crescent Lake	140	Crescent Highlands
315	Oakland	Crescent Lake	141	Crescent Lake Park

Appendix D.2. 2009 Michigan List of Inland Beaches Not Monitored

316	Oakland	Lotus Lake	142	Lotus Park
317	Oakland	Lotus Lake	143	Harris Park
318	Oakland	Oakland Lake	144	Lake Oakland Shores
319	Oakland	Orion Lake	145	Lake Orion Heights
320	Oakland	Sherwood Lake	146	Sherwood Property Owners
321	Oakland	Sherwood Lake	147	Ravinewood East
322	Oakland	Upper Straits Lake	148	Banker's Subdivision
323	Oakland	Upper Straits Lake	149	Outlet A
324	Oakland	Waumegah Lake	150	Lake Waumegah Homeowners Association
325	Oakland	Whipple Lake	151	Whipple Shores Subdivision
326	Oakland	White Lake	152	Rolling Acres
327	Oakland	Sandshores	153	Emerald Lake Homeowners Assoc. - Little Creek Road
328	Oakland	Allen Lake	154	Fox Bay Civic Association
329	Oakland	Brendel Lake	155	Brendle Heights - Hillwood
330	Oakland	Fox Lake	156	Cloister-on-the-Lakes
331	Oakland	Lower Straits Lake	157	Lower Straits Beach Club
332	Oakland	Oakland Lake	158	Lake Oakland Heights
333	Oakland	Union Lake	159	Alpha Beach
334	Oakland	Upper Straits Lake	160	Bayside Beach Association
335	Oakland	Watkins Lake	161	Lanarh Street
336	Oakland	White Lake	162	Stanley Beach
<u>36</u>	<u>337</u>	<u>Ogemaw</u>		1 Rifle River Recreation Area Day Use Area
	338	Ogemaw		2 Lake George Campground
	339	Ogemaw		3 Hardwood Lake
<u>37</u>	<u>340</u>	<u>Osceola</u>		1 Diamond Lake
	341	Osceola		2 DNR Access Diamond Lake
	342	Osceola		3 Kettunen Center
	343	Osceola		4 Hersey Road Access
	344	Osceola		5 DNR Access Todd Lake
	345	Osceola		6 DNR Access McCoy Lake
	346	Osceola		7 Center Lake Bible Camp
	347	Osceola		8 City of Evart Campground
	348	Osceola		9 DNR Access Wells Lake
	349	Osceola		10 Rose Lake Youth Camp
	350	Osceola		11 DNR Access Hicks Lake
<u>38</u>	<u>351</u>	<u>Oscoda</u>		1 Mio Pond Campground
<u>39</u>	<u>352</u>	<u>Otsego</u>		1 Arbutus Beach
<u>40</u>	<u>353</u>	<u>Presque Isle</u>		1 Grand Lake Northwest
	354	Presque Isle		2 Sunken Lake County Park
	355	Presque Isle		3 Lake May Public Access
	356	Presque Isle		4 Grand Lake Public Access
	357	Presque Isle		5 Millersburg Park
	358	Presque Isle		6 Onaway State Park
	359	Presque Isle		7 Ocquoec Falls Park
	360	Presque Isle		8 Shoepac Lake Camp Ground

Appendix D.2. 2009 Michigan List of Inland Beaches Not Monitored

	361	Presque Isle	Tomahawk Lake	9	Tomahawk Lake Camp Ground
<u>41</u>	362	Roscommon	Higgins Lake	1	DNR Public Fishing Site
	363	Roscommon	Higgins Lake	2	Kelly Beach
	364	Roscommon	Higgins Lake	3	Higgins Lake Public Fishing Site
	365	Roscommon	Houghton Lake	4	Houghton Lake State Forest Campground
	366	Roscommon	Houghton Lake	5	Houghton Lake Public Fishing Site
	367	Roscommon	Bambi Lake/Sinkhole Lake	6	Bambi Lake Camp
	368	Roscommon	Higgins Lake	7	Sam-O-Set Road End
	369	Roscommon	Higgins Lake	8	Beaver Creek Road End
	370	Roscommon	Higgins Lake	9	Phoenix Park
	371	Roscommon	Backus Pond	10	Backus Township. Park
	372	Roscommon	Owens Lake	11	Camp Co-Be-Ac
	373	Roscommon	Houghton Lake	12	Houghton Lake DNR Boat Launch and Park
	374	Roscommon	Houghton Lake	13	Old 27 DNR Access
<u>42</u>	375	Saginaw	Lake of Dreams	1	Lake of Dreams Campground
	376	Saginaw	Haithco Lake	2	Haithco Recreation Area
<u>43</u>	377	St. Joseph	Sand Lake	1	Nottawa Park
	378	St. Joseph	Cade Lake	2	Cade Lake Beach
	379	St. Joseph	Palmer Lake	3	Palmer Lake Beach
<u>44</u>	380	Tuscola	Murphy Lake	1	Murphy Lake

Appendix E.1. 2009 Michigan List of Monitored Great Lakes Beaches

	County	Waterbody	Location
1	1 Alcona	1 Lake Huron	Harrisville State Park
	2 Alcona	2 Lake Huron	Black River Public Access
	3 Alcona	3 Lake Huron	Sturgeon Point Park Beach
	4 Alcona	4 Lake Huron	Negwegon State Park
	5 Alcona	5 Lake Huron	Trask Lake Road Beach
	6 Alcona	6 Lake Huron	Greenbush Township
2	7 Allegan	1 Lake Michigan	Douglas Beach
	8 Allegan	2 Lake Michigan	Oval Beach
	9 Allegan	3 Lake Michigan	Pier Cove Beach
	10 Allegan	4 Lake Michigan	West Side County Park Beach
3	11 Alpena	1 Lake Huron	Starlite Beach
	12 Alpena	2 Lake Huron	Ossineke Beach
	13 Alpena	3 Lake Huron	Michekewis Beach
	14 Alpena	4 Lake Huron	Thompson Park
	15 Alpena	5 Lake Huron	Blair Street Park
4	16 Antrim	1 Lake Michigan	Antrim County Day Park South
	17 Antrim	2 Lake Michigan	Barnes Park
	18 Antrim	3 Lake Michigan	Elk Rapids
	19 Antrim	4 Lake Michigan	Veterans Memorial Park
	20 Antrim	5 Lake Michigan	Echo Township Park
	21 Antrim	6 Lake Michigan	Banks Township Park
5	22 Arenac	1 Saginaw Bay-Lake Huron	Foster Road Beach
	23 Arenac	2 Saginaw Bay-Lake Huron	Hammel Beach Road Access
	24 Arenac	3 Saginaw Bay-Lake Huron	Singing Bridge Beach
	25 Arenac	4 Saginaw Bay-Lake Huron	Whites Beach
	26 Arenac	5 Saginaw Bay-Lake Huron	Cemetery Beach
	27 Arenac	6 Saginaw Bay-Lake Huron	Dyer Road Beach
	28 Arenac	7 Saginaw Bay-Lake Huron	Arenac County Park
	29 Arenac	8 Saginaw Bay-Lake Huron	Twining Road Beach
	30 Arenac	9 Saginaw Bay-Lake Huron	Bessinger Road Beach
	31 Arenac	10 Saginaw Bay-Lake Huron	28th Street Beach
	32 Arenac	11 Saginaw Bay-Lake Huron	16th Street Beach
6	33 Baraga	1 Keweenaw Bay / Lake Superior	L'Anse Waterfront Park
7	34 Bay	1 Saginaw Bay-Lake Huron	Pinconning Park
	35 Bay	2 Saginaw Bay-Lake Huron	Brissette Beach Township Park
	36 Bay	3 Saginaw Bay-Lake Huron	Wenona Beach
	37 Bay	4 Saginaw Bay-Lake Huron	Bay City State Recreation Area
	38 Bay	5 Saginaw Bay-Lake Huron	South Linwood Beach Township Park
8	39 Benzie	1 Lake Michigan	Frankfort: Anchor Road Beach
9	40 Berrien	1 Lake Michigan	Harbert Beach
	41 Berrien	2 Lake Michigan	Tiscornia Park
	42 Berrien	3 Lake Michigan	Weko Beach
	43 Berrien	4 Lake Michigan	Silver Beach
	44 Berrien	5 Lake Michigan	Michiana Village
	45 Berrien	6 Lake Michigan	Lions Park
	46 Berrien	7 Lake Michigan	Rocky Gap
	47 Berrien	8 Lake Michigan	Jean Klock Park
	48 Berrien	9 Lake Michigan	Grand Beach
	49 Berrien	10 Lake Michigan	Hagar Township Park
	50 Berrien	11 Lake Michigan	Cherry Beach
	51 Berrien	12 Lake Michigan	Lincoln Township Park
	52 Berrien	13 Lake Michigan	Warren Dunes Beach
	53 Berrien	14 Lake Michigan	New Buffalo City
10	54 Charlevoix	1 Lake Michigan	Iron Ore Bay Beach

Appendix E.1. 2009 Michigan List of Monitored Great Lakes Beaches

	55	Charlevoix	2 Lake Charlevoix	Elm Point Beach
	56	Charlevoix	3 Lake Michigan	Harbor Beach
	57	Charlevoix	4 Lake Michigan	Donegal Bay
	58	Charlevoix	5 Lake Michigan	Lake Michigan Beach
	59	Charlevoix	6 Lake Charlevoix	Peninsula Beach
	60	Charlevoix	7 Lake Charlevoix	Whiting Park Beach
	61	Charlevoix	8 Lake Michigan	Fisherman's Island State Park
	62	Charlevoix	9 Lake Charlevoix	Ferry Beach
	63	Charlevoix	10 Lake Charlevoix	Depot Beach
	64	Charlevoix	11 Lake Charlevoix	East Jordan Tourist Park
	65	Charlevoix	12 Lake Michigan	Norwood Township Park
	66	Charlevoix	13 Lake Charlevoix	Young State Park Beach
	67	Charlevoix	14 Lake Charlevoix	Tannery Park
	68	Charlevoix	15 Lake Charlevoix	Hayes Township Park
11	69	<u>Cheboygan</u>	1 Lake Huron	Cheboygan City Park
	70	Cheboygan	2 Lake Huron	Wawatam City Park
	71	Cheboygan	3 Lake Huron	Cheboygan State Park Duncan Bay
	72	Cheboygan	4 Lake Huron	Mackinaw City Lighthouse Park
12	73	<u>Chippewa</u>	1 Lake Superior	Sherman Park
	74	Chippewa	2 Lake Superior	Brimley State Park
	75	Chippewa	3 Lake Superior	Bayview Campground
	76	Chippewa	4 St. Mary's River	Four Mile Beach
	77	Chippewa	5 Lake Superior	Big Pines Beach
	78	Chippewa	6 St. Mary's River	Sugar Island Township Park
13	79	<u>Delta</u>	1 Lake Michigan	Gladstone Bathing Beach/Van Cleve Park
	80	Delta	2 Lake Michigan	Escanaba Bathing Beach
14	81	<u>Emmet</u>	1 Lake Michigan	Wilderness State Park
	82	Emmet	2 Lake Michigan	Zorn Park - Harbor Springs
	83	Emmet	3 Lake Michigan	Readmond Township Beach
	84	Emmet	4 Lake Michigan	Zoll Street Beach
	85	Emmet	5 Lake Michigan	Petoskey State Park
	86	Emmet	6 Lake Michigan	Mackinaw City Beach #2
	87	Emmet	7 Lake Michigan	Magnus Park
	88	Emmet	8 Lake Michigan	Mackinaw City Beach #1
	89	Emmet	9 Lake Michigan	Middle Village Park
	90	Emmet	10 Lake Michigan	Sturgeon Bay Township Beach
	91	Emmet	11 Lake Michigan	Cross Village Beach
15	92	<u>Grand Traverse</u>	1 Grand Traverse Bay-West	Clinch Park
	93	Grand Traverse	2 Grand Traverse Bay-West	West End Beach
	94	Grand Traverse	3 Grand Traverse Bay-East	Traverse City State Park
	95	Grand Traverse	4 Grand Traverse Bay-East	East Bay Park (Milliken Park)
	96	Grand Traverse	5 Grand Traverse Bay-West	Bryant Park Beach
16	97	<u>Houghton</u>	1 Lake Superior	Agate Beach
	98	Houghton	2 Lake Superior	McLain State Park Beach
	99	Houghton	3 Portage Canal / Lake Superior	Sandy Bottom Beach/ Dollar Bay
	100	Houghton	4 Pike Bay at Portage Canal / Lake Superior	Chassell Beach
	101	Houghton	5 Portage Canal / Lake Superior	Houghton City Beach
	102	Houghton	6 Portage Canal / Lake Superior	Hancock City Beach
	103	Houghton	7 Torch Lake / Portage Canal / Lake Superior	Lake Linden Campground Beach
17	104	<u>Huron</u>	1 Lake Huron	Sleeper State Park
	105	Huron	2 Lake Huron	Philp County Park
	106	Huron	3 Lake Huron	Thompson Park
	107	Huron	4 Lake Huron	Jenks County Park
	108	Huron	5 Lake Huron	Oak Beach County Park
	109	Huron	6 Lake Huron	Bird Creek County Park
	110	Huron	7 Lake Huron	Port Crescent State Park - Day Use
	111	Huron	8 Lake Huron	Harbor Beach City Park

Appendix E.1. 2009 Michigan List of Monitored Great Lakes Beaches

	112	Huron	9 Lake Huron	McGraw County Park
	113	Huron	10 Lake Huron	Caseville County Park
	114	Huron	11 Lake Huron	Port Crescent State Park - Camping Area
	115	Huron	12 Lake Huron	Lighthouse County Park
	116	Huron	13 Lake Huron	Veterans Park
18	117	losco	1 Tawas Bay	East Tawas City Park
	118	losco	2 Lake Huron	Tawas Point State Park-Day Use area
	119	losco	3 Lake Huron	MDOT Roadside Park - Three Mile Park
	120	losco	4 Lake Huron	Tawas Point State Park Campground
	121	losco	5 Lake Huron	Au Sable Township Park
	122	losco	6 Lake Huron	Alabaster Township
	123	losco	7 Lake Huron	Alabaster Township Douglas Drive Beach Use Area
	124	losco	8 Lake Huron	Oscoda Township Beach
	125	losco	9 Tawas Bay	Tawas City Park
	126	losco	10 Lake Huron	Interlake Road End
	127	losco	11 Lake Huron	Lake To Lake Road
19	128	Keweenaw	1 Lake Superior	Eagle Harbor Beach
20	129	Leelanau	1 Grand Traverse Bay-West	Northport Bay Marina
	130	Leelanau	2 Lake Michigan	Empire Municipal Beach
	131	Leelanau	3 Grand Traverse Bay-West	Suttons Bay Park
21	132	Mackinac	1 Lake Michigan	US 2 Sand Dunes Beach (East of Brevort)
	133	Mackinac	2 Lake Huron	Kiwanis Beach
22	134	Macomb	1 Lake St. Clair	New Baltimore Park Beach
	135	Macomb	2 Lake St. Clair	St. Clair Shores Memorial Park Beach
	136	Macomb	3 Lake St. Clair	St. Clair Shores Blossom Heath Beach
	137	Macomb	4 Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark
23	138	Manistee	1 Lake Michigan	First Street Beach
	139	Manistee	2 Lake Michigan	Fifth Avenue Beach
	140	Manistee	3 Lake Michigan	Magoon Creek
	141	Manistee	4 Lake Michigan	Pierport Township Beach
	142	Manistee	5 Lake Michigan	Onkama Township Beach
	143	Manistee	6 Lake Michigan	Bar Lake Outlet
	144	Manistee	7 Lake Michigan	Arcadia Park
	145	Manistee	8 Lake Michigan	Orchard Beach State Park
	146	Manistee	9 Lake Michigan	Sundling Park
24	147	Marquette	1 Lake Superior	McCarty's Cove
	148	Marquette	2 Lake Superior	North of Picnic Rocks
	149	Marquette	3 Lake Superior	North Beach
	150	Marquette	4 Lake Superior	Picnic Rocks
	151	Marquette	5 Lake Superior	Marquette South Beach
25	152	Mason	1 Lake Michigan	Stearns Park Beach
	153	Mason	2 Lake Michigan	Ludington State Park Campground Beach
	154	Mason	3 Lake Michigan	Bass Lake Outlet Beach
	155	Mason	4 Lake Michigan	Buttersville Park Beach
	156	Mason	5 Lake Michigan	South Summit Beach - Sunset Boulevard Beach
	157	Mason	6 Lake Michigan	Summit Township Beach
	158	Mason	7 Lake Michigan	South Pier Beach
26	159	Menominee	1 Lake Michigan	Memorial Beach
	160	Menominee	2 Lake Michigan	Henes Park
27	161	Monroe	1 Lake Erie	Luna Pier City Beach
	162	Monroe	2 Lake Erie	Sterling State Park
28	163	Muskegon	1 Lake Michigan	Lighthouse/Sylvan Beach
	164	Muskegon	2 Lake Michigan	Duck Lake Channel Beach

Appendix E.1. 2009 Michigan List of Monitored Great Lakes Beaches

	165	Muskegon	3 Lake Michigan	Medbury Park Beach
	166	Muskegon	4 Lake Michigan	Bronson/Kruse Park
	167	Muskegon	5 Lake Michigan	Pioneer County Park
	168	Muskegon	6 Lake Michigan	P.J. Hoffmaster State Park - Public Beach Area
	169	Muskegon	7 Lake Michigan	Lake Harbor Park
	170	Muskegon	8 Lake Michigan	Muskegon State Park
	171	Muskegon	9 Lake Michigan	Old Channel Beach
	172	Muskegon	10 Lake Michigan	P.J. Hoffmaster State Park - Campground
	173	Muskegon	11 Lake Michigan	Pere Marquette Park
	174	Muskegon	12 Lake Michigan	Meinert County Park
29	175	Oceana	1 Lake Michigan	Cedar Point County Park
	176	Oceana	2 Silver Lake-Lake Michigan	Silver Creek Channel
	177	Oceana	3 Lake Michigan	Mears State Park
	178	Oceana	4 Stony Lake and Lake Michigan	Stony Lake Channel
	179	Oceana	5 Lake Michigan	Claybanks Township Park
	180	Oceana	6 Lake Michigan	Whiskey Creek
	181	Oceana	7 Lake Michigan	Lighthouse Beach at Silver Lake State Park
30	182	Ontonagon	1 Lake Superior	Porcupine Mountains State Park- Union Bay
	183	Ontonagon	2 Lake Superior	Ontonagon Township Park and Campground
31	184	Ottawa	1 Lake Michigan	North Beach Park
	185	Ottawa	2 Lake Michigan	Kouw Park
	186	Ottawa	3 Lake Michigan	Grand Haven State Park
	187	Ottawa	4 Lake Michigan	Kirk Park
	188	Ottawa	5 Lake Michigan	Grand Haven City Beach
	189	Ottawa	6 Lake Michigan	Rosy Mound Recreation Area
	190	Ottawa	7 Lake Michigan	Windsnest Park
	191	Ottawa	8 Lake Michigan	Holland State Park
	192	Ottawa	9 Lake Michigan	Tunnel Park
32	193	Presque Isle	1 Lake Huron	Hoelt State Park-South
	194	Presque Isle	2 Lake Huron	Hoelt State Park-North
	195	Presque Isle	3 Lake Huron	Lakeside Park in Rogers City
	196	Presque Isle	4 Lake Huron	Presque Isle Harbor Beach
33	197	Sanilac	1 Lake Huron	Port Sanilac Park
	198	Sanilac	2 Lake Huron	Lexington Beach
	199	Sanilac	3 Lake Huron	Lexington County Park
	200	Sanilac	4 Lake Huron	Forester County Park
	201	Sanilac	5 Lake Huron	Forestville Beach
34	202	Schoolcraft	1 Lake Michigan	Rogers Park-MDOT
	203	Schoolcraft	2 Lake Michigan	Roadside Park Beach
35	204	St. Clair	1 St. Clair River	Marine City Beach
	205	St. Clair	2 Lake Huron	Metcalf Road Beach
	206	St. Clair	3 St. Clair River	Marine City Diving Area
	207	St. Clair	4 Lake Huron	Lakeport State Park
	208	St. Clair	5 Lake Huron	Lakeside Beach
	209	St. Clair	6 Lake Huron	Holland Road Beach
	210	St. Clair	7 Lake Huron	Conger-Lighthouse Beach
	211	St. Clair	8 Lake Huron	Keewadin Road Beach
	212	St. Clair	9 Lake Huron	Krafft Road Beach
	213	St. Clair	10 Lake Huron	Lakeport State Campground
	214	St. Clair	11 Lake Huron	Fort Gratiot County Park
	215	St. Clair	12 Lake Huron	Washington Street Park
	216	St. Clair	13 Lake Huron	Jeddo Road Beach
	217	St. Clair	14 Lake Huron	Burtchville Township Park
	218	St. Clair	15 St. Clair River	Chrysler Park Beach
36	219	Van Buren	1 Lake Michigan	South Haven North Beach
	220	Van Buren	2 Lake Michigan	Van Buren State Park Beach

Appendix E.1. 2009 Michigan List of Monitored Great Lakes Beaches

	221	Van Buren	3 Lake Michigan	South Haven South Beach
	222	Van Buren	4 Lake Michigan	Covert Township Park Beach
37	223	Wayne	1 Detroit River	Belle Isle Beach
	224	Wayne	2 Lake St. Clair	Pier Park
	225	Wayne	3 Lake St. Clair	Crescent Sail Yacht Club

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	County	Water Body	Location	
<u>1</u>	1 Alcona	Lake Huron	Harrisville Public Access	
	2 Alcona	Lake Huron	Public Shoreline Beach-Huron National Forest North	
	3 Alcona	Lake Huron	Public Shoreline Beach-Huron National Forest South	
<u>2</u>	4 Alger	Lake Superior	Au Train Beach	
	5 Alger	Lake Superior	Bay Furnace Recreation Area Beach	
	6 Alger	Lake Superior	Christmas Beach	
	7 Alger	Lake Superior	Grand Marais Harbor Beach	
	8 Alger	Lake Superior	Grand Marais Township Beach	
	9 Alger	Lake Superior	Hurricane Campground Beach	
	10 Alger	Lake Superior	Miners Beach	
	11 Alger	Lake Superior	Munising Beach	
	12 Alger	Lake Superior	Public Shoreline Beach-Au Train Bay	
	13 Alger	Lake Superior	Public Shoreline Beach-Au Train to Five Mile Pts	
	14 Alger	Lake Superior	Public Shoreline Beach-East County Border area	
	15 Alger	Lake Superior	Public Shoreline Beach-Grand Sable Dunes	
	16 Alger	Lake Superior	Public Shoreline-Grand Portal Point	
	17 Alger	Lake Superior	Public Shoreline-Sand Point to Miners Castle Point	
	18 Alger	Lake Superior	Rathfoot Park Beach	
	19 Alger	Lake Superior	Roadside Park	
	20 Alger	Lake Superior	Sand Point	
	21 Alger	Lake Superior	Twelve-Mile Beach	
	<u>3</u>	22 Allegan	Lake Michigan	Saugatuck Dunes State Park Shoreline Beach
	<u>4</u>	23 Alpena	Lake Huron	Bay View Park
24 Alpena		Lake Huron	Elcajon Bay	
25 Alpena		Lake Huron	Issineke Hardwood Point	
26 Alpena		Lake Huron	Negwegon State Park-Ossineke South Point	
27 Alpena		Lake Huron	Ossineke Campground	
28 Alpena		Lake Huron	Ossineke State Park	
29 Alpena		Lake Huron	Partridge Point	
30 Alpena		Lake Huron	Rock Port Beach	
31 Alpena		Lake Huron	Whitefish Bay	
<u>5</u>	32 Antrim	Lake Michigan	Antrim County Day Park North	
	33 Antrim	Lake Michigan	Antrim Creek Natural Area	
	34 Antrim	Lake Michigan	Elk Rapids Park	
	35 Antrim	Lake Michigan	Erickson Road	
	36 Antrim	Lake Michigan	Lore Road End Beach	
	37 Antrim	Lake Michigan	Michigan Trail	
	38 Antrim	Lake Michigan	Nature Preserve	
	39 Antrim	Lake Michigan	North Bay Shore (Conservancy)	

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	40	Antrim	Lake Michigan	O'Dell Road
	41	Antrim	Grand Traverse Bay-East	Petobego Pond Area
	42	Antrim	Lake Michigan	Road Crossing near Winters Road
<u>6</u>	43	Arenac	Huron	Au Sable State Forest- Greens Point
	44	Arenac	Inner Saginaw Bay	Augres Township Park Beach
	45	Arenac	Inner Saginaw Bay	Booth Road Beach
	46	Arenac	Inner Saginaw Bay	City of Augres Public Access
	47	Arenac	Inner Saginaw Bay	Gordon Road Beach
	48	Arenac	Saginaw Bay-Lake Huron	Pump Station
	49	Arenac	Inner Saginaw Bay	Terrace Road
<u>7</u>	50	Baraga	Huron Bay / Lake Superior	Arvon Township Park
	51	Baraga	Superior	Baraga State Park
	52	Baraga	Superior	First Sand Beach
	53	Baraga	Lake Superior	Keweenaw Bay Village Public Roadside Park
	54	Baraga	Superior	L'Anse Township Park
	55	Baraga	Lake Superior	Mouth of the Huron River
	56	Baraga	Lake Superior	Public Shoreline Beach-Cooper Country Huron Bay
	57	Baraga	Lake Superior	Public Shoreline Beach-Northwest Abbaye Peninsula
	58	Baraga	Lake Superior	Public Shoreline Beach-Point Abbaye
	59	Baraga	Lake Superior	Public Shoreline Beach-Sand Point
	60	Baraga	Superior	Second Sands Beach
<u>8</u>	61	Bay	Saginaw Bay	Nayanquing Point Wildlife Area
<u>9</u>	62	Benzie	Lake Michigan	Alberta Village Beach & Bluffs
	63	Benzie	Lake Michigan	County Road # 669
	64	Benzie	Lake Michigan	Esch Road/Otter Creek
	65	Benzie	Lake Michigan	Platte River Point
	66	Benzie	Lake Michigan	Point Betsie Lighthouse Beach
	67	Benzie	Lake Michigan	Sleeping Bear Dunes-Esch Road Beach
	68	Benzie	Lake Michigan	Sleeping Bear Dunes-North of Esch Road
	69	Benzie	Lake Michigan	Sleeping Bear Dunes-Peterson Road Beach
	70	Benzie	Lake Michigan	Sleeping Bear Dunes-Platte Point Bay
	71	Benzie	Platte River	Sleeping Bear Dunes-Platte River Outlet
	72	Benzie	Lake Michigan	Zettenberg Preserve
<u>10</u>	73	Berrien	Lake Michigan	Galien River Park
	74	Berrien	Lake Michigan	Gordon Beach
	75	Berrien	Lake Michigan	Grand Mere State Park- Rosemary Beach
	76	Berrien	Lake Michigan	Grand Mere State Park- Shoreline Beach
	77	Berrien	Lake Michigan	Grand Mere State Park- Waverland Beach
	78	Berrien	Lake Michigan	Mizpah Park

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	79	Berrien	Lake Michigan	Warren Dunes State Park North
<u>11</u>	80	Charlevoix	Lake Michigan	Bill Wagner Memorial Campground Beach
	81	Charlevoix	Lake Michigan	Cables Bay Beach
	82	Charlevoix	Lake Charlevoix	Glenwood Beach
	83	Charlevoix	Lake Michigan	Mt. McSauba Beach
	84	Charlevoix	Lake Charlevoix	Washington Street Beach
<u>12</u>	85	Cheboygan	Lake Huron	Alexander Henry Park
	86	Cheboygan	Lake Huron	Cheboygen State Park- Lighthouse Point
	87	Cheboygan	Lake Huron	Ditta Park
	88	Cheboygan	Lake Huron	Huron Street Beach
	89	Cheboygan	Lake Huron	Mackinaw City Beach
	90	Cheboygan	Lake Huron	Mill Creek Public Access
	91	Cheboygan	Lake Huron	Pinewood Circle Road End Beach
	92	Cheboygan	Lake Huron	Roadside Park MDOT, US-23
	93	Cheboygan	Lake Huron	Stoney Point Road End Beach
<u>13</u>	94	Chippewa	Lake Huron	Bass Cove Beach-Drummond Island
	95	Chippewa	Lake Huron	Betsey Seaman Memorial Park-Drummond Island
	96	Chippewa	Lake Huron	Big Shoal Cove Beach
	97	Chippewa	Lake Huron	De Tour State Park Shoreline Beach
	98	Chippewa	Lake Huron	Detour Albany Beach
	99	Chippewa	Lake Huron	Drummond Island Township Park
	100	Chippewa	St. Mary's River	Dunbar Park
	101	Chippewa	Lake Superior	Hiawatha National Forest- Nodoway Point Area
	102	Chippewa	Lake Superior	Hiawatha National Forest- North of Big Pine Picnic
	103	Chippewa	St. Mary's River	Hiawatha National Forest- North Pond
	104	Chippewa	Lake Superior	Hiawatha National Forest- Pendills Bay
	105	Chippewa	Lake Superior	Hiawatha National Forest- Pendills Lake
	106	Chippewa	Lake Superior	Hiawatha National Forest- Point Iroquois Light
	107	Chippewa	Lake Superior	Hiawatha National Forest- Tahquamenon Bay
	108	Chippewa	St. Mary's River	Hiawatha National Forest- Waiska Bay
	109	Chippewa	Lake Superior	Hiawatha National Forest- West of Salt Point
	110	Chippewa	St. Mary's River	Lake Superior State Forest- Munuscong Lake
	111	Chippewa	Lake Superior	Public Shoreline Beach-Browns Creek Area
	112	Chippewa	St. Mary's River	Public Shoreline Beach-Brush Point
	113	Chippewa	Lake Superior	Public Shoreline Beach-Marsh Lake Area
	114	Chippewa	Lake Superior	Public Shoreline Beach-Northwest of Two Mile Lake
	115	Chippewa	St. Mary's River	Public Shoreline Beach-Point Aux Frenes
	116	Chippewa	St. Mary's River	Public Shoreline Beach-Raber Bay stretch
	117	Chippewa	Lake Superior	Public Shoreline Beach-Weatherhog Lake East Area
	118	Chippewa	Lake Superior	Public Shoreline Beach-Weatherhog Lake West
	119	Chippewa	Lake Superior	Public Shoreline Beach-West of Whitefish Point

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	120	Chippewa	Lake Huron	Sand Bay Beach-Drummond Island
	121	Chippewa	Lake Superior	Tahquamenon Falls State Park-River Mouth Unit
	122	Chippewa	St. Mary's River	Wilderness Beach
<u>14</u>	123	Delta	Lake Michigan	Big Bay De Noc/ Fishdam River Public Access
	124	Delta	Lake Michigan	Fayette State Park
	125	Delta	Lake Michigan	Fuller Park
	126	Delta	Lake Michigan	Little Bay De Noc Public Beach Access
	127	Delta	Lake Michigan	Portage Bay Forest Campground
	128	Delta	Lake Michigan	Public Shoreline Beach-Charboneau Point
	129	Delta	Lake Michigan	Public Shoreline Beach-County Road 481
	130	Delta	Lake Michigan	Public Shoreline Beach-East Wilsey Bay
	131	Delta	Lake Michigan	Public Shoreline Beach-Fishdam River
	132	Delta	Lake Michigan	Public Shoreline Beach-Gilnet Haven
	133	Delta	Lake Michigan	Public Shoreline Beach-Indian Point
	134	Delta	Lake Michigan	Public Shoreline Beach-Indian Town Lake USFS
	135	Delta	Lake Michigan	Public Shoreline Beach-Jacks Bluff
	136	Delta	Lake Michigan	Public Shoreline Beach-Martin Bay
	137	Delta	Lake Michigan	Public Shoreline Beach-Nahma
	138	Delta	Lake Michigan	Public Shoreline Beach-North End of Kregg Bay
	139	Delta	Lake Michigan	Public Shoreline Beach-North of Stonington
	140	Delta	Lake Michigan	Public Shoreline Beach-Ogontz Bay
	141	Delta	Lake Michigan	Public Shoreline Beach-Peninsula Point
	142	Delta	Lake Michigan	Public Shoreline Beach-Point Detour
	143	Delta	Lake Michigan	Public Shoreline Beach-Portage Bay
	144	Delta	Lake Michigan	Public Shoreline Beach-Portage Peninsula
	145	Delta	Lake Michigan	Public Shoreline Beach-St. Vital's Island
	146	Delta	Lake Michigan	Public Shoreline Beach-USFS West Wilsey Bay
	147	Delta	Lake Michigan	Public Shoreline Beach-West Side of Kregg Bay
	148	Delta	Lake Michigan	Sac Bay County Park
	149	Delta	Lake Michigan	Sac Bay County Park
	150	Delta	Lake Michigan	Twin Springs Campground and Bathing Beach
<u>15</u>	151	Emmet	Lake Michigan	Bliss Township Beach
	152	Emmet	Lake Michigan	Church Beach
	153	Emmet	Lake Michigan	Colonial Michilimackinac State Park
	154	Emmet	Lake Michigan	Forest Beach
	155	Emmet	Lake Michigan	Petoskey Harbor
	156	Emmet	Lake Michigan	The Headlands County Park
	157	Emmet	Lake Michigan	Thorne Swift Preserve
	158	Emmet	Lake Michigan	Wilderness State Park-East of the Beach
	159	Emmet	Lake Michigan	Wilderness State Park-Sturgeon Bay
	160	Emmet	Lake Michigan	Wilderness State Park-West of Beach

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

16	161	Gogebic	Lake Superior	Black River Harbor Beach
	162	Gogebic	Lake Superior	Little Girls Point Park
	163	Gogebic	Lake Superior	Mouth of the Montreal River
	164	Gogebic	Lake Superior	Porcupine Mountain State Park-North
	165	Gogebic	Lake Superior	Presque Isle Beach
	166	Gogebic	Lake Superior	Presque Isle State Campground
	167	Gogebic	Lake Superior	Public Shoreline Beach-West of Black River
17	168	Grand Traverse	Grand Traverse Bay-East	Acme Roadside Park & Beach MDOT
	169	Grand Traverse	Grand Traverse Bay-East	Acme Roadside Park (DNR)
	170	Grand Traverse	Grand Traverse Bay	Archie Park
	171	Grand Traverse	Grand Traverse Bay-East	Bayside Acme Township Park
	172	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Bowers Harbor Public Access
	173	Grand Traverse	Grand Traverse Bay-East	Deep Water Point
	174	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	DNR Launch/Beach Center Road
	175	Grand Traverse	Grand Traverse Bay-East	East Bay Township Four Mile Road
	176	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Haserot Beach
	177	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Kroupa Road Access M-22 South of Crain Hill Road
	178	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Leffingwell Point Beach
	179	Grand Traverse	Grand Traverse Bay-West	Mouth of Boardman
	180	Grand Traverse	Grand Traverse Bay	Old Mission - Center Road Natural Area
	181	Grand Traverse	Grand Traverse Bay	Old Mission - MDOT Right of Way-South of M-37
	182	Grand Traverse	Grand Traverse Bay	Old Mission - Old Mission Point State Park
	183	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Old Mission Lighthouse
	184	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Old Mission Peninsula Twp Park-East of Light House
	185	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Old Mission Peninsula Twp Park-West of Light House
	186	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Old Mission Road
	187	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Peninsula Volunteer Fire Station Point #2
	188	Grand Traverse	Grand Traverse Bay-West	Power Island Bay Park
	189	Grand Traverse	Grand Traverse Bay-West	Rose Street Access at Peninsula Drive
	190	Grand Traverse	Grand Traverse Bay-East	Sayler Park
	191	Grand Traverse	Grand Traverse Bay-West	Senior Center
	192	Grand Traverse	Grand Traverse Bay-West	Sunset Park
	193	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	Swaney Road
	194	Grand Traverse	Grand Traverse Bay-East	Yuba Beach

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

<u>18</u>	195	Houghton	Lake Superior	Calument Waterworks Beach
	196	Houghton	Torch Lake / Portage Canal / Lake Superior	Hubbell Park
	197	Houghton	Lake Superior	Mink Farm
	198	Houghton	Lake Superior	Public Shoreline Beach-Le Chance Creek
	199	Houghton	Lake Superior	Public Shoreline Beach-Mc Lain State Park
	200	Houghton	Lake Superior	Public Shoreline Beach-S. of Portage Entry
	201	Houghton	Lake Superior	Public Shoreline Beach-Southwest County Border
	202	Houghton	Lake Superior	White City
<u>19</u>	203	Huron	Lake Huron	County Road End
	204	Huron	Lake Huron	Geiger Road Public Access
	205	Huron	Lake Huron	Grindstone Public Access
	206	Huron	Lake Huron	Harbor Beach Marina
	207	Huron	Lake Huron	Helena Road End
	208	Huron	Lake Huron	Kinch Road End
	209	Huron	Lake Huron	Larned Road End
	210	Huron	Lake Huron	Lighthouse County Park-South
	211	Huron	Lake Huron	Mud Creek Public Access
	212	Huron	Lake Huron	Stafford County Park
	213	Huron	Lake Huron	Wagener County Park
<u>20</u>	214	Iosco	Lake Huron	Au Sable Point Beach
	215	Iosco	Lake Huron (Tawas Bay)	County Road End.
	216	Iosco	Lake Huron (Tawas Bay)	Gateway Park
	217	Iosco	Lake Huron	Tawas Point State Park-Central
<u>21</u>	218	Keweenaw	Gris Bay	Bete de Gris Beach
	219	Keweenaw	Lake Superior	Brunette Park
	220	Keweenaw	Lake Superior	Cat Harbor Beach
	221	Keweenaw	Lake Superior	Cooper Harbor Lighthouse Complex
	222	Keweenaw	Lake Superior	Eagle River Beach
	223	Keweenaw	Lake Superior	Fort Wilkins State Park
	224	Keweenaw	Lake Superior	Fort Wilkins State Park-East
	225	Keweenaw	Lake Superior	Fort Wilkins State Park-West
	226	Keweenaw	Lake Superior	Great Sands Bay Beach
	227	Keweenaw	Lake Superior	Mouth of the Gratiot River Beach
	228	Keweenaw	Lake Superior	Point Isabelle Beach
	229	Keweenaw	Lake Superior	Public Shoreline Beach-Big Traverse Bay
	230	Keweenaw	Lake Superior	Public Shoreline Beach-Gay Park
<u>22</u>	231	Leelanau	Lake Michigan	Bay Front Park
	232	Leelanau	Grand Traverse Bay	Boughy Park & Beach

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	233	Leelanau	Grand Traverse Bay-West	Cathead Bay, Leelanau State Park
	234	Leelanau	Lake Michigan	Cedar Street Beach
	235	Leelanau	Grand Traverse Bay-West	Christmas Cove
	236	Leelanau	Grand Traverse Bay-West	Elmwood/Greilikville Park & Beach
	237	Leelanau	Lake Michigan	G. Marsten Dame Marina
	238	Leelanau	Lake Michigan	Gils Pier
	239	Leelanau	Lake Michigan	Glen Arbor/Manitou Boulevard Beach
	240	Leelanau	Grand Traverse Bay-West	Graham Green Park
	241	Leelanau	Grand Traverse Bay-West	Hendryx County Roadside Park
	242	Leelanau	Lake Michigan	Lake Street Beach, Glen Arbor
	243	Leelanau	Lake Michigan	Leelanau State Park, Lighthouse
	244	Leelanau	Lake Michigan	Leland Harbor
	245	Leelanau	Grand Traverse Bay-West	M-22 at M-72 Public Access
	246	Leelanau	Grand Traverse Bay-West	MDOT Roadside Park & Beach
	247	Leelanau	Grand Traverse Bay-West	MDOT Roadside Park & Beach M-22 N of Cherry Bend
	248	Leelanau	Lake Michigan	North Bar
	249	Leelanau	Lake Michigan	North Street Beach
	250	Leelanau	Grand Traverse Bay-West	Northport 4th Street Beach
	251	Leelanau	Grand Traverse Bay-West	Northport 5th Street Beach
	252	Leelanau	Grand Traverse Bay-West	Northport 7th Street Beach
	253	Leelanau	Grand Traverse Bay-West	Northport Haserot Beach, Rose Street
	254	Leelanau	Grand Traverse Bay-West	Omena Beach & Park
	255	Leelanau	Lake Michigan	Peterson Park
	256	Leelanau	Lake Michigan	Reynolds Street Beach
	257	Leelanau	Lake Michigan	Sleeping Bear Dunes- CR 669 Good Harbor Bay
	258	Leelanau	Lake Michigan	Sleeping Bear Dunes-CR 651 Good Harbor Bay
	259	Leelanau	Lake Michigan	Sleeping Bear Dunes-DH Day Campground
	260	Leelanau	Lake Michigan	Sleeping Bear Dunes-Empire Bluffs
	261	Leelanau	Lake Michigan	Sleeping Bear Dunes-Empire/North Bar Stretch
	262	Leelanau	Lake Michigan	Sleeping Bear Dunes-Glen Haven Beach
	263	Leelanau	Lake Michigan	Sleeping Bear Dunes-Good Harbor Bay Middle Stretch
	264	Leelanau	Lake Michigan	Sleeping Bear Dunes-North Bar Lake MI Beach
	265	Leelanau	Lake Michigan	Sleeping Bear Dunes-Pyramid Point
	266	Leelanau	Lake Michigan	Sleeping Bear Dunes-Scenic Overlook
	267	Leelanau	Lake Michigan	Sleeping Bear Dunes-Scenic Sleeping Bear Dune
	268	Leelanau	Lake Michigan	Smith Street Beach Northport
	269	Leelanau	Grand Traverse Bay-West	Stoney Point County Roadside Park
	270	Leelanau	Grand Traverse Bay-West	Suttons Bay Marina Park & Beach South
	271	Leelanau	Grand Traverse Bay-West	Suttons Bay Public Launch and Beach
	272	Leelanau	Grand Traverse Bay-West	Suttons Bay South Shore Park
	273	Leelanau	Lake Michigan	Thompson Stree Beach
23	274	Luce	Lake Superior	Blind Sucker River # 1
	275	Luce	Lake Superior	Blind Sucker River # 2

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	276	Luce	Lake Superior	Crisp Point Light House
	277	Luce	Lake Superior	Lake Superior Campground Beach
	278	Luce	Lake Superior	Mouth of the Two Hearted River Campground
	279	Luce	Lake Superior	Muskallonge Lake State Park Beach
	280	Luce	Lake Superior	Public Shoreline Beach-Blind Sucker Flooding Area
	281	Luce	Lake Superior	Public Shoreline Beach-Coast Guard Line Road
	282	Luce	Lake Superior	Public Shoreline Beach-County Rd 407
	283	Luce	Lake Superior	Public Shoreline Beach-County Rd 412 and Crisp Pt
	284	Luce	Lake Superior	Public Shoreline Beach-Little Sucker/Two Hearted
	285	Luce	Lake Superior	Public Shoreline Beach-Three Mile Creek Area
	286	Luce	Lake Superior	Public Shoreline Beach-West County Border Beach
	287	Luce	Lake Superior	Unnamed Road End #1
	288	Luce	Lake Superior	Unnamed Road End #2
	289	Luce	Lake Superior	Unnamed Road End #3
<u>24</u>	290	Mackinac	Lake Huron	American Legion Memorial Park
	291	Mackinac	Lake Huron	Antoine Road End
	292	Mackinac	Lake Michigan	Big Knob State Forest Campground
	293	Mackinac	Lake Michigan	Black River State Forest Campground
	294	Mackinac	Lake Huron	Boot Island
	295	Mackinac	Lake Huron	Coast Guard Pier Boat Launch and City Park
	296	Mackinac	Lake Michigan	Epoufette Bay Campground
	297	Mackinac	Lake Huron	Foley Creek Campground
	298	Mackinac	Lake Huron	Government Island-Hiawatha National Forest
	299	Mackinac	Lake Huron	Harbour Light
	300	Mackinac	Lake Huron	Hazelton Road End
	301	Mackinac	Lake Huron	Hiawatha National Forest- Carp River Access
	302	Mackinac	Lake Michigan	Hog Island Campground
	303	Mackinac	Lake Huron	Horseshoe Bay Wilderness-North
	304	Mackinac	Lake Huron	Horseshoe Bay Wilderness-South
	305	Mackinac	Lake Michigan	Lake Michigan US-2 Campground Beach
	306	Mackinac	Lake Michigan	MDOT Overlook
	307	Mackinac	Lake Michigan	MDOT Roadside Park on US 2
	308	Mackinac	Lake Michigan	Mouth of Cut River Roadside Beach
	309	Mackinac	Lake Michigan	Naubinway Bay Access
	310	Mackinac	Lake Michigan	Public Shoreline Beach #2-Little Hog Island area
	311	Mackinac	Lake Michigan	Public Shoreline Beach #2-Manitou Paymen Highbanks
	312	Mackinac	Lake Michigan	Public Shoreline Beach #3-Little Hog Island area
	313	Mackinac	Lake Michigan	Public Shoreline Beach #4-Little Hog Island area
	314	Mackinac	Lake Michigan	Public Shoreline Beach #5-Little Hog Island area
	315	Mackinac	Lake Michigan	Public Shoreline Beach-Epoufette Bay
	316	Mackinac	Lake Michigan	Public Shoreline Beach-Fox Point Area
	317	Mackinac	Lake Michigan	Public Shoreline Beach-Little Hog Island area
	318	Mackinac	Lake Michigan	Public Shoreline Beach-Manitou Paymen Highbanks

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

	319	Mackinac	Lake Michigan	Public Shoreline Beach-MDNR Matrix Point Area
	320	Mackinac	Lake Michigan	Public Shoreline Beach-Morean Township, Section 25
	321	Mackinac	Lake Michigan	Public Shoreline Beach-Naubinway Area
	322	Mackinac	Lake Michigan	Public Shoreline Beach-Pointe Aux Chenes Bay
	323	Mackinac	Lake Michigan	Public Shoreline Beach-Seiners Point
	324	Mackinac	Lake Michigan	Public Shoreline Beach-South of Brevort River
	325	Mackinac	Lake Michigan	Public Shoreline Beach-State Forest Matrix Point
	326	Mackinac	Lake Michigan	Sand Point
	327	Mackinac	Lake Michigan	State Roadside Park Beach
	328	Mackinac	Lake Huron	Straits State Park
<u>25</u>	329	Manistee	Lake Michigan	Portage Park
<u>26</u>	330	Marquette	Lake Superior	Public Shoreline Beach-Big Huron River
	331	Marquette	Lake Superior	Public Shoreline Beach-Little Presque Isle
<u>27</u>	332	Mason	Lake Michigan	Ludington State Park Public Shoreline Beach North
	333	Mason	Lake Michigan	Ludington State Park Public Shoreline Beach South
	334	Mason	Lake Michigan	Manistee National Forest Campground Beach
	335	Mason	Lake Michigan	Manistee National Forest-Public Shoreline Beach N
	336	Mason	Lake Michigan	Manistee National Forest-Public Shoreline Beach S
	337	Mason	Lake Michigan	Pere Marquette Harbor
<u>28</u>	338	Menominee	Lake Michigan	Airport Park
	339	Menominee	Lake Michigan	Fox Park
	340	Menominee	Lake Michigan	Klienke Park
	341	Menominee	Lake Michigan	Public Shoreline Beach-Cedar River
	342	Menominee	Lake Michigan	Public Shoreline Beach-Fox village
	343	Menominee	Lake Michigan	Wells State Park
<u>29</u>	344	Muskegon	Lake Michigan	Muskegon State Park-Shoreline Beach North
<u>30</u>	345	Oceana	Lake Michigan	Silver Lake State Park
<u>31</u>	346	Ontonagon	Lake Superior	Green Park
	347	Ontonagon	Lake Superior	Gull Point Beach
	348	Ontonagon	Lake Superior	Mouth of the Big Iron River Beach
	349	Ontonagon	Lake Superior	Porcupine Mountain State Park
	350	Ontonagon	Lake Superior	Porcupine Mountains Wilderness State Park-West
	351	Ontonagon	Lake Superior	Public Shoreline Beach-Misery Bay
	352	Ontonagon	Lake Superior	Public Shoreline Beach-Sleeping Bay
	353	Ontonagon	Lake Superior	Public Shoreline Beach-Wolf Point
	354	Ontonagon	Lake Superior	Union Bay Beach

Appendix E.2. 2009 Michigan List of Great Lakes Beaches Not Monitored

<u>32</u>	355	Ottawa	Lake Michigan	Mountain Beach
	356	Ottawa	Lake Michigan	P.J. Hoffmaster State Park- Shoreline Beach
<u>33</u>	357	Presque Isle	Lake Huron	40 Mile Point Park
	358	Presque Isle	Lake Huron	Ball Diamond Park
	359	Presque Isle	Lake Huron	Bell Bay
	360	Presque Isle	Lake Huron	Evergreen Beach
	361	Presque Isle	Lake Huron	Golden Beach
	362	Presque Isle	Lake Huron	Grace Access Site
	363	Presque Isle	Lake Huron	Hammond Bay Access Site
	364	Presque Isle	Lake Huron	Hammond Bay Harbor
	365	Presque Isle	Lake Huron	Lakeside Park Beach
	366	Presque Isle	Lake Huron	Lakeview Park Beach
	367	Presque Isle	Lake Huron	Manitou Beach
	368	Presque Isle	Lake Huron	New Lighthouse Park
	369	Presque Isle	Lake Huron	Presque Isle Harbor
	370	Presque Isle	Lake Huron	Public Shoreline Beach-False Presque Isle Harbor
	371	Presque Isle	Lake Huron	Seagull Point Park
	372	Presque Isle	Lake Huron	Thompson's Harbor State Park
	373	Presque Isle	Lake Huron	US 23 Hammond Bay
	374	Presque Isle	Lake Huron	US 23 Roger City
<u>34</u>	375	Sanilac	Lake Huron	Birch Beach
	376	Sanilac	Lake Huron	Birch Beach Middle #2
	377	Sanilac	Lake Huron	Birch Beach North #3
	378	Sanilac	Lake Huron	Delaware Park
	379	Sanilac	Lake Huron	Great Lakes Beach
	380	Sanilac	Lake Huron	Sanilac County Park #4
	381	Sanilac	Lake Huron	Sanilac County Roadside Park #1
<u>35</u>	382	Schoolcraft	Lake Michigan	Doyle Township Park
	383	Schoolcraft	Lake Michigan	Lakeview Park
	384	Schoolcraft	Lake Michigan	Manistique Township Park
	385	Schoolcraft	Lake Michigan	Public Shoreline Beach-Goudreou's Harbor
	386	Schoolcraft	Lake Michigan	Public Shoreline Beach-S. of McDonald Lake
	387	Schoolcraft	Lake Michigan	Public Shoreline Beach-Thompson
	388	Schoolcraft	Lake Michigan	Public Shoreline Beach-Thompson Village

Appendix F. 2009 Inland and Great Lakes Beaches Exceedances of WQS (300 E.coli per 100 ml)

	County	Water Body	Location	Sampling Date	<i>E. coli</i> Test Results
<u>1</u> 1	<u>Alcona</u>	Lake Huron	Greenbush Township	6/30/09	380.5
<u>2</u> 2	<u>Alpena</u>	Lake Huron	Blair Street Park	8/3/09	308.0
3	Alpena	Lake Huron	Blair Street Park	8/10/09	302.0
4	Alpena	Lake Huron	Blair Street Park	8/17/09	400.0
<u>3</u> 5	<u>Antrim</u>	Lake Bellaire	Richardi Park	8/3/09	342.0
6	Antrim	Torch Lake	Day Park	8/3/09	1076.9
<u>4</u> 7	<u>Arenac</u>	Saginaw Bay	16th Street Beach	7/23/09	426.5
8	Arenac	Saginaw Bay	Arenac County Park	7/23/09	1463.6
9	Arenac	Saginaw Bay	Hammel Beach Road Access	7/15/09	366.9
10	Arenac	Saginaw Bay	Singing Bridge Beach	6/25/09	319.4
11	Arenac	Saginaw Bay	Singing Bridge Beach	7/1/09	316.4
12	Arenac	Saginaw Bay	Singing Bridge Beach	6/10/09	487.8
13	Arenac	Saginaw Bay	Singing Bridge Beach	7/23/09	557.9
14	Arenac	Saginaw Bay	Singing Bridge Beach	8/19/09	506.7
15	Arenac	Saginaw Bay	Singing Bridge Beach	8/26/09	402.7
16	Arenac	Saginaw Bay	Twining Road Beach	6/25/09	2419.6
17	Arenac	Saginaw Bay	Whites Beach	7/15/09	310.6
18	Arenac	Saginaw Bay	Whites Beach	7/23/09	2419.6
<u>5</u> 19	<u>Bay</u>	Saginaw Bay	Bay City State Recreation Area	8/26/09	2419.0
20	Bay	Saginaw Bay	Bay City State Recreation Area	9/8/09	625.0
21	Bay	Saginaw Bay	Bay City State Recreation Area	9/16/09	539.0
22	Bay	Saginaw Bay	Brissette Beach Township Park	9/8/09	688.0
23	Bay	Saginaw Bay	Brissette Beach Township Park	6/18/09	1645.0
24	Bay	Saginaw Bay	Pinconning Park	8/20/09	788.0
25	Bay	Saginaw Bay	South Linwood Beach Township Park	6/9/09	1434.0
26	Bay	Saginaw Bay	South Linwood Beach Township Park	9/8/09	326.0
27	Bay	Saginaw Bay	South Linwood Beach Township Park	8/12/09	625.0
28	Bay	Saginaw Bay	South Linwood Beach Township Park	8/10/09	333.0
29	Bay	Saginaw Bay	South Linwood Beach Township Park	9/16/09	1745.0
30	Bay	Saginaw Bay	Wenona Beach	6/9/09	368.0
<u>6</u> 31	<u>Berrien</u>	Lake Michigan	New Buffalo City	9/8/09	853.1
32	Berrien	Lake Michigan	New Buffalo City	9/10/09	1063.8
33	Berrien	Lake Michigan	Warren Dunes Beach	8/18/09	343.9
<u>7</u> 34	<u>Charlevoix</u>	Lake Charlevoix	Hayes Township Park	7/27/09	318.5
<u>8</u> 35	<u>Cheboygan</u>	Lake Huron	Wawatam City Park	6/30/09	2121.3
<u>9</u> 36	<u>Chippewa</u>	Kinross Lake	Kinross Lake	9/8/09	2419.6
37	Chippewa	St. Mary's River	Four Mile Beach	8/10/09	2027.0
38	Chippewa	St. Mary's River	Sugar Island Township Park	9/21/09	591.2
<u>10</u> 39	<u>Emmet</u>	Lake Michigan	Cross Village Beach	8/25/09	308.9

Appendix F. 2009 Inland and Great Lakes Beaches Exceedances of WQS (300 E.coli per 100 ml)

<u>11</u>	40	Genesee	Byram Lake	Clover Beach	8/17/09	342.0
	41	Genesee	Byram Lake	Clover Beach	8/24/09	547.0
	42	Genesee	Byram Lake	Clover Beach	8/11/09	364.0
	43	Genesee	Covenant Hill Camp	Covenant Hill Camp	8/17/09	613.0
	44	Genesee	Covenant Hill Camp	Covenant Hill Camp	7/27/09	395.0
	45	Genesee	Covenant Hill Camp	Covenant Hill Camp	7/20/09	422.0
	46	Genesee	Dollar lake	Dollar Lake	8/31/09	568.0
	47	Genesee	Fenton Lake	Township Hall	8/24/09	1428.0
	48	Genesee	Kelly Lake	Kelly Lake	7/20/09	479.0
	49	Genesee	Otter Lake	Griswold Park	8/17/09	629.0
<u>12</u>	50	Gladwin	Cedar River	Gladwin City Park	6/9/09	358.7
	51	Gladwin	Ross Lake	Beaverton City Park	8/19/09	863.3
<u>13</u>	52	Gogebic	Lake Gogebic	Lake Gogebic State Park Beach	6/29/09	533.0
<u>14</u>	53	Grand Traverse	Grand Traverse Bay-East	East Bay Park (Milliken Park)	8/26/09	1320.8
	54	Grand Traverse	Grand Traverse Bay-West	Bryant Park Beach	8/26/09	458.7
	55	Grand Traverse	Grand Traverse Bay-West	West End Beach	8/26/09	426.8
<u>15</u>	56	Huron	Lake Huron	Lighthouse County Park	8/11/09	519.7
	57	Huron	Lake Huron	Port Crescent State Park - Camping Area	7/28/09	419.6
	58	Huron	Lake Huron	Veterans Park	6/30/09	1027.3
<u>16</u>	59	Iosco	Lake Huron	Interlake Road End	7/28/09	362.7
	60	Iosco	Lake Huron	Lake To Lake Road	7/28/09	394.7
<u>17</u>	61	Ingham	Valhalla Pond	Valhalla Park	8/11/09	335.9
<u>18</u>	62	Isabella	Coldwater Lake	Coldwater Park	6/17/09	661.5
	63	Isabella	Coldwater Lake	Coldwater Park	7/9/09	314.4
	64	Isabella	Coldwater Lake	Coldwater Park	7/8/09	1234.0
<u>19</u>	65	Kalamazoo	Campbell Lake	Robert Morris Park	8/11/09	516.0
	66	Kalamazoo	Campbell Lake	Robert Morris Park	8/10/09	637.0
	67	Kalamazoo	Campbell Lake	Robert Morris Park	8/18/09	313.6
	68	Kalamazoo	Campbell Lake	Robert Morris Park	8/17/09	326.8
	69	Kalamazoo	Sunset Lake	Sunset Lake Park	7/13/09	664.0
<u>20</u>	70	Leelanau	Grand Traverse Bay-West	Suttons Bay Park	8/26/09	1048.5
	71	Leelanau	Lake Michigan	Empire Municipal Beach	7/15/09	573.2
<u>21</u>	72	Livingston	Bishop Lake	Brighton State Recreation Area	6/24/09	557.5
	73	Livingston	Thompson Lake	Howell City Park	6/9/09	411.3
	74	Livingston	Thompson Lake	Howell City Park	8/18/09	322.1
	75	Livingston	Thompson Lake	Howell City Park	7/29/09	908.0
<u>22</u>	76	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	8/5/09	739.4
	77	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	9/2/09	344.2

Appendix F. 2009 Inland and Great Lakes Beaches Exceedances of WQS (300 E.coli per 100 ml)

78	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	8/12/09	1292.4
79	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	8/13/09	1292.4
80	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	8/12/09	329.5
81	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	4/22/09	392.8
82	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	6/1/09	1751.9
83	Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	9/21/09	579.1
84	Macomb	Lake St. Clair	New Baltimore Park Beach	9/21/09	2419.0
85	Macomb	Lake St. Clair	New Baltimore Park Beach	5/13/09	347.2
86	Macomb	Lake St. Clair	New Baltimore Park Beach	6/17/09	376.4
87	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/17/09	2419.0
88	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/15/09	1108.9
89	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	5/4/09	592.1
90	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	5/27/09	1813.5
91	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	4/29/09	1307.6
92	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	4/20/09	418.7
93	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/8/09	426.6
94	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/3/09	714.6
95	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	7/13/09	716.7
96	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	7/8/09	1647.8
97	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/22/09	1220.5
98	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/24/09	1342.0
99	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	7/1/09	1696.6
100	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	6/29/09	393.1
101	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	7/6/09	794.7
102	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	8/12/09	1561.3
103	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	8/26/09	2026.8
104	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	8/31/09	1095.1
105	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	9/9/09	2419.0
106	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	9/21/09	2419.0
107	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	9/23/09	1194.6
108	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	9/16/09	2419.0
109	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	9/30/09	1212.8
110	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	8/10/09	1500.5
111	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/29/09	303.3
112	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/20/09	1794.6
113	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/6/09	497.3
114	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	6/29/09	1396.5
115	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/1/09	488.1
116	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/2/09	645.3
117	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/8/09	2419.0
118	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/13/09	2419.0
119	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	7/15/09	1365.4
120	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	4/15/09	1312.5
121	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	4/20/09	824.4
122	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	4/22/09	903.5
123	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	4/27/09	744.4
124	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	4/29/09	1394.2
125	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	6/1/09	376.3
126	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	5/4/09	337.0
127	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	9/28/09	2419.0

Appendix F. 2009 Inland and Great Lakes Beaches Exceedances of WQS (300 E.coli per 100 ml)

128	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	9/21/09	451.7	
129	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	9/23/09	601.4	
130	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	8/11/09	578.2	
131	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	8/12/09	444.8	
132	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	8/10/09	1023.5	
133	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	8/10/09	345.4	
134	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	8/12/09	444.8	
135	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Beach	8/13/09	352.2	
136	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Eastwood Beach	8/10/09	345.4	
137	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Eastwood Beach	8/10/09	345.4	
138	Macomb	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Eastwood Beach	9/28/09	2419.0	
<u>23</u>	139	Manistee	Lake Michigan	Sundling Park	8/3/09	327.0
<u>24</u>	140	Muskegon	Fox Lake	Fox Lake Park Beach	8/10/09	546.9
	141	Muskegon	Fox Lake	Fox Lake Park Beach	8/3/09	337.0
	142	Muskegon	Lake Michigan	Meinert County Park	8/11/09	2420.0
	143	Muskegon	Muskegon Lake	Water Sports Park	8/10/09	350.1
	144	Muskegon	Twin Lake	Twin Lake County Park Beach	7/23/09	701.5
	145	Muskegon	Twin Lake	Twin Lake County Park Beach	8/10/09	2420.0
	146	Muskegon	Twin Lake	Twin Lake County Park Beach	7/13/09	937.7
	147	Muskegon	Twin Lake	Twin Lake County Park Beach	7/14/09	370.9
	148	Muskegon	Twin Lake	Twin Lake County Park Beach	7/21/09	1518.1
	149	Muskegon	Twin Lake	Twin Lake County Park Beach	7/20/09	1411.3
	150	Muskegon	Twin Lake	Twin Lake County Park Beach	7/22/09	730.7
	151	Muskegon	Twin Lake	Twin Lake County Park Beach	7/27/09	1117.0
<u>25</u>	152	Oakland	Cass Lake	Pontiac Yacht Club	7/27/09	434.0
	153	Oakland	Walled Lake	E.V. Mercer City Beach	7/20/09	850.0
	154	Oakland	Walled Lake	E.V. Mercer City Beach	7/13/09	651.0
	155	Oakland	Walled Lake	E.V. Mercer City Beach	6/1/09	590.0
	156	Oakland	Walled Lake	E.V. Mercer City Beach	7/23/09	744.0
	157	Oakland	Walled Lake	E.V. Mercer City Beach	7/28/09	1695.0
	158	Oakland	Walled Lake	E.V. Mercer City Beach	8/3/09	314.0
	159	Oakland	Walled Lake	E.V. Mercer City Beach	8/10/09	1619.0
	160	Oakland	Walnut Lake	Bloomfield Parks & Recreation/West Hills H.S.	6/15/09	352.0
<u>26</u>	161	Osceola	Big Lake	Crittenden Park	7/14/09	418.4
	162	Osceola	Muskegon River	Crawford Park	6/9/09	840.2

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	163	Osceola	Sunrise Lake	Sunrise Lake Park	8/11/09	2419.6
<u>27</u>	164	Ottawa	Georgetown Lake	Georgetown Community Park	8/10/09	1381.0
	165	Ottawa	Lake Macatawa	Dunton Park	8/4/09	786.8
	166	Ottawa	Lake Macatawa	Dunton Park	8/11/09	1271.9
	167	Ottawa	Lake Macatawa	Dunton Park	8/27/09	2419.6
	168	Ottawa	Lake Macatawa	Dunton Park	8/27/09	563.0
	169	Ottawa	Lake Macatawa	Dunton Park	5/27/09	410.0
	170	Ottawa	Lake Macatawa	Dunton Park	5/28/09	867.8
	171	Ottawa	Lake Macatawa	Dunton Park	6/23/09	624.9
	172	Ottawa	Lake Macatawa	Fallen Leaf Park	6/22/09	395.9
	173	Ottawa	Lake Macatawa	Holland State Park	6/23/09	352.1
	174	Ottawa	Lake Macatawa	Holland State Park	6/22/09	337.4
	175	Ottawa	Lake Michigan	Tunnel Park	6/24/09	347.1
	176	Ottawa	Lake Michigan	Tunnel Park	8/25/09	545.9
	177	Ottawa	Maplewood Lake	Maplewood Lake Park	7/21/09	809.9
	178	Ottawa	Maplewood Lake	Maplewood Lake Park	7/14/09	344.8
	179	Ottawa	Maplewood Lake	Maplewood Lake Park	7/15/09	905.0
	180	Ottawa	Maplewood Lake	Maplewood Lake Park	8/19/09	442.7
	181	Ottawa	Maplewood Lake	Maplewood Lake Park	8/19/09	558.4
	182	Ottawa	Maplewood Lake	Maplewood Lake Park	8/25/09	366.3
	183	Ottawa	Maplewood Lake	Maplewood Lake Park	8/7/09	700.6
	184	Ottawa	Maplewood Lake	Maplewood Lake Park	8/7/09	436.4
	185	Ottawa	Maplewood Lake	Maplewood Lake Park	8/10/09	2419.6
	186	Ottawa	Maplewood Lake	Maplewood Lake Park	8/10/09	580.5
<u>28</u>	187	Roscommon	Houghton Lake	Denton Township Public Beach	6/9/09	426.8
	188	Roscommon	Houghton Lake	Denton Township Public Beach	8/11/09	300.3
	189	Roscommon	Houghton Lake	Houghton Lake Heights	6/9/09	496.5
<u>29</u>	190	Schoolcraft	Lake Michigan	Rogers Park-MDOT	7/15/09	321.1
<u>30</u>	191	St. Clair	Lake Huron	Fort Gratiot County Park	8/19/09	380.5
	192	St. Clair	Lake Huron	Keewadhin Road Beach	6/8/09	309.1
	193	St. Clair	Lake Huron	Krafft Road Beach	8/19/09	468.9
	194	St. Clair	Lake Huron	Lakeport State Campground	8/12/09	624.9
	195	St. Clair	St. Clair River	Chrysler Park Beach	8/17/09	303.9
	196	St. Clair	St. Clair River	Chrysler Park Beach	8/20/09	1518.4
	197	St. Clair	St. Clair River	Chrysler Park Beach	8/26/09	802.2
	198	St. Clair	St. Clair River	Chrysler Park Beach	8/25/09	304.3
	199	St. Clair	St. Clair River	Chrysler Park Beach	8/18/09	414.9
<u>31</u>	200	Washtenaw	Bruin Lake	Pinckney Recreation Area	6/19/09	491.3
<u>32</u>	201	Wayne	Lake St. Clair	Crescent Sail Yacht Club	8/26/09	304.4
	202	Wayne	Lake St. Clair	Crescent Sail Yacht Club	7/29/09	496.7
	203	Wayne	Lake St. Clair	Crescent Sail Yacht Club	7/20/09	343.1
	204	Wayne	Lake St. Clair	Crescent Sail Yacht Club	7/22/09	463.9
	205	Wayne	Lake St. Clair	Crescent Sail Yacht Club	6/22/09	716.6
	206	Wayne	Lake St. Clair	Crescent Sail Yacht Club	7/1/09	1565.9
	207	Wayne	Lake St. Clair	Crescent Sail Yacht Club	5/27/09	586.4
	208	Wayne	Rouge River	Phoenix Lake	5/14/09	611.8

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209	Wayne	Rouge River	Phoenix Lake	8/27/09	325.5
210	Wayne	Rouge River	Wilcox Lake	5/14/09	833.0
211	Wayne	Rouge River	Wilcox Lake	8/20/09	420.0
212	Wayne	Rouge River	Wilcox Lake	8/27/09	322.3