

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER RESOURCES DIVISION
FEBRUARY 2011

STAFF REPORT

MICHIGAN BEACH MONITORING
YEAR 2010 ANNUAL REPORT

INTRODUCTION

The Michigan Department of Environmental Quality (MDEQ), 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 MDEQ 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 MDEQ 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 MDEQ 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 MDEQ 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.

The availability of grant funds has increased the number of counties where beaches are monitored. Less than 50 beaches were monitored with local funding in 25 counties in 2000. With consistent grant funding, over 400 beaches have been monitored in at least 50 counties for the past 6 years as shown 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	2005	2006	2007	2008	2009	2010
Number of Counties that Monitored	52	58	57	57	57	59
Number of Beaches Monitored	406	440	474	467	414	430

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 state-wide 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 MDEQ 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 MDEQ 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 MDEQ 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 MDEQ has awarded \$1,122,267 including 14 awards totaling \$187,424 for monitoring beaches in 2009 and 2010. A list of the most recent grant awards is shown in Appendix A.

BEACH Act Grants

The MDEQ 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 MDEQ has allocated \$2,130,345 including 24 awards totaling \$204,807 in 2010 (the MDEQ also 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 MDEQ 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 Notification Data

Beach notification data are the actions taken at a beach to warn the public of unsafe water conditions. A beach advisory or closure (collectively referred to as an action) may be issued due to riptides, spills, harmful algal blooms, an *E. coli* result that exceeded WQS, or other potential threats to public health. Advisories or closures 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 MDEQ developed a centralized statewide database, BeachGuard, which includes bathing beach monitoring *E. coli* test results and notification data. These data are available electronically to the public via the MDEQ's Web site (<https://www.egle.state.mi.us/beach/>). 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 search tools, options for data export, 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 and Notification Data

According to R 333.12541(2), all local health departments are required to report their beach monitoring test results to the MDEQ within 36 hours of conducting the test or evaluation. Health departments receiving beach monitoring grants are required to enter their data on the MDEQ'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 MDEQ submits beach monitoring data to the USEPA. The USEPA has created several Web pages for beach information that can be found at <https://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 <https://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 MDEQ 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 MDEQ's beach Web site. The beaches are arranged alphabetically by county, then water body, then location (site name). There are 573 identified public beaches on inland lakes and rivers and 609 identified public beaches on the Great Lakes.

Synopsis of Data

Monitoring and notification data reported for beaches included results of *E. coli* tests and the number of advisories or closures (actions) that were posted and the number of days for each posting. In 2010, monitoring was conducted at 430 (206 inland and 224 Great Lakes) public beaches in 59 Michigan counties. Local beach managers collected 5,194 daily water samples and 209 (4.0 percent) exceeded Michigan's WQS (Appendix F).

Exceedances were reported at 108 beaches (25 percent of all monitored beaches) resulting in 103 of those beaches posting 152 advisories or closures lasting a total of 1,003 days. The number of beaches with exceedances differed from the number of beaches with actions due to any of the following reasons: (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. Table 2 shows an increase in the number and percent of beaches with exceedances in comparison to previous years. The number and percent of samples exceeding WQS in 2010 were similar to 2009, but were higher than the previous years (Table 2).

Table 2. Monitoring data for all public beaches in Michigan, including percent of beaches with exceedances and percent of samples exceeding WQS.

Year	2005	2006	2007	2008	2009	2010
Number of Beaches with Exceedances	77	99	77	75	83	108
Percent of Beaches with Exceedances	19	22.5	16.2	15.8	20	25
Number of Samples Exceeding WQS	130	200	145	154	212	209
Percent of Samples Exceeding WQS	2.8	3.6	2.6	2.8	3.6	4.0

Notification data in 2010 showed an increase in the number and percentage of beaches with an action and in the number of actions (Figure 1 and Table 3). However, the total number of days with actions decreased (Table 3).

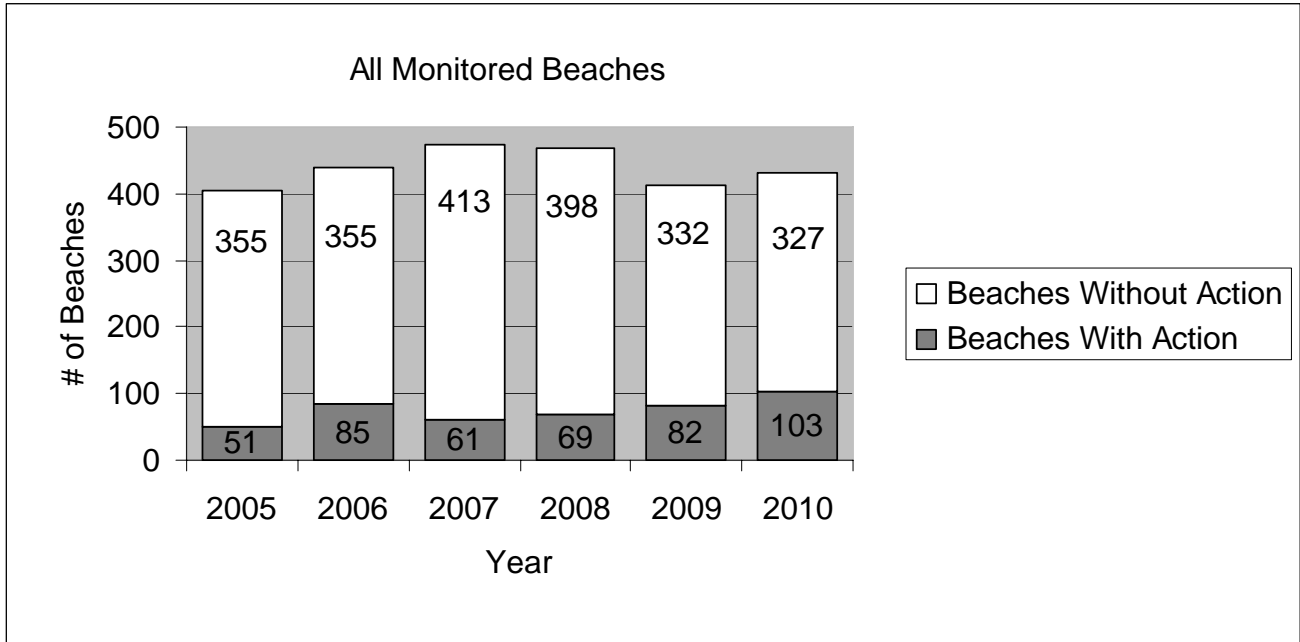


Figure 1. Each bar represents the total number of monitored beaches with divisions designating beaches with and without an action.

Table 3. Monitoring data for all public beaches in Michigan including the total number of actions, percent of beaches with an action, and total number of days with an action.

Year	2005	2006	2007	2008	2009	2010
Actions	80	110	89	108	125	152
Percent of Monitored Beaches with an Action	19	18.4	12.9	14.8	19.8	24.3
Total Days with an Action	474	886	1,568	697	1,596	1,003

Synopsis of Data from Great Lakes Beaches

In 2010, monitoring was conducted at 224 Great Lakes public beaches in 38 counties in Michigan. Out of 3,002 daily samples collected, 147 (4.9 percent) exceeded Michigan’s WQS (Appendix F). The exceedances were reported from 66 beaches (29 percent of monitored Great Lakes beaches), 60 (27 percent) of which reported actions (100 incidents lasting a total of 638 days). A summary of the exceedances of the *E. coli* WQS for Great Lakes beaches is provided in Table 4. Figure 2 shows that the number of monitored Great Lakes beaches has stayed about the same, but the number of beaches with an action has increased.

Table 4. Number of exceedances and actions for Great Lakes beaches monitored in 2010.

a. Number of Exceedances Reported per Beach	b. Number of Beaches with Exceedence(s)	Total Number of Exceedances (a x b)	c. Number of Actions per Beach	d. Number of Beaches with Actions	Total Number of Actions (c x d)
1	37	37	1	38	38
2	17	34	2	14	28
3	4	12	3	4	12
4	1	4	4	1	4
5	1	5	5	2	10
6	1	6	8	1	8
7	2	14			0
10	2	20			0
15	1	15			0
TOTAL	66	147		60	100

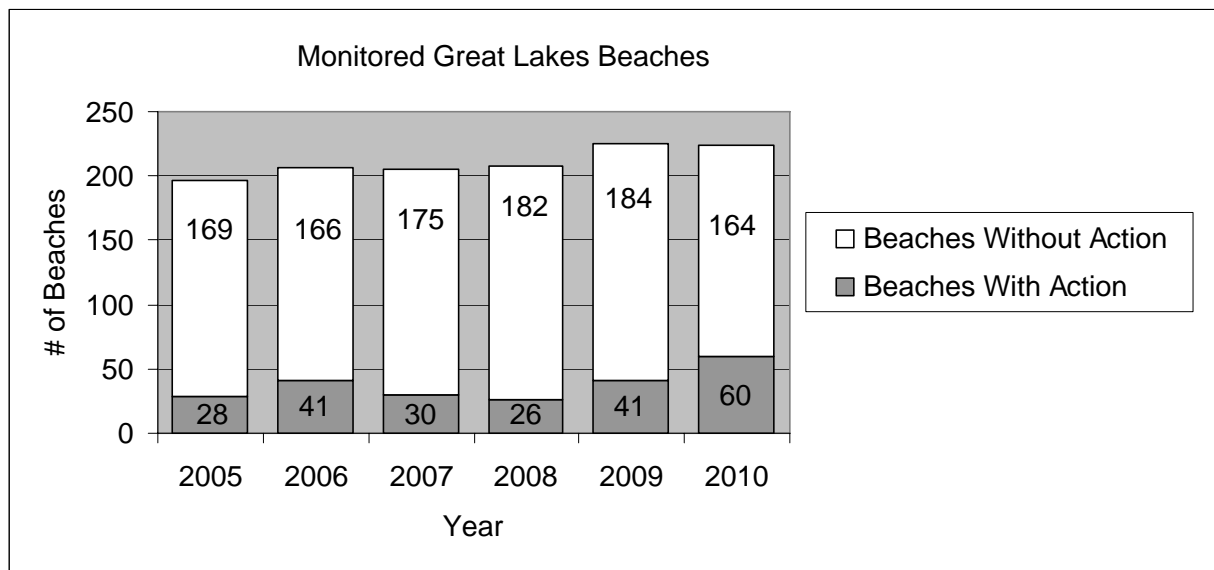


Figure 2. Each bar represents the total number of monitored Great Lakes beaches with divisions designating beaches with and without an action.

A summary of the 2010 beach monitoring and notification data for each of the Great Lakes, Lake St. Clair, and connecting channels is provided in Table 5. A summary of sources of contamination reported for actions in the Great Lakes, Lake St. Clair, and connecting channels is provided in Table 6.

Table 5. Number of public beaches and actions 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 with an Action	Number of Beach Actions	Total Number of Days with Actions
Lake Erie	4	4	2	3	27
Lake Huron	164	68	30	46	190
Lake Michigan	304	120	19	25	71
Lake Superior	118	21	3	9	42
Lake St. Clair	5	5	4	9	219
Great Lakes Connecting Channels	14	6	3	8	89
TOTAL	609	224	61	100	638

Table 6. Contamination sources reported for advisories and closures, days affected, and the number of beaches for the Great Lakes, Lake St. Clair, and connecting channels for the specific cause of the beach action.

Contamination Source	Number of Actions with Reporting Source	Number of Days Affected by Source	Number of Beaches Reporting Source
Wildlife	1	1	1
Agriculture	1	7	1
Storm	18	78	12
Runoff	3	12	1
CSO	1	60	1
SSO	2	6	2
Other	5	111	5
Unknown	69	363	44
TOTAL	100	638	67*

*Total includes four beaches that reported closures caused by two sources and one beach that reported closures caused by four sources.

Synopsis of Data from Inland Beaches

In 2010, monitoring was conducted at 206 inland lake public beaches in 42 counties in Michigan. Out of 2,192 daily samples collected, 62 (3 percent) exceeded Michigan's WQS (Appendix F). The exceedances were reported from 42 beaches (20 percent of monitored inland beaches) and 43 beaches (21 percent) reported actions (52 incidents lasting a total of 365 days).

A summary of the exceedances of the *E. coli* WQS for inland beaches is provided in Table 7. Figure 3 shows that the number of monitored inland beaches varies, but the number of beaches with an action is similar over the last few years. A summary of sources of contamination reported for beach actions for inland lakes is provided in Table 8.

Table 7. Number of exceedances and actions for inland beaches monitored in 2010.

a. Number of Exceedances Reported per Beach	b. Number of Beaches with Exceedance(s)	Total Number of Exceedances (a x b)	c. Number of Actions per Beach	d. Number of Beaches with Actions	Total Number of Actions (c x d)
1	30	30	1	34	34
2	6	12	2	9	18
3	4	12			
4	2	8			
TOTAL	42	62		43	52

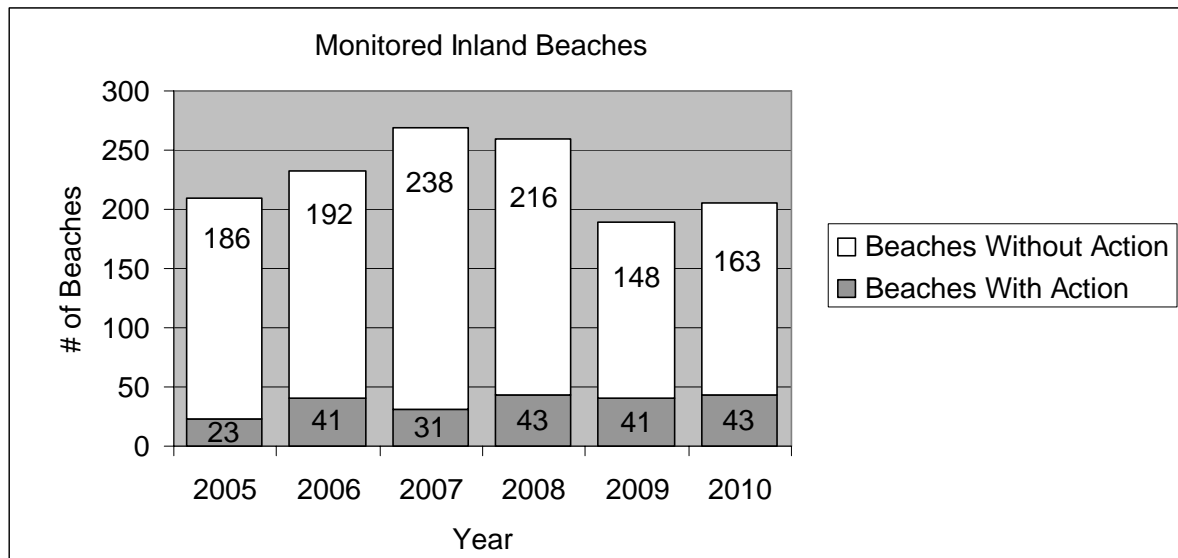


Figure 3. Each bar represents the total number of monitored inland beaches with divisions designating beaches with and without an action.

Table 8. Contamination sources reported for actions, days affected, and the number of beaches reporting the specific cause of an action for inland lakes.

Contamination Source	Number of Actions Reporting Source	Number of Days Affected by Source	Number of Beaches Reporting Source
Wildlife	7	9	6
Agriculture	1	1	1
Storm	3	4	2
Runoff	2	3	2
CSO	0	0	0
SSO	0	0	0
Other	0	0	0
Unknown	39	348	32
TOTAL	52	365	43

5. EVALUATE THE EFFECTIVENESS OF MDEQ 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 MDEQ routinely review beach water quality data. 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 be attaining 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, which 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.

Appendix A. CMI-CWF Grants Inland Lake Beaches 2009-2010.

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. 2010 BEACH Act Grants for Great Lakes Beaches.

Local Health Department	Allocated Amount	Total Monitored Beaches
Allegan County Health Department	\$5,064	4
Bay County Health Department	\$5,705	5
Berrien County Health Department	\$11,474	14
Central Michigan District Health Department	\$9,551	11
Chippewa County Health Department	\$8,269	9
Delta-Menominee District Health Department	\$5,064	4
Detroit, City of	\$2,505	1
District Health Department #2	\$8,269	9
District Health Department #4	\$10,192	12
District Health Department #10	\$16,602	22
Huron County Health Department	\$10,833	13
Luce-Mackinac-Alger-Schoolcraft District Health Department	\$5,064	4
Macomb County Health Department	\$5,064	4
Marquette (city of Marquette)	\$5,705	5
Monroe County Health Department	\$5,064	4
Muskegon County Health Department	\$10,192	12
Northwest Michigan Community Health Agency	\$24,294	34
Ottawa County Health Department	\$8,269	9
St. Clair County Health Department	\$12,115	15
Sanilac County Health Department	\$5,705	5
Van Buren/Cass District Health Department	\$5,064	4
Watershed Center (Grand Traverse & Benzie-Leelanau)	\$10,769	9
Wayne County Health Department	\$3,782	2
Western Upper Peninsula District Health Department	\$10,192	12
Total	\$204,807	223

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. Inland Beaches Monitored.

	County	Water Body		Location
1	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
2	4 Alpena	Beaver Lake	1	Beaver Lake Park
	5 Alpena	Lake Avalon	2	Lake Avalon Public Access
3	6 Antrim	Central Lake	1	Thurston Park
	7 Antrim	Elsworth Lake	2	Wooden Shoe Park
	8 Antrim	Lake Bellaire	3	Richardi Park
	9 Antrim	Torch Lake	4	Day Park
4	10 Arenac	Oasis Lake	1	Oasis Lake County Park
5	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
6	14 Bay	Kawkawlin River	1	Boat Launch on Kawkawlin River
	15 Bay	Saginaw River	2	Vet's Park North Bay City
	16 Bay	Saginaw River	3	Vet's Park South River Rd.
7	17 Benzie	Otter Creek	1	Sleeping Bear Dunes-Otter Creek
8	18 Charlevoix	Thumb Lake	1	Thumb Lake Beach
	19 Charlevoix	Walloon Lake	2	Melrose Township Park
9	20 Chippewa	Dukes Lake	1	Dukes Lake
	21 Chippewa	Kinross Lake	2	Kinross Lake
	22 Chippewa	Monocle Lake	3	Monocle Lake
10	23 Clare	Bertha Lake	1	Bertha Lake Beach
	24 Clare	Budd Lake	2	Wilson Lake State Park
	25 Clare	Shingle Lake	3	Shingle Lake Park
	26 Clare	Silver Lake	4	Silver Lake Park
11	27 Crawford	Higgins Lake	1	North Higgins State Park
		Fox Memorial Park Beach		
12	28 Eaton		1	Fox Memorial Park
13	29 Emmet	Crooked Lake	1	Little Traverse Township Beach
	30 Emmet	Larks Lake	2	Pioneer Picnic Park
	31 Emmet	Pickereel Lake	3	Camp Petosega
	32 Emmet	Pickereel Lake	4	Channel Beach
	33 Emmet	Walloon Lake	5	Resort Pike Road Beach
14	34 Genesee	Byram Lake	1	Clover Beach
	35 Genesee	Copneconic Lake	2	Camp Copneconic
	36 Genesee	Copneconic Lake	3	Copneconic Day Beach
	37 Genesee	Covenant Hill Camp	4	Covenant Hill Camp

Appendix D.1. Inland Beaches Monitored.

	County	Water Body		Location
38	Genesee	Fenton Lake	5	Township Hall
39	Genesee	Hasler Lake	6	Hasler Lake Campground
40	Genesee	Holloway Reservoir	7	Buttercup Beach
41	Genesee	Kelly Lake	8	Kelly Lake
42	Genesee	Lake Linda	9	Lake Linda
43	Genesee	Mott Lake	10	Bluebell Beach
44	Genesee	Myers Lake	11	Myers Lake
45	Genesee	Otter Lake	12	Griswold Park
46	Genesee	Pinewood Lake	13	Beach at Pinewood Lake
47	Genesee	Silver Lake	14	City Park Beach
48	Genesee	West Sister Lake	15	West Sister Lake
15	Gladwin	Cedar River	1	Gladwin City Park
50	Gladwin	Pratt Lake	2	Pratt Lake
51	Gladwin	Ross Lake	3	Beaverton City Park
16	Gogebic	Lake Gogebic	1	Gogebic County Park
53	Gogebic	Lake Gogebic	2	Lake Gogebic State Park Beach
54	Gogebic	Sunday Lake	3	Sunday Lake Beach
17	Houghton	Lake Roland	1	Twin Lakes State Park
18	Ingham	Burchfield Pond	1	Burchfield Park
57	Ingham	Hawk Island	2	Hawk Island County Park
58	Ingham	Lake Lansing	3	Lake Lansing Park South
59	Ingham	Valhalla Pond	4	Valhalla Park
19	Iosco	Cedar Lake	1	Greenbush Township beach
61	Iosco	Footo Pond	2	Old Orchard Park
62	Iosco	Long Lake	3	Long Lake Public Access
63	Iosco	Van Ettan Lake	4	Oscoda Township Park- Van Ettan Lake
20	Isabella	Borrow Pit	1	Herrick County Park
65	Isabella	Chippewa River	2	Deerfield County Park
66	Isabella	Coldwater Lake	3	Coldwater Park
67	Isabella	Halls Lake	4	Halls Lake
21	Kalamazoo	Blue Lake	1	Cold Brook County Park
69	Kalamazoo	Campbell Lake	2	Robert Morris Park
70	Kalamazoo	Eagle Lake	3	Fort Custer Recreation Area Beach
71	Kalamazoo	Gull Lake	4	Ross Township Park
72	Kalamazoo	Hogsett Lake	5	Prairie View County Park
73	Kalamazoo	Long Lake	6	Ramona Park
74	Kalamazoo	Sunset Lake	7	Sunset Lake Park
75	Kalamazoo	Swimmers Lake	8	Markin Glen County Park
76	Kalamazoo	Woods Lake	9	Woods Lake Beach
22	Leelanau	inland lake	1	Sleeping Bear Dunes-Little Glen Lake
78	Leelanau	inland lake	2	Sleeping Bear Dunes-North Bar Lake
23	Livingston	Bentley Lake	1	Camp Innisfree

Appendix D.1. Inland Beaches Monitored.

	County	Water Body		Location
80	Livingston	Bishop Lake	2	Brighton State Recreation Area
81	Livingston	Cordley Lake	3	Varsity Day Camp
82	Livingston	Church Lake	4	Wildwood Ranch
83	Livingston	Cook Lake	5	Taylor's Beach
84	Livingston	Haynor Lake	6	Hamburg Fitness Center & Camp
85	Livingston	Kent Lake	7	Island Lake Recreation Area - Kent Lake
86	Livingston	Lake Chemung	8	Lake Chemung Outdoor Resort
87	Livingston	Lake Walden	9	Waldenwoods Resort
88	Livingston	Pleasant Lake	10	Howell Nature Center
89	Livingston	Spring Mill Pond	11	Island Lake Recreation Area
90	Livingston	Thompson Lake	12	Howell City Park
91	Livingston	Winans Lake	13	Lakelands Golf & Country Club
<u>24</u>	<u>Mackinac</u>	Brevort Lake	1	Brevort Lake Campground Beach
		Stony Creek Lake-Impoundment		
<u>25</u>	<u>Macomb</u>		1	Stony Creek Metropark-Baypoint Beach
		Stony Creek Lake-Impoundment		
94	Macomb		2	Stony Creek Metropark-Eastwood Beach
<u>26</u>	<u>Midland</u>	Sanford Lake	1	Sanford Lake Park
<u>27</u>	<u>Monroe</u>	(man-made pond)	1	Totem Pole Campground Pond
<u>28</u>	<u>Montmorency</u>	Clear Lake	1	Clear Lake State Park
<u>29</u>	<u>Muskegon</u>	Bear Lake	1	Laketon Township Beach
99	Muskegon	Big Blue Lake	2	Blue Lake County Park Beach
100	Muskegon	Duck Lake	3	Duck Lake State Park Beach
101	Muskegon	Fox Lake	4	Fox Lake Park Beach
102	Muskegon	Goose Egg Lake	5	Kattulpa
103	Muskegon	Half Moon Lake	6	Moore County Park Beach
104	Muskegon	Mona Lake	7	Ross Park Beach
105	Muskegon	Muskegon Lake	8	Harbor Towne Beach
106	Muskegon	Twin Lake	9	Twin Lake County Park Beach
107	Muskegon	West Lake	10	Paddley Park
108	Muskegon	White Lake	11	Maple Park
109	Muskegon	Wolf Lake	12	Sunset Park
<u>30</u>	<u>Oakland</u>	Adams Lake	1	Addison Oaks Co. Park
111	Oakland	Big Peat Lake	2	Haas Lake Park #2
112	Oakland	Big Seven Lake	3	Seven Lakes Park
113	Oakland	Bush Lake	4	Holly Village Beach
114	Oakland	Cass Lake	5	Dodge Park #4
115	Oakland	Cass Lake	6	Keego Harbor City Beach
116	Oakland	Cass Lake	7	Pontiac Yacht Club
117	Oakland	Crooked Lake	8	Independence Oaks County Park
118	Oakland	Deer Lake	9	Independence Township Village Beach
119	Oakland	Fish Lake	10	Camp Ohiyesa - North
120	Oakland	Green Lake	11	Bay Court Park
121	Oakland	Green Lake	12	Camp Wathana

Appendix D.1. Inland Beaches Monitored.

	County	Water Body		Location
122	Oakland	Green Lake	13	Clear Water Resort
123	Oakland	Haas Lake	14	Haas Lake Park #1
124	Oakland	Haas Lake	15	Haas Lake Park #3
125	Oakland	Handsome Lake	16	Camp Oakland - summer
126	Oakland	Heron Lake	17	Holly Recreation Area - Heron Beach
127	Oakland	Kent Lake	18	Kensington - Maple beach
128	Oakland	Kent Lake	19	Kensington - Martindale Beach
129	Oakland	Long Lake	20	Christ the King Church Camp
130	Oakland	Lower Trout	21	Bald Mountain Recreation Area
131	Oakland	Mill Pond	22	Davisburg Village Beach (Hart Community Center)
132	Oakland	No Name	23	Thelma Spencer Park
133	Oakland	Orchard lake	24	Country Club (500 W. Shore Dr)
134	Oakland	Orion Lake	25	Greens Park Village Beach
135	Oakland	Phillips Lake	26	Camp Dearborn - Lake #1
136	Oakland	Phillips Lake	27	Camp Dearborn - Lake #5
137	Oakland	Phipps Lake	28	Camp Maas - Rodecker
138	Oakland	Phipps Lake	29	Camp Maas- Sobell Beach
139	Oakland	Pontiac Lake	30	Pontiac Recreation Area
140	Oakland	Prince Lake	31	Upland Hills Farm
141	Oakland	Proud Lake	32	Proud Lake Recreation Area Campground
142	Oakland	Round Lake	33	Scripter Village Park Township Beach
143	Oakland	Sand Lake	34	Seven Lakes State Park - Campground
144	Oakland	Stewart Lake	35	Groveland Oaks County Park - Paradise Beach
145	Oakland	Stony Lake	36	Stony Lake Park
146	Oakland	Sun Lake	37	Finnish Day Camp
147	Oakland	Sylvan Lake	38	Ferndale
148	Oakland	Teeple Lake	39	Teeple Lake Recreation Area - Highland State Park
149	Oakland	Tipsico Lake	40	Brown's Landing Mobile Home Park
150	Oakland	Tommys Lake	41	Camp Agawam Boy Scout Camp
151	Oakland	Walled Lake	42	E.V. Mercer City Beach
152	Oakland	Walled Lake	43	Lakeshore Park
153	Oakland	Walnut Lake	44	Bloomfield Parks & Recreation/West Hills M.S.
31	154	Ogemaw	Devoe Lake	1 Rifle River Recreation Area
	155	Ogemaw	Grousehaven Lake	2 Rifle River Recreation Area Campground Beach
	156	Ogemaw	Rifle Lake	3 Shady Shores Park Subdivision Beach
	157	Ogemaw	Skidway Lake	4 Skidway Lake
32	158	Ontonagon	Lake Gogebic	1 Bergland Township Park
	159	Ontonagon	Lake Gogebic	2 Ontonagon County Park
33	160	Osceola	Big Lake	1 Crittenden Park
	161	Osceola	Center Lake	2 Center Lake Park
	162	Osceola	Muskegon River	3 Crawford Park
	163	Osceola	Rose Lake	4 Rose Lake County Park
	164	Osceola	Sunrise Lake	5 Sunrise Lake Park
34	165	Oscoda	Perry Lake	1 Comins Township. Park
	166	Oscoda	Smith Lake	2 Oscoda County Park
35	167	Otsego	Bear Lake	1 Bear Lake State Forest Campground

Appendix D.1. Inland Beaches Monitored.

	County	Water Body		Location
168	Otsego	Big lake	2	Big Lake
169	Otsego	Otsego Lake	3	Arbutus Beach
170	Otsego	Otsego Lake	4	Otsego County Park
171	Otsego	Otsego Lake	5	Otsego Lake State Park North
172	Otsego	Otsego Lake	6	Otsego State Park
173	Otsego	Otsego Lake	7	WahWahSoo Beach
174	Otsego	Pickeral Lake	8	Pickeral Lake State Forest Campground
36 175	Ottawa	Crockery Lake	1	Grose Park
176	Ottawa	Georgetown Lake	2	Georgetown Community Park
177	Ottawa	Lake Macatawa	3	Dunton Park
178	Ottawa	Lake Macatawa	4	Fallen Leaf Park
179	Ottawa	Lake Macatawa	5	Holland State Park
180	Ottawa	Pottawattomie Bayou	6	Pottawattomie Park
181	Ottawa	Spring Lake	7	Lakeside Beach
37 182	Roscommon	Higgins Lake	1	Gerrish Township Park
183	Roscommon	Higgins Lake	2	South Higgins Lake State Park
184	Roscommon	Houghton Lake	3	Denton Township Public Beach
185	Roscommon	Houghton Lake	4	Houghton Lake Heights
186	Roscommon	Lake St. Helen	5	Richfield Township Public Fishing Site
38 187	Schoolcraft	Indian Lake State Park	1	Indian Lake
188	Schoolcraft	Quarry Beach	2	Quarry Beach
39 189	St. Clair	Emmett K.O.A. Pond	1	Emmett K.O.A.
190	St. Clair	Fort Trodd Lake	2	Fort Trodd Campground North
191	St. Clair	Fort Trodd Lake	3	Fort Trodd South
192	St. Clair	Kimball Pond	4	Kimball Township Pond
193	St. Clair	Ruby Campground Pond	5	Ruby Campground
40 194	Washtenaw	Bruin Lake	1	Pinckney Recreation Area
195	Washtenaw	Half Moon Lake	2	Pinckney Recreation Area
196	Washtenaw	Independence Lake	3	Independence Lake County Park
197	Washtenaw	Silver Lake	4	Pinckney Recreation Area
198	Washtenaw	Sugarloaf Lake	5	Waterloo Recreation Area
41 199	Wayne	Belleville Lake	1	Van Buren Township Park
200	Wayne	Lake at Park	2	Sherwood Park
42 201	Wexford	Billings Lake	1	Manton Park
202	Wexford	Lake Cadillac	2	Cadillac City Dock
203	Wexford	Lake Cadillac	3	City Park
204	Wexford	Lake Cadillac	4	Kenwood Park
205	Wexford	Lake Meauwataka	5	Colfax Township Park
206	Wexford	Lake Mitchell	6	Mitchell State Park

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
1	Alcona	Alcona Pond	1	Alcona Pond West Campground
2	Alcona	Brownlee Lake	2	Brownlee Lake - Village of Lincoln Park
3	Alcona	Hubbard Lake	3	Alcona Township Park
2	Allegan	Dumont Lake	1	Dumont Lake County Park Beach
5	Allegan	Ely Lake	2	Ely Lake Campground Beach
6	Allegan	Gun Lake	3	Gun Lake County Park Beach
7	Allegan	Little John Lake	4	Little John Lake County Park Beach
8	Allegan	Swan Creek Pond	5	Pine Point Campground Beach
3	Alpena	Long Lake	1	Long Lake Day Use
10	Alpena	Long Lake	2	Long Lake Park
4	Antrim	Torch Lake	1	Eastport
12	Antrim	Torch Lake	2	Torch River Bridge
13	Antrim	Torch River	3	Torch River Sand Bar
5	Arenac	Au Gres River	1	DNR Access-Au Gres River
15	Arenac	Flint Park Hunt Club Lake	2	Flint Park Hunt Club
16	Arenac	Man made Pond	3	Big Bend Campground
17	Arenac	Man made Pond	4	Outdoor Adventures
18	Arenac	Pine River	5	Pine River Public Access
6	Barry	Gull Lake	1	Prairieville Township Park
20	Barry	Gun Lake	2	Old Beach - Day Use Area
7	Benzie	Crystal Lake	1	Bellows
22	Benzie	Crystal Lake	2	South Shore near Beulah
8	Berrien	Paw Paw Lake	1	Paw Paw Lake
24	Berrien	St. Joseph River	2	Bertrand Park
25	Berrien	St. Joseph River	3	Niles - French Paper
26	Berrien	St. Joseph River	4	Niles - Marmont
9	Branch	First Lake	1	Quincy Park
28	Branch	Messenger Lake	2	Memorial Park
10	Calhoun	Duck Lake	1	Springport
30	Calhoun	Goguac Lake	2	Willard Beach in Battle Creek
11	Charlevoix	Huffman Lake	1	Hudson Township Park
12	Cheboygan	Black Lake	1	Black Lake S.F.C.G.
33	Cheboygan	Black Lake	2	Bluffs Beach
34	Cheboygan	Burt Lake	3	Burt Lake State Park
35	Cheboygan	Burt Lake	4	Devoe Beach
36	Cheboygan	Burt Lake	5	Hoppie's Launch
37	Cheboygan	Burt Lake	6	Maple Bay Park
38	Cheboygan	Douglass Lake	7	Ryder's Landing
39	Cheboygan	Mullett Lake	8	Aloha State Park

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
40	Cheboygan	Mullett Lake	9	Boy Scout Launch
41	Cheboygan	Mullett Lake	10	Foot Road Park
42	Cheboygan	Mullett Lake	11	Grand View Beach
43	Cheboygan	Mullett Lake	12	Hobert's Launch
44	Cheboygan	Mullett Lake	13	Orchard Beach
45	Cheboygan	Mullett Lake	14	Polish Line Beach
46	Cheboygan	Mullett Lake	15	Topinabee Park
47	Cheboygan	Webber Lake	16	Webber Lake State Park
13	Chippewa	Caribou Lake	1	Caribou Lake
48	Chippewa	Carp Lake	2	Trout Lake
49	Chippewa	Soldiers Lake	3	Soldiers Lake
50				
14	Clare	Arnold Lake	1	Arnold Lake Beach
51	Clare	Cranberry lake	2	Cranberry Lake South
52	Clare	Crooked Lake	3	Crooked Lake Beach
53	Clare	Crooked Lake	4	Hillcrest Public Landing
54	Clare	Doc and Tom Lake	5	Lake of the Pines
55	Clare	Dodge Lake	6	Dodge Lake Beach
56	Clare	George Lake	7	Lake George Public Landing
57	Clare	Grass Lake	8	Sandy Shores Beach
58	Clare	Hayes Lake (Cranberry Lake)	9	Oak Hills Children's Camp
59	Clare	Lilly Lake	10	Lilly Lake Beach
60	Clare	Long Lake	11	Long Lake Beach
61	Clare	Muskegon River	12	Muskegon River Township Park
62	Clare	Sand Lake	13	Sand Lake Beach
63	Clare	Shamrock Lake	14	City of Clare Park
64	Clare	Townline Lake	15	Cedar Shores Beach
65				
15	Clinton	Lake Ovid	1	Sleepy Hollow State Park Beach
66				
16	Eaton	Grand River	1	Lincoln Brick Park
67				
17	Emmet	Crooked Lake	1	Oden Beach
68				
18	Genesee	Barnum Lake	1	Barnum Lake
69	Genesee	Buell Lake	2	Boat Ramp at Buell Lake
70	Genesee	Crane Lake	3	Crane Lake Beach
71	Genesee	Crooked Lake	4	Crooked Lake
72	Genesee	Dollar lake	5	Dollar Lake
73	Genesee	Fenton Lake	6	DNR Boat Dock-Fenton Lake
74	Genesee	Fenton Lake	7	Fenton Lake Marina
75	Genesee	Flagstone Point	8	Flagstone Point Beach
76	Genesee	Golden Rod Lake	9	Golden Rod Beach
77	Genesee	Hasler Lake	10	Beach at Hasler Lake
78	Genesee	Holloway Reservoir	11	Walleye Pike Dock
79	Genesee	Kearsley Reservoir	12	Kearsley Reservoir Beach
80	Genesee	Lake Helene	13	Lake Helene Beach
81	Genesee	Lake Ponemah	14	at Drain
82	Genesee	Lake Ponemah	15	DNR Boat Launch at Lake Ponemah
83				

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
84	Genesee	Lake Shinangaug	16	Lake Shinangaug
85	Genesee	Linden Mill Pond	17	Linden Mill Pond Beach
86	Genesee	Lobdell Lake	18	DNR Boat Launch at Lobdell Lake
87	Genesee	Loon Lake	19	Loon Lake Beach
88	Genesee	Marl Lake	20	Marl Lake Beach
89	Genesee	McCaslin Lake	21	McCaslin Lake Beach
90	Genesee	McKane Lake	22	McKane Lake Beach
91	Genesee	Mott Lake	23	Bluegill Boat Ramp
92	Genesee	Mott Lake	24	Mott Lake Beach
		Mott Lake Stepping Stone		
93	Genesee		25	Mott Lake Stepping Stone Beach
94	Genesee	Pine Lake	26	Pine Lake Beach
95	Genesee	Silver Lake	27	Silver Lake Marina
96	Genesee	Smokerise Lake	28	Smokerise Beach
97	Genesee	Squaw Lake	29	Squaw Lake Beach
98	Genesee	Thread Lake	30	Thread Lake Beach
<u>19</u>	Gladwin	Cedar River	1	Cedar River Campground Beach
100	Gladwin	Cedar River	2	Gladwin North Park
101	Gladwin	Flowing well/pond	3	Gilman Springs Swimming Area
102	Gladwin	Hoister Lake	4	Hoister Lake Beach
103	Gladwin	House Lake	5	House Lake
104	Gladwin	Lake Four	6	Lake Four
105	Gladwin	Lake Lancer	7	Sugar Springs/Lake Lancer
106	Gladwin	Lyle Drain/Tobacco River	8	Lost Haven Beach
107	Gladwin	Secord Lake	9	Secord Lake
108	Gladwin	Secord Lake	10	Secord Lake - East
109	Gladwin	Secord Lake	11	West River Drive Boat Launch
110	Gladwin	Tittabawassee River	12	Estey Road Access
111	Gladwin	Tittabawassee River	13	Gilman Springs Canoe Launch
112	Gladwin	Tittabawassee River	14	Good News Camp
113	Gladwin	Tittabawassee River	15	Pine Street Public Access
114	Gladwin	Trout Lake	16	Trout Lake SFCG
115	Gladwin	Wiggins Lake North	17	Wiggins Lake DNR Boat Launch
116	Gladwin	Wiggins Lake South	18	Wiggins Lake - at Clendening Road
117	Gladwin	Wixon Lake	19	Wixon Lake - West
		Long Lake (AKA: Mickey Lake)		
<u>20</u>	Grand Traverse		1	Gilbert Beach
		Long Lake (AKA: Mickey Lake)		
119	Grand Traverse		2	Taylor Park
<u>21</u>	Hillsdale	Baw Beese Lake	1	Sandy Beach
121	Hillsdale	Bird lake	2	Bird Lake Beach
<u>22</u>	Iosco	Chain Lake	1	Chain Lake Beach
123	Iosco	Foot Pond	2	Footsite Park
124	Iosco	Loon Lake	3	Loon Lake Park
125	Iosco	Sand Lake	4	Sand Lake - Sand Lake Road Access

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
<u>23</u> 126	Isabella	Millpond	1	Millpond Park
<u>24</u> 127	Jackson	Clark Lake	1	Clark Lake County Park
128	Jackson	Clear Lake	2	Clear Lake County Park
129	Jackson	Gilletts Lake	3	Gilletts Lake County Park
130	Jackson	Grass Lake	4	Grass Lake County Park
131	Jackson	Lime Lake	5	Lime Lake County Park
132	Jackson	Little Wolf Lake	6	Little Wolf Lake County Park
133	Jackson	Pleasant Lake	7	Pleasant Lake County Park & Campground
134	Jackson	Portage Lake	8	Portage Lake County Park
135	Jackson	Round Lake	9	Round Lake County Park
136	Jackson	Swains Lake	10	Swains Lake County Park
137	Jackson	Vandercook Lake	11	Vandercook Lake County Park
138	Jackson	Vineyard Lake	12	Vineyard Lake County Park
<u>25</u> 139	Kalamazoo	Timber Lake	1	Timber Lake Campground
<u>26</u> 140	Kent	Lincoln Lake	1	Lincoln Lake Baptist Camp
141	Kent	Lincoln Lake	2	Lincoln Pines Resort
142	Kent	Long Lake	3	Long Lake County Park
143	Kent	Myers Lake	4	Myers Lake County Park
144	Kent	Reeds Lake	5	Collins Park
145	Kent	Scalley Lake	6	Scalley Lake Park
146	Kent	Versluis Lake	7	Versluis Park
147	Kent	Wabasis Lake	8	Wabasis Lake County Park
<u>27</u> 148	Leelanau	Lake Leelanau	1	Leelanau Township Park Beach
149	Leelanau	Lake Leelanau	2	Nedow's (Bartholomew) Beach
150	Leelanau	Lake Leelanau	3	Popp Road End
151	Leelanau	South Bar Lake	4	South Bar Lake - South End
<u>28</u> 152	Livingston	Chenago Lake	1	Camp Talahi
153	Livingston	Dibrova Lake	2	Green Valley Camp
154	Livingston	Pickerel Lake	3	Providence Medical Center
<u>29</u> 155	Marquette	Dead River Reservoir	1	Marquette Tourist Park Beach
156	Marquette	Shiras Pool	2	Shiras Swimming Area
<u>30</u> 157	Menominee	Hermansville lake	1	Hermansville Beach
158	Menominee	Shakey Lakes	2	Shakey Lakes Campground
<u>31</u> 159	Monroe	Camp Lord Willing Pond	1	Camp Lord Willing
		Covered Wagon		
160	Monroe	Campground Pond	2	Covered Wagon Campground
161	Monroe	Heath Beach Pond	3	Heath Beach
162	Monroe	K.C. Campground Pond	4	K.C. Campground
		Monroe KOA		
163	Monroe	Campground Pond	5	Monroe K.O.A. Campground

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
164	Monroe	Pirollis Campground Pond	6	Pirolli's Campground
165	Monroe	The Vine campground pond	7	The Vine
166	Monroe	Wilderness Retreat Campground Pond	8	Wilderness Retreat Campground
<u>32</u> 167	Montmorency	Clear Lake	1	Clear Lake Day Use
168	Montmorency	Crooked Lake	2	Crooked Lake Beach
169	Montmorency	East Twin Lake	3	East Twin Beach/Albert Township Park
170	Montmorency	Ess Lake	4	Ess Lake State Campground
<u>33</u> 171	Muskegon	Mona Lake	1	Mona Lake Park Beach
172	Muskegon	Muskegon Lake	2	Muskegon State Park - Muskegon Lake Side
173	Muskegon	Muskegon Lake	3	Water Sports Park
174	Muskegon	Wolf Lake	4	Wolf Lake County Park
<u>34</u> 175	Oakland	Allen Lake	1	Fox Bay Civic Association
176	Oakland	Avon Lake	2	Avon Lakes Beach #1
177	Oakland	Avon Lake	3	Avon Lakes Beach #2
178	Oakland	Bass Lake	4	Idlewild Subdivision
179	Oakland	Bogie Lake	5	Bogie Lake Property Owners - Beryl Drive
180	Oakland	Bogie Lake	6	Pinecrest Shores
181	Oakland	Brendel Lake	7	Brendle Heights - Hillwood
182	Oakland	Brendel Lake	8	Lakewood Village
183	Oakland	Brendel Lake	9	Pawlaks Campground
184	Oakland	Carpenter Lake	10	Lakeview Recreation
185	Oakland	Carpenter Lake	11	Silver Valley Subdivision
186	Oakland	Cass Lake	12	Cass Lake Woods
187	Oakland	Cass Lake	13	Keego Harbor Trailer Park
188	Oakland	Cass Lake	14	Sylvan-on-the-Lakes
189	Oakland	Cass Lake	15	Willow Beach Subdivision
190	Oakland	Cedar Island Lake	16	Cedar Crest Subdivision
191	Oakland	Cedar Island Lake	17	Sunset Subdivision
192	Oakland	Charnwood Lake	18	Charnwood
193	Oakland	Clear Lake	19	Lakeland Improvement Association - Keith Street
194	Oakland	Commerce Lake	20	Log Cabin Sub.
195	Oakland	Cranberry Lake	21	Cranberry Lake Village
196	Oakland	Cranberry Lake	22	Cranberry Lake Village
197	Oakland	Crescent Lake	23	Crescent Highlands
198	Oakland	Crescent Lake	24	Crescent Lake Park
199	Oakland	Darb Lake	25	Mission Springs Subdivision
200	Oakland	Davis Lake	26	Meagher Park/Woodland Manor
201	Oakland	Deer Lake	27	Deer Lake Estates
202	Oakland	Eagle Lake	28	Eagle Lake Road
203	Oakland	Eagle Lake	29	Lakeland Estates
204	Oakland	Ekelund Lake	30	Camp Gordanwood
205	Oakland	Elizabeth Lake	31	Bloomfield
206	Oakland	Elizabeth Lake	32	Cass-Elizabeth Heights
207	Oakland	Elizabeth Lake	33	Elizabeth Lake Estates Improvement Assoc.
208	Oakland	Elizabeth Lake	34	Elizabeth Lakeshore

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
209	Oakland	Elizabeth Lake	35	Elizabeth Shores
210	Oakland	Elizabeth Lake	36	Rangate Park
211	Oakland	Elizabeth Lake	37	Terrace
212	Oakland	Elizabeth Lake	38	Walters
213	Oakland	Emerald Lake	39	Emerald Lake
214	Oakland	Fox Lake	40	Cloister-on-the-Lakes
215	Oakland	Geneva Lake	41	Lakewood Farms - Crocus Street
216	Oakland	Geneva Lake	42	Lakewood Farms - Sharon Street
217	Oakland	Green Lake	43	Green Acres / Green Valley Park
218	Oakland	Hammond Lake	44	Hammond Estates
219	Oakland	Harvey Lake	45	Harvey Lake Estates
220	Oakland	Harvey Lake	46	Harvey Lake Heights
221	Oakland	Heather Lake	47	Heather Lake Estates
222	Oakland	Huntoon Lake	48	Broadway Civic Association
223	Oakland	Huntoon Lake	49	Burlingham Lake Park I
224	Oakland	Huntoon Lake	50	Burlingham Lake Park II
225	Oakland	Huntoon Lake	51	Huntoon Village
226	Oakland	Indian Lake	52	Indian Lake Improvement Association
227	Oakland	Lakeville Lake	53	Doll's Dock (Skip's Landing)
228	Oakland	Long Lake	54	Annex 1
229	Oakland	Long Lake	55	Bunny Run C.C.
230	Oakland	Long Lake	56	Twin Shores Subdivision
231	Oakland	Loon Lake	57	Birch Park
232	Oakland	Loon Lake	58	Indianwood
233	Oakland	Loon Lake	59	Sandy Beach
234	Oakland	Lotus Lake	60	Harris Park
235	Oakland	Lotus Lake	61	Lotus Park
236	Oakland	Lotus Lake	62	Mountain View
237	Oakland	Lower Straits	63	Maple Point
238	Oakland	Lower Straits Lake	64	Lower Straits Beach Club
239	Oakland	Lower Straits Lake	65	Shores at Bay Point
240	Oakland	Maceday Lake	66	Moutain View C.C. Subdivision
241	Oakland	Maceday Lake	67	Whitfield-Maceday Association - North
242	Oakland	Maceday Lake	68	Whitfield-Maceday Association - South
243	Oakland	Marion Lake	69	Locklin Pines Association
244	Oakland	Meadow Lake	70	Meadow Lake Association
245	Oakland	Middle Straits Lake	71	Crystal Echo
246	Oakland	Middle Straits Lake	72	Crystal Echo (the point)
247	Oakland	Middle Straits Lake	73	Stony Beach
248	Oakland	Middle Straits Lake	74	Trippls Sub. Park
249	Oakland	Middle Straits Lake	75	Twin Beach Park
250	Oakland	Middle Straits Lake	76	West Acres
251	Oakland	Morgan Lake	77	Lake Angelus Lakeview Estates
252	Oakland	Mud Lake	78	Rose Hill Center
253	Oakland	Narrin Lake	79	Camp Narrin
254	Oakland	Neva Lake	80	Lakewood Village Subdivision
255	Oakland	Oakland Lake	81	Bird Island Subdivision
256	Oakland	Oakland Lake	82	Lake Oakland Heights
257	Oakland	Oakland Lake	83	Lake Oakland Shores
258	Oakland	Orchard Lake	84	St. Mary's Park
259	Oakland	Orion Lake	85	Lake Orion Heights

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
260	Oakland	Orion Lake	86	Sunset Club
261	Oakland	Pine Lake	87	Pine Lake Manor
262	Oakland	Pleasant Lake	88	Pleasant Lake Highlands
263	Oakland	Pleasant Lake	89	Pleasant Lake Manor
264	Oakland	Pleasant Lake	90	Pleasant Lake Woods
265	Oakland	Reed Lake	91	Reed Lake Property Owners
266	Oakland	Round Lake	92	Family Park
267	Oakland	Rowe Lake	93	Jacksina Subdivision
268	Oakland	Sandshores	94	Emerald Lake Homeowners Assoc. - Little Creek Road
269	Oakland	Scotch Lake	95	Scotch Lake Residents
270	Oakland	Sherwood Lake	96	Ledgewood
271	Oakland	Sherwood Lake	97	Ravinewood East
272	Oakland	Sherwood Lake	98	Ravinewood West
273	Oakland	Sherwood Lake	99	Sherwood Boat Ramp
274	Oakland	Sherwood Lake	100	Sherwood Property Owners
275	Oakland	Silver Lake	101	Silver Hill Road
276	Oakland	Square Lake	102	Pleasant View Subdivision
277	Oakland	Square Lake	103	Pleasant View Subdivision - Kempster St
278	Oakland	Sugden Lake	104	Oakridge Subdivision
279	Oakland	Sylvan Lake	105	Cunningham Park
280	Oakland	Sylvan Lake	106	Lakeview
281	Oakland	Sylvan Lake	107	Pioneer Highlands
282	Oakland	Sylvan Lake	108	Sylvan Shores Improvement Association
283	Oakland	Tan Lake	109	Mary K. Subdivision
284	Oakland	Union Lake	110	Alpha Beach
285	Oakland	Union Lake	111	Burley & Barnsbury Streets
286	Oakland	Union Lake	112	Union Lake Beach Club
287	Oakland	Union Lake	113	Union Lake Heights Subdivision #2
288	Oakland	Upper Pettibone Lake	114	657 Dunleavy
289	Oakland	Upper Pettibone Lake	115	Oak Heights Improvement Association, 3015 Lakeview
290	Oakland	Upper Straits Lake	116	Banker's Subdivision
291	Oakland	Upper Straits Lake	117	Bayside Beach Association
292	Oakland	Upper Straits Lake	118	Outlet A
293	Oakland	Upper Straits Lake	119	Shady Beach
294	Oakland	Van Norman Lake	120	Waterford Hill
295	Oakland	Voorheis Lake	121	Keatington Subdivision - Eaton Gate - off Baldwin
296	Oakland	Voorheis Lake	122	Keatington Subdivision - Joslyn Ct.
297	Oakland	Walled Lake	123	Beachwalk Apartments
298	Oakland	Walnut Lake	124	Bloomfield Square Beach Association
299	Oakland	Walnut Lake	125	Finnish American Club of Detroit
300	Oakland	Walnut Lake	126	Lone Pine Association
301	Oakland	Walnut Lake	127	North Cove
302	Oakland	Walnut Lake	128	Shenandoah Farms Association
303	Oakland	Walnut Lake	129	Walnut Lake Estates
304	Oakland	Walnut Lake	130	Walnut Lake Hills Corporation
305	Oakland	Walnut Lake	131	Walnut Lake Park
306	Oakland	Walnut Lake	132	Walnut Lake Property Owners Sub #1
307	Oakland	Walters Lake	133	Sunny Beach #1 - Eston Road
308	Oakland	Walters Lake	134	Sunny Beach #2 - Clarkston Road
309	Oakland	Watkins Lake	135	Heitch Street
310	Oakland	Watkins Lake	136	Lakeland Association #1

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
311	Oakland	Watkins Lake	137	Lakeland Association #2
312	Oakland	Watkins Lake	138	Lanarh Street
313	Oakland	Watkins Lake	139	Whitney Street
314	Oakland	Waumegah Lake	140	Lake Waumegah Homeowners Association
315	Oakland	Whipple Lake	141	Whipple Shores Subdivision
316	Oakland	White Lake	142	Rolling Acres
317	Oakland	White Lake	143	Stanley Beach
318	Oakland	Wildwood Lake	144	Holly Recreation Area - Wildwood Beach
319	Oakland	Wing Lake	145	Westwood Manor
320	Oakland	Wing Lake	146	Wing Lake Farms Association
321	Oakland	Wing Lake	147	Wing Lake Property Owners Association
322	Oakland	Woodhull Lake	148	Woodhull Lake Civic Association
<u>35</u>	Ogemaw	Grousehaven Lake	1	Rifle River Recreation Area Day Use Area
324	Ogemaw	Hardwood Lake	2	Hardwood Lake
325	Ogemaw	Lake George	3	Lake George Campground
<u>36</u>	Osceola	Center Lake	1	Center Lake Bible Camp
327	Osceola	Center Lake	2	Kettunen Center
328	Osceola	Diamond Lake	3	Diamond Lake
329	Osceola	Diamond Lake	4	DNR Access Diamond Lake
330	Osceola	Hicks Lake	5	DNR Access Hicks Lake
331	Osceola	McCoy Lake	6	DNR Access McCoy Lake
332	Osceola	Muskegon River	7	City of Evert Campground
333	Osceola	Muskegon River	8	Hersey Road Access
334	Osceola	Rose Lake	9	Rose Lake Youth Camp
335	Osceola	Todd Lake	10	DNR Access Todd Lake
336	Osceola	Wells Lake	11	DNR Access Wells Lake
<u>37</u>	Oscoda	Mio Pond	1	Mio Pond Campground
<u>38</u>	Otsego	Otsego Lake	1	Arbutus Beach
<u>39</u>	Ottawa	Maplewood Lake	1	Maplewood Lake Park
<u>40</u>	Presque Isle	Black Lake	1	Onaway State Park
341	Presque Isle	Grand Lake	2	Grand Lake Northwest
342	Presque Isle	Grand Lake	3	Grand Lake Public Access
343	Presque Isle	Lake May	4	Lake May Public Access
344	Presque Isle	Ocquoec River	5	Millersburg Park
345	Presque Isle	Ocquoec River	6	Ocquoec Falls Park
346	Presque Isle	Shoepac Lake	7	Shoepac Lake Camp Ground
347	Presque Isle	Sunken Lake	8	Sunken Lake County Park
348	Presque Isle	Tomahawk Lake	9	Tomahawk Lake Camp Ground
<u>41</u>	Roscommon	Backus Pond	1	Backus Township. Park
350	Roscommon	Bambi Lake/Sinkhole Lake	2	Bambi Lake Camp
351	Roscommon	Higgins Lake	3	Beaver Creek Road End
352	Roscommon	Higgins Lake	4	DNR Public Fishing Site
353	Roscommon	Higgins Lake	5	Higgins Lake Public Fishing Site

Appendix D.2. Inland Beaches Not Monitored.

	County	Water Body		Location
354	Roscommon	Higgins Lake	6	Kelly Beach
355	Roscommon	Higgins Lake	7	Phoenix Park
356	Roscommon	Higgins Lake	8	Sam-O-Set Road End
357	Roscommon	Houghton Lake	9	Houghton Lake DNR Boat Launch and Park
358	Roscommon	Houghton Lake	10	Houghton Lake Public Fishing Site
359	Roscommon	Houghton Lake	11	Houghton Lake State Forest Campground
360	Roscommon	Houghton Lake	12	Old 27 DNR Access
361	Roscommon	Owens Lake	13	Camp Co-Be-Ac
<u>42</u> 362	Saginaw	Haithco Lake	1	Haithco Recreation Area
362	Saginaw	Lake of Dreams	2	Lake of Dreams Campground
<u>43</u> 364	St. Joseph	Cade Lake	1	Cade Lake Beach
365	St. Joseph	Palmer Lake	2	Palmer Lake Beach
366	St. Joseph	Sand Lake	3	Nottawa Park
<u>44</u> 367	Tuscola	Murphy Lake	1	Murphy Lake

Appendix E.1. Great Lakes Beaches Monitored.

	County	Water Body	Location
1	1 Alcona	Lake Huron	1 Harrisville State Park
2	2 Alger	Lake Superior	1 Sand Point
3	3 Allegan	Lake Michigan	1 Douglas Beach
4	4 Allegan	Lake Michigan	2 Oval Beach
5	5 Allegan	Lake Michigan	3 Pier Cove Beach
6	6 Allegan	Lake Michigan	4 West Side County Park Beach
4	7 Alpena	Lake Huron	1 Blair Street Park
	8 Alpena	Lake Huron	2 Michekewis Beach
	9 Alpena	Lake Huron	3 Ossineke Beach
	10 Alpena	Lake Huron	4 Starlite Beach
	11 Alpena	Lake Huron	5 Thompson Park
5	12 Antrim	Lake Michigan	1 Antrim County Day Park South
	13 Antrim	Lake Michigan	2 Banks Township. Park
	14 Antrim	Lake Michigan	3 Barnes Park
	15 Antrim	Lake Michigan	4 Echo Township Park
	16 Antrim	Lake Michigan	5 Elk Rapids
	17 Antrim	Lake Michigan	6 Veterans Memorial Park
6	18 Arenac	Saginaw Bay-Lake Huron	1 16th Street Beach
	19 Arenac	Saginaw Bay-Lake Huron	2 28th Street Beach
	20 Arenac	Saginaw Bay-Lake Huron	3 Arenac County Park
	21 Arenac	Saginaw Bay-Lake Huron	4 Bessinger Road Beach
	22 Arenac	Saginaw Bay-Lake Huron	5 Cemetery Beach
	23 Arenac	Saginaw Bay-Lake Huron	6 Dyer Road Beach
	24 Arenac	Saginaw Bay-Lake Huron	7 Foster Road Beach
	25 Arenac	Saginaw Bay-Lake Huron	8 Hammel Beach Road Access
	26 Arenac	Saginaw Bay-Lake Huron	9 Singing Bridge Beach
	27 Arenac	Saginaw Bay-Lake Huron	10 Twining Road Beach
	28 Arenac	Saginaw Bay-Lake Huron	11 Whites Beach
7	29 Baraga	Keweenaw Bay / Lake Superior	1 L'Anse Waterfront Park
8	30 Bay	Saginaw Bay-Lake Huron	1 Bay City State Recreation Area
	31 Bay	Saginaw Bay-Lake Huron	2 Brissette Beach Township Park
	32 Bay	Saginaw Bay-Lake Huron	3 Pinconning Park
	33 Bay	Saginaw Bay-Lake Huron	4 South Linwood Beach Township Park
	34 Bay	Saginaw Bay-Lake Huron	5 Wenona Beach
9	35 Benzie	Lake Michigan	1 Frankfort: Anchor Road Beach

Appendix E.1. Great Lakes Beaches Monitored.

	County	Water Body	Location
36	Benzie	Lake Michigan	2 Sleeping Bear Dunes-Esch Road Beach
37	Benzie	Lake Michigan	3 Sleeping Bear Dunes-Peterson Road Beach
38	Benzie	Lake Michigan	4 Sleeping Bear Dunes-Platte Point Bay
39	Benzie	Platte River	5 Sleeping Bear Dunes-Platte River Outlet
10 40	<u>Berrien</u>	Lake Michigan	1 Cherry Beach
41	Berrien	Lake Michigan	2 Grand Beach
42	Berrien	Lake Michigan	3 Hagar Township Park
43	Berrien	Lake Michigan	4 Jean Klock Park
44	Berrien	Lake Michigan	5 Lincoln Township Park
45	Berrien	Lake Michigan	6 Lions Park
46	Berrien	Lake Michigan	7 Michiana Village
47	Berrien	Lake Michigan	8 New Buffalo City
48	Berrien	Lake Michigan	9 Rocky Gap
49	Berrien	Lake Michigan	10 Silver Beach
50	Berrien	Lake Michigan	11 Tiscornia Park
51	Berrien	Lake Michigan	12 Warren Dunes Beach
52	Berrien	Lake Michigan	13 Weko Beach
11 53	<u>Charlevoix</u>	Lake Charlevoix	1 Depot Beach
54	Charlevoix	Lake Charlevoix	2 East Jordan Tourist Park
55	Charlevoix	Lake Charlevoix	3 Elm Point Beach
56	Charlevoix	Lake Charlevoix	4 Ferry Beach
57	Charlevoix	Lake Charlevoix	5 Fisherman's Island State Park
58	Charlevoix	Lake Charlevoix	6 Glenwood Beach
59	Charlevoix	Lake Charlevoix	7 Hayes Township Park
60	Charlevoix	Lake Charlevoix	8 Lake Michigan Beach
61	Charlevoix	Lake Charlevoix	9 Michigan Avenue
62	Charlevoix	Lake Charlevoix	10 Norwood Township Park
63	Charlevoix	Lake Charlevoix	11 Peninsula Beach
64	Charlevoix	Lake Michigan	12 Tannery Park
65	Charlevoix	Lake Michigan	13 Washington Street Beach
66	Charlevoix	Lake Michigan	14 Whiting Park Beach
67	Charlevoix	Lake Michigan	15 Young State Park Beach
12 68	<u>Cheboygan</u>	Lake Huron	1 Cheboygan City Park
69	Cheboygan	Lake Huron	2 Cheboygan State Park Duncan Bay
70	Cheboygan	Lake Huron	3 Mackinaw City Lighthouse Park
71	Cheboygan	Lake Huron	4 Wawatam City Park
13 72	<u>Chippewa</u>	Lake Superior	1 Bayview Campground
73	Chippewa	Lake Superior	2 Big Pine Day Use Area
74	Chippewa	Lake Superior	3 Brimley State Park

Appendix E.1. Great Lakes Beaches Monitored.

	County	Water Body		Location
75	Chippewa	Lake Superior	4	Four Mile Beach
76	Chippewa	St. Mary's River	5	Sherman Park
77	Chippewa	St. Mary's River	6	Sugar Island Township Park
14	Delta	Lake Michigan	1	Escanaba Bathing Beach
79	Delta	Lake Michigan	2	Gladstone Bathing Beach/Van Cleve Park
15	Emmet	Lake Michigan	1	Cross Village Beach
81	Emmet	Lake Michigan	2	Mackinaw City Beach #1
82	Emmet	Lake Michigan	3	Mackinaw City Beach #2
83	Emmet	Lake Michigan	4	Magnus Park
84	Emmet	Lake Michigan	5	Middle Village Park
85	Emmet	Lake Michigan	6	Petoskey State Park
86	Emmet	Lake Michigan	7	Readmond Township Beach
87	Emmet	Lake Michigan	8	Sturgeon Bay Township Beach
88	Emmet	Lake Michigan	9	Wilderness State Park
89	Emmet	Lake Michigan	10	Zoll Street Beach
90	Emmet	Lake Michigan	11	Zorn Park - Harbor Springs
16	Traverse	Grand Traverse Bay-East	1	Bryant Park Beach
92	Traverse	Grand Traverse Bay-East	2	Clinch Park
93	Traverse	Grand Traverse Bay-West	3	East Bay Park (Milliken Park)
94	Traverse	Grand Traverse Bay-West	4	Traverse City State Park
95	Traverse	Grand Traverse Bay-West	5	West End Beach
17	Houghton	Lake Superior	1	Agate Beach
97	Houghton	Lake Superior	2	Chassell Beach
98	Houghton	Superior	3	Hancock City Beach
99	Houghton	Portage Canal / Lake Superior	4	Houghton City Beach
100	Houghton	Portage Canal / Lake Superior	5	Lake Linden Campground Beach
101	Houghton	Portage Canal / Lake Superior	6	McLain State Park Beach
102	Houghton	Superior	7	Sandy Bottom Beach/ Dollar Bay
18	Huron	Lake Huron	1	Bird Creek County Park
104	Huron	Lake Huron	2	Caseville County Park
105	Huron	Lake Huron	3	Harbor Beach City Park
106	Huron	Lake Huron	4	Jenks County Park
107	Huron	Lake Huron	5	Lighthouse County Park
108	Huron	Lake Huron	6	McGraw County Park
109	Huron	Lake Huron	7	Oak Beach County Park
110	Huron	Lake Huron	8	Philp County Park
111	Huron	Lake Huron	9	Port Crescent State Park - Camping Area
112	Huron	Lake Huron	10	Port Crescent State Park - Day Use

Appendix E.1. Great Lakes Beaches Monitored.

	County	Water Body		Location
113	Huron	Lake Huron	11	Sleeper State Park
114	Huron	Lake Huron	12	Thompson Park
115	Huron	Lake Huron	13	Veterans Park
<u>19</u> 116	Iosco	Lake Huron	1	Alabaster Township
117	Iosco	Lake Huron	2	Au Sable Township Park
118	Iosco	Lake Huron	3	East Tawas City Park
119	Iosco	Lake Huron	4	MDOT Roadside Park - Three Mile Park
120	Iosco	Lake Huron	5	Oscoda Township Beach
121	Iosco	Lake Huron	6	Tawas City Park
122	Iosco	Tawas Bay	7	Tawas Point State Park Campground
123	Iosco	Tawas Bay	8	Tawas Point State Park-Day Use area
<u>20</u> 124	Keweenaw	Lake Superior	1	Eagle Harbor Beach
<u>21</u> 125	Leelanau	Grand Traverse Bay-West	1	Empire Municipal Beach
126	Leelanau	Grand Traverse Bay-West	2	Northport Bay Marina
127	Leelanau	Lake Michigan	3	Sleeping Bear Dunes- CR 669 Good Harbor Bay
128	Leelanau	Lake Michigan	4	Sleeping Bear Dunes-CR 651 Good Harbor Bay
129	Leelanau	Lake Michigan	5	Sleeping Bear Dunes-DH Day Campground
130	Leelanau	Lake Michigan	6	Sleeping Bear Dunes-Glen Haven Beach
131	Leelanau	Lake Michigan	7	Sleeping Bear Dunes-North Bar Lake MI Beach
132	Leelanau	Lake Michigan	8	Suttons Bay Park
<u>22</u> 133	Mackinac	Lake Huron	1	Kiwanis Beach
134	Mackinac	Lake Michigan	2	US 2 Sand Dunes Beach (East of Brevort)
<u>23</u> 135	Macomb	Lake St. Clair	1	H.C.M.A. - Metropolitan Beach Metropark
136	Macomb	Lake St. Clair	2	New Baltimore Park Beach
137	Macomb	Lake St. Clair	3	St. Clair Shores Blossom Heath Beach
138	Macomb	Lake St. Clair	4	St. Clair Shores Memorial Park Beach
<u>24</u> 139	Manistee	Lake Michigan	1	Arcadia Park
140	Manistee	Lake Michigan	2	Bar Lake Outlet
141	Manistee	Lake Michigan	3	Fifth Avenue Beach
142	Manistee	Lake Michigan	4	First Street Beach
143	Manistee	Lake Michigan	5	Magoon Creek
144	Manistee	Lake Michigan	6	Onkama Township Beach
145	Manistee	Lake Michigan	7	Orchard Beach State Park
146	Manistee	Lake Michigan	8	Pierport Township Beach
147	Manistee	Lake Michigan	9	Sundling Park
<u>25</u> 148	Marquette	Lake Superior	1	Marquette South Beach

Appendix E.1. Great Lakes Beaches Monitored.

	County	Water Body		Location
149	Marquette	Lake Superior	2	McCarty's Cove
150	Marquette	Lake Superior	3	North Beach
151	Marquette	Lake Superior	4	North of Picnic Rocks
152	Marquette	Lake Superior	5	Picnic Rocks
<u>26</u> 153	Mason	Lake Michigan	1	Bass Lake Outlet Beach
154	Mason	Lake Michigan	2	Buttersville Park Beach
155	Mason	Lake Michigan	3	Ludington State Park Campground Beach
156	Mason	Lake Michigan	4	South Pier Beach
157	Mason	Lake Michigan	5	South Summit Beach - Sunset Boulevard Beach
158	Mason	Lake Michigan	6	Stearns Park Beach
159	Mason	Lake Michigan	7	Summit Township Beach
<u>27</u> 160	Menominee	Lake Michigan	1	Henes Park
161	Menominee	Lake Michigan	2	Memorial Beach
<u>28</u> 162	Monroe	Lake Erie	1	Estral Beach
163	Monroe	Lake Erie	2	Luna Pier City Beach
164	Monroe	Lake Erie	3	Sterling State Park
165	Monroe	Lake Erie	4	Woodland Beach
<u>29</u> 166	Muskegon	Lake Michigan	1	Bronson/Kruse Park
167	Muskegon	Lake Michigan	2	Duck Lake Channel Beach
168	Muskegon	Lake Michigan	3	Lake Harbor Park
169	Muskegon	Lake Michigan	4	Lighthouse/Sylvan Beach
170	Muskegon	Lake Michigan	5	Medbury Park Beach
171	Muskegon	Lake Michigan	6	Meinert County Park
172	Muskegon	Lake Michigan	7	Muskegon State Park
173	Muskegon	Lake Michigan	8	Old Channel Beach
174	Muskegon	Lake Michigan	9	P.J. Hoffmaster State Park - Campground
175	Muskegon	Lake Michigan	10	P.J. Hoffmaster State Park - Public Beach Area
176	Muskegon	Lake Michigan	11	Pere Marquette Park
177	Muskegon	Lake Michigan	12	Pioneer County Park
<u>30</u> 178	Oceana	Lake Michigan	1	Claybanks Township Park
179	Oceana	Lake Michigan	2	Lighthouse Beach at Silver Lake State Park
180	Oceana	Lake Michigan	3	Mears State Park
181	Oceana	Lake Michigan	4	Stony Lake Channel
182	Oceana	Stony Lake and Lake Michigan	5	Whiskey Creek
<u>31</u> 183	Ontonagon	Lake Superior	1	Ontonagon Township Park and Campground
184	Ontonagon	Lake Superior	2	Porcupine Mountains State Park- Union Bay

Appendix E.1. Great Lakes Beaches Monitored.

	County	Water Body		Location
32 185	Ottawa	Lake Michigan	1	Grand Haven City Beach
186	Ottawa	Lake Michigan	2	Grand Haven State Park
187	Ottawa	Lake Michigan	3	Holland State Park
188	Ottawa	Lake Michigan	4	Kirk Park
189	Ottawa	Lake Michigan	5	Kouw Park
190	Ottawa	Lake Michigan	6	North Beach Park
191	Ottawa	Lake Michigan	7	Rosy Mound Recreation Area
192	Ottawa	Lake Michigan	8	Tunnel Park
193	Ottawa	Lake Michigan	9	Windsnest Park
33 194	Presque Isle	Lake Huron	1	Hoelt State Park-North
195	Presque Isle	Lake Huron	2	Lakeside Park in Rogers City
196	Presque Isle	Lake Huron	3	Presque Isle Harbor Beach
34 197	Sanilac	Lake Huron	1	Forester County Park
198	Sanilac	Lake Huron	2	Forestville Beach
199	Sanilac	Lake Huron	3	Lexington Beach
200	Sanilac	Lake Huron	4	Lexington County Park
201	Sanilac	Lake Huron	5	Port Sanilac Park
35 202	Schoolcraft	Lake Michigan	1	Roadside Park Beach
203	Schoolcraft	Lake Michigan	2	Rogers Park-MDOT
36 204	St. Clair	Lake Huron	1	Burtchville Township Park
205	St. Clair	Lake Huron	2	Chrysler Park Beach
206	St. Clair	Lake Huron	3	Conger-Lighthouse Beach
207	St. Clair	Lake Huron	4	Fort Gratiot County Park
208	St. Clair	Lake Huron	5	Holland Road Beach
209	St. Clair	Lake Huron	6	Jeddo Road Beach
210	St. Clair	Lake Huron	7	Keewadhin Road Beach
211	St. Clair	Lake Huron	8	Krafft Road Beach
212	St. Clair	Lake Huron	9	Lakeport State Campground
213	St. Clair	Lake Huron	10	Lakeport State Park
214	St. Clair	Lake Huron	11	Lakeside Beach
215	St. Clair	Lake Huron	12	Marine City Beach
216	St. Clair	St. Clair River	13	Marine City Diving Area
217	St. Clair	St. Clair River	14	Metcalf Road Beach
218	St. Clair	St. Clair River	15	Washington Street Park
37 219	Van Buren	Lake Michigan	1	Covert Township Park Beach
220	Van Buren	Lake Michigan	2	South Haven North Beach
221	Van Buren	Lake Michigan	3	South Haven South Beach
222	Van Buren	Lake Michigan	4	Van Buren State Park Beach

Appendix E.1. Great Lakes Beaches Monitored.

		County	Water Body		Location
<u>38</u>	223	Wayne	Detroit River	1	Belle Isle Beach
	224	Wayne	Lake St. Clair	2	Pier Park

Appendix E.2. Great Lakes Beaches not Monitored.

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

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
47	Antrim	Lake Michigan	11	Road Crossing near Winters Road
6	Arenac	Inner Saginaw Bay	1	Augres Township Park Beach
49	Arenac	Inner Saginaw Bay	2	Booth Road Beach
50	Arenac	Inner Saginaw Bay	3	City of Augres Public Access
51	Arenac	Inner Saginaw Bay	4	Gordon Road Beach
52	Arenac	Inner Saginaw Bay	5	Terrace Road
53	Arenac	Saginaw Bay Inner-Lake Huron	6	Au Sable State Forest- Greens Point
54	Arenac	Saginaw Bay-Lake Huron	7	Pump Station
7	Baraga	Huron Bay / Lake Superior	1	Arvon Township Park
56	Baraga	Keweenaw Bay / Lake Superior	2	Baraga State Park
57	Baraga	Keweenaw Bay / Lake Superior	3	First Sand Beach
58	Baraga	Keweenaw Bay / Lake Superior	4	L'Anse Township Park
59	Baraga	Keweenaw Bay / Lake Superior	5	Second Sands Beach
60	Baraga	Lake Superior	6	Keweenaw Bay Village Public Roadside Park
61	Baraga	Lake Superior	7	Mouth of the Huron River
62	Baraga	Lake Superior	8	Public Shoreline Beach-Cooper Country Huron Bay
63	Baraga	Lake Superior	9	Public Shoreline Beach-Northwest Abbaye Peninsula
64	Baraga	Lake Superior	10	Public Shoreline Beach-Point Abbaye
65	Baraga	Lake Superior	11	Public Shoreline Beach-Sand Point
8	Bay	Saginaw Bay	1	Nayanquing Point Wildlife Area
9	Benzie	Lake Michigan	1	Alberta Village Beach & Bluffs
68	Benzie	Lake Michigan	2	County Road # 669
69	Benzie	Lake Michigan	3	Esch Road/Otter Creek
70	Benzie	Lake Michigan	4	Platte River Point
71	Benzie	Lake Michigan	5	Point Betsie Lighthouse Beach
72	Benzie	Lake Michigan	6	Zettenberg Preserve
10	Berrien	Lake Michigan	1	Galien River Park
74	Berrien	Lake Michigan	2	Gordon Beach
75	Berrien	Lake Michigan	3	Grand Mere State Park- Rosemary Beach
76	Berrien	Lake Michigan	4	Grand Mere State Park- Shoreline Beach
77	Berrien	Lake Michigan	5	Grand Mere State Park- Waverland Beach
78	Berrien	Lake Michigan	6	Harbert Beach
79	Berrien	Lake Michigan	7	Mizpah Park
80	Berrien	Lake Michigan	8	Warren Dunes State Park North
11	Charlevoix	Lake Michigan	1	Bill Wagner Memorial Campground Beach
82	Charlevoix	Lake Michigan	2	Cables Bay Beach
83	Charlevoix	Lake Michigan	3	Donegal Bay
84	Charlevoix	Lake Michigan	4	Harbor Beach

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
85	Charlevoix	Lake Michigan	5	Iron Ore Bay Beach
86	Charlevoix	Lake Michigan	6	Mt. McSauba Beach
12	Cheboygan	Lake Huron	1	Alexander Henry Park
88	Cheboygan	Lake Huron	2	Cheboygen State Park- Lighthouse Point
89	Cheboygan	Lake Huron	3	Ditta Park
90	Cheboygan	Lake Huron	4	Huron Street Beach
91	Cheboygan	Lake Huron	5	Mackinaw City Beach
92	Cheboygan	Lake Huron	6	Mill Creek Public Access
93	Cheboygan	Lake Huron	7	Pinewood Circle Road End Beach
94	Cheboygan	Lake Huron	8	Roadside Park MDOT, US-23
95	Cheboygan	Lake Huron	9	Stoney Point Road End Beach
13	Chippewa	Lake Huron	1	Bass Cove Beach-Drummond Island
97	Chippewa	Lake Huron	2	Betsey Seaman Memorial Park-Drummond Island
98	Chippewa	Lake Huron	3	Big Shoal Cove Beach
99	Chippewa	Lake Huron	4	De Tour State Park Shoreline Beach
100	Chippewa	Lake Huron	5	Detour Albany Beach
101	Chippewa	Lake Huron	6	Drummond Island Township Park
102	Chippewa	Lake Huron	7	Sand Bay Beach-Drummond Island
103	Chippewa	Lake Superior	8	Hiawatha National Forest- Nodoway Point Area
104	Chippewa	Lake Superior	9	Hiawatha National Forest- North of Big Pine Picnic
105	Chippewa	Lake Superior	10	Hiawatha National Forest- Pendills Bay
106	Chippewa	Lake Superior	11	Hiawatha National Forest- Pendills Lake
107	Chippewa	Lake Superior	12	Hiawatha National Forest- Point Iroquois Light
108	Chippewa	Lake Superior	13	Hiawatha National Forest- Tahquamenon Bay
109	Chippewa	Lake Superior	14	Hiawatha National Forest- West of Salt Point
110	Chippewa	Lake Superior	15	Public Shoreline Beach-Browns Creek Area
111	Chippewa	Lake Superior	16	Public Shoreline Beach-Marsh Lake Area
112	Chippewa	Lake Superior	17	Public Shoreline Beach-Northwest of Two Mile Lake
113	Chippewa	Lake Superior	18	Public Shoreline Beach-Weatherhog Lake East Area
114	Chippewa	Lake Superior	19	Public Shoreline Beach-Weatherhog Lake West
115	Chippewa	Lake Superior	20	Public Shoreline Beach-West of Whitefish Point
116	Chippewa	Lake Superior	21	Tahquamenon Falls State Park-River Mouth Unit
117	Chippewa	St. Mary's River	22	Dunbar Park
118	Chippewa	St. Mary's River	23	Hiawatha National Forest- North Pond
119	Chippewa	St. Mary's River	24	Hiawatha National Forest- Waiska Bay
120	Chippewa	St. Mary's River	25	Lake Superior State Forest- Munuscong Lake
121	Chippewa	St. Mary's River	26	Public Shoreline Beach-Brush Point
122	Chippewa	St. Mary's River	27	Public Shoreline Beach-Point Aux Frenes
123	Chippewa	St. Mary's River	28	Public Shoreline Beach-Raber Bay stretch
124	Chippewa	St. Mary's River	29	Wilderness Beach
14	Delta	Lake Michigan	1	Big Bay De Noc/ Fishdam River Public Access
126	Delta	Lake Michigan	2	Fayette State Park
127	Delta	Lake Michigan	3	Fuller Park
128	Delta	Lake Michigan	4	Little Bay De Noc Public Beach Access
129	Delta	Lake Michigan	5	Portage Bay Forest Campground
130	Delta	Lake Michigan	6	Public Shoreline Beach-Charboneau Point
131	Delta	Lake Michigan	7	Public Shoreline Beach-County Road 481

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
132	Delta	Lake Michigan	8	Public Shoreline Beach-East Wilsey Bay
133	Delta	Lake Michigan	9	Public Shoreline Beach-Fishdam River
134	Delta	Lake Michigan	10	Public Shoreline Beach-Gilnet Haven
135	Delta	Lake Michigan	11	Public Shoreline Beach-Indian Point
136	Delta	Lake Michigan	12	Public Shoreline Beach-Indian Town Lake USFS
137	Delta	Lake Michigan	13	Public Shoreline Beach-Jacks Bluff
138	Delta	Lake Michigan	14	Public Shoreline Beach-Martin Bay
139	Delta	Lake Michigan	15	Public Shoreline Beach-Nahma
140	Delta	Lake Michigan	16	Public Shoreline Beach-North End of Kregg Bay
141	Delta	Lake Michigan	17	Public Shoreline Beach-North of Stonington
142	Delta	Lake Michigan	18	Public Shoreline Beach-Ogontz Bay
143	Delta	Lake Michigan	19	Public Shoreline Beach-Peninsula Point
144	Delta	Lake Michigan	20	Public Shoreline Beach-Point Detour
145	Delta	Lake Michigan	21	Public Shoreline Beach-Portage Bay
146	Delta	Lake Michigan	22	Public Shoreline Beach-Portage Peninsula
147	Delta	Lake Michigan	23	Public Shoreline Beach-St. Vital's Island
148	Delta	Lake Michigan	24	Public Shoreline Beach-USFS West Wilsey Bay
149	Delta	Lake Michigan	25	Public Shoreline Beach-West Side of Kregg Bay
150	Delta	Lake Michigan	26	Sac Bay County Park (Point)
151	Delta	Lake Michigan	27	Sac Bay County Park (West)
152	Delta	Lake Michigan	28	Twin Springs Campground and Bathing Beach
15	Emmet	Lake Michigan	1	Bliss Township Beach
154	Emmet	Lake Michigan	2	Church Beach
155	Emmet	Lake Michigan	3	Colonial Michilimamackinac State Park
156	Emmet	Lake Michigan	4	Forest Beach
157	Emmet	Lake Michigan	5	Petoskey Harbor
158	Emmet	Lake Michigan	6	The Headlands County Park
159	Emmet	Lake Michigan	7	Thorne Swift Preserve
160	Emmet	Lake Michigan	8	Wilderness State Park-East of the Beach
161	Emmet	Lake Michigan	9	Wilderness State Park-Sturgeon Bay
162	Emmet	Lake Michigan	10	Wilderness State Park-West of Beach
16	Gogebic	Lake Superior	1	Black River Harbor Beach
164	Gogebic	Lake Superior	2	Little Girls Point Park
165	Gogebic	Lake Superior	3	Mouth of the Montreal River
166	Gogebic	Lake Superior	4	Porcupine Mountain State Park-North
167	Gogebic	Lake Superior	5	Presque Isle Beach
168	Gogebic	Lake Superior	6	Presque Isle State Campground
169	Gogebic	Lake Superior	7	Public Shoreline Beach-West of Black River
	Grand Traverse	Grand Traverse Bay	1	Archie Park
170	Grand Traverse	Grand Traverse Bay	2	Old Mission - Center Road Natural Area
171	Grand Traverse	Grand Traverse Bay	3	Old Mission - MDOT Right of Way-South of M-37
172	Grand Traverse	Grand Traverse Bay	4	Old Mission - Old Mission Point State Park
173	Grand Traverse	Grand Traverse Bay-East	5	Acme Roadside Park & Beach MDOT
174				

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
175	Grand Traverse	Grand Traverse Bay-East	6	Acme Roadside Park (DNR)
176	Grand Traverse	Grand Traverse Bay-East	7	Bayside Acme Township Park
177	Grand Traverse	Grand Traverse Bay-East	8	Deep Water Point
178	Grand Traverse	Grand Traverse Bay-East	9	East Bay Township Four Mile Road
179	Grand Traverse	Grand Traverse Bay-East	10	Sayler Park
180	Grand Traverse	Grand Traverse Bay-East	11	Yuba Beach
181	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	12	Bowers Harbor Public Access
182	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	13	DNR Launch/Beach Center Road
183	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	14	Haserot Beach
184	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	15	Kroupa Road Access M-22 South of Crain Hill Road
185	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	16	Leffingwell Point Beach
186	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	17	Old Mission Lighthouse
187	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	18	Old Mission Peninsula Twp Park-East of Light House
188	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	19	Old Mission Peninsula Twp Park-West of Light House
189	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	20	Old Mission Road
190	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	21	Peninsula Volunteer Fire Station Point #2
191	Grand Traverse	Grand Traverse Bay-Old Mission Peninsula	22	Swaney Road
192	Grand Traverse	Grand Traverse Bay-West	23	Mouth of Boardman
193	Grand Traverse	Grand Traverse Bay-West	24	Power Island Bay Park
194	Grand Traverse	Grand Traverse Bay-West	25	Rose Street Access at Peninsula Drive

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
195	Grand Traverse	Grand Traverse Bay-West	26	Senior Center
196	Grand Traverse	Grand Traverse Bay-West	27	Sunset Park
18 197	Houghton	Lake Superior	1	Calument Waterworks Beach
198	Houghton	Lake Superior	2	Mink Farm
199	Houghton	Lake Superior	3	Public Shoreline Beach-Le Chance Creek
200	Houghton	Lake Superior	4	Public Shoreline Beach-Mc Lain State Park
201	Houghton	Lake Superior	5	Public Shoreline Beach-S. of Portage Entry
202	Houghton	Lake Superior	6	Public Shoreline Beach-Southwest County Border
203	Houghton	Lake Superior	7	White City
204	Houghton	Torch Lake / Portage Canal / Lake Superior	8	Hubbell Park
19 205	Huron	Lake Huron	1	County Road End
206	Huron	Lake Huron	2	Geiger Road Public Access
207	Huron	Lake Huron	3	Grindstone Public Access
208	Huron	Lake Huron	4	Harbor Beach Marina
209	Huron	Lake Huron	5	Helena Road End
210	Huron	Lake Huron	6	Kinch Road End
211	Huron	Lake Huron	7	Larned Road End
212	Huron	Lake Huron	8	Lighthouse County Park-South
213	Huron	Lake Huron	9	Mud Creek Public Access
214	Huron	Lake Huron	10	Stafford County Park
215	Huron	Lake Huron	11	Wagener County Park
20 216	Iosco	Lake Huron	1	Alabaster Township Douglas Drive Beach Use Area
217	Iosco	Lake Huron	2	Au Sable Point Beach
218	Iosco	Lake Huron	3	Interlake Road End
219	Iosco	Lake Huron	4	Lake To Lake Road
220	Iosco	Lake Huron	5	Tawas Point State Park-Central
221	Iosco	Lake Huron (Tawas Bay)	6	County Road End.
222	Iosco	Lake Huron (Tawas Bay)	7	Gateway Park
21 223	Keweenaw	Lake Superior	1	Brunette Park
224	Keweenaw	Lake Superior	2	Cat Harbor Beach
225	Keweenaw	Lake Superior	3	Cooper Harbor Lighthouse Complex
226	Keweenaw	Lake Superior	4	Eagle River Beach
227	Keweenaw	Lake Superior	5	Fort Wilkins State Park
228	Keweenaw	Lake Superior	6	Fort Wilkins State Park-East
229	Keweenaw	Lake Superior	7	Fort Wilkins State Park-West
230	Keweenaw	Lake Superior	8	Great Sands Bay Beach
231	Keweenaw	Lake Superior	9	Mouth of the Gratiot River Beach
232	Keweenaw	Lake Superior	10	Point Isabelle Beach
233	Keweenaw	Lake Superior	11	Public Shoreline Beach-Big Traverse Bay
234	Keweenaw	Lake Superior	12	Public Shoreline Beach-Gay Park

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
235	Keweenaw	Lake Superior at Bete de Gris Bay	13	Bete de Gris Beach
22 236	Leelanau	Lake Michigan	1	Bay Front Park
237	Leelanau	Grand Traverse Bay-West	2	Boughy Park & Beach
238	Leelanau	Lake Michigan	3	Cathead Bay, Leelanau State Park
239	Leelanau	Lake Michigan	4	Cedar Street Beach
240	Leelanau	Grand Traverse Bay-West	5	Christmas Cove
241	Leelanau	Lake Michigan	6	Elmwood/Greilikville Park & Beach
242	Leelanau	Grand Traverse Bay-West	7	G. Marsten Dame Marina
243	Leelanau	Lake Michigan	8	Gils Pier
244	Leelanau	Grand Traverse Bay-West	9	Glen Arbor/Manitou Boulevard Beach
245	Leelanau	Grand Traverse Bay-West	10	Graham Green Park
246	Leelanau	Grand Traverse Bay-West	11	Hendryx County Roadside Park
247	Leelanau	Grand Traverse Bay-West	12	Lake Street Beach, Glen Arbor
248	Leelanau	Grand Traverse Bay-West	13	Leelanau State Park, Lighthouse
249	Leelanau	Lake Michigan	14	Leland Harbor
250	Leelanau	Grand Traverse Bay-West	15	M-22 at M-72 Public Access
251	Leelanau	Grand Traverse Bay-West	16	MDOT Roadside Park & Beach
252	Leelanau	Lake Michigan	17	MDOT Roadside Park & Beach M-22 N of Cherry Bend D
253	Leelanau	Lake Michigan	18	North Bar
254	Leelanau	Lake Michigan	19	North Street Beach
255	Leelanau	Grand Traverse Bay-West	20	Northport 4th Street Beach
256	Leelanau	Grand Traverse Bay	21	Northport 5th Street Beach
257	Leelanau	Lake Michigan	22	Northport 7th Street Beach
258	Leelanau	Grand Traverse Bay-West	23	Northport Haserot Beach, Rose Street
259	Leelanau	Lake Michigan	24	Omena Beach & Park
260	Leelanau	Lake Michigan	25	Peterson Park
261	Leelanau	Lake Michigan	26	Reynolds Street Beach
262	Leelanau	Lake Michigan	27	Smith Street Beach Northport
263	Leelanau	Grand Traverse Bay-West	28	Stoney Point County Roadside Park
264	Leelanau	Grand Traverse Bay-West	29	Suttons Bay Marina Park & Beach South
265	Leelanau	Grand Traverse Bay-West	30	Suttons Bay Public Launch and Beach
266	Leelanau	Grand Traverse Bay-West	31	Suttons Bay South Shore Park

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
267	Leelanau	Grand Traverse Bay-West	32	Thompson Stree Beach
23 268	Luce	Lake Superior	1	Blind Sucker River # 1
269	Luce	Lake Superior	2	Blind Sucker River # 2
270	Luce	Lake Superior	3	Crisp Point Light House
271	Luce	Lake Superior	4	Lake Superior Campground Beach
272	Luce	Lake Superior	5	Mouth of the Two Hearted River Campground
273	Luce	Lake Superior	6	Public Shoreline Beach-Blind Sucker Flooding Area
274	Luce	Lake Superior	7	Public Shoreline Beach-Coast Guard Line Road
275	Luce	Lake Superior	8	Public Shoreline Beach-County Rd 407
276	Luce	Lake Superior	9	Public Shoreline Beach-County Rd 412 and Crisp Pt
277	Luce	Lake Superior	10	Public Shoreline Beach-Little Sucker/Two Hearted R
278	Luce	Lake Superior	11	Public Shoreline Beach-Three Mile Creek Area
279	Luce	Lake Superior	12	Public Shoreline Beach-West County Border Beach
280	Luce	Lake Superior	13	Unnamed Road End #1
281	Luce	Lake Superior	14	Unnamed Road End #2
282	Luce	Lake Superior	15	Unnamed Road End #3
283	Luce	Muskallonge Lake	16	Muskallonge Lake SFC
24 284	Mackinac	Lake Huron	1	American Legion Memorial Park
285	Mackinac	Lake Huron	2	Antoine Road End
286	Mackinac	Lake Huron	3	Boot Island
287	Mackinac	Lake Huron	4	Coast Guard Pier Boat Launch and City Park
288	Mackinac	Lake Huron	5	Foley Creek Campground
289	Mackinac	Lake Huron	6	Government Island-Hiawatha National Forest
290	Mackinac	Lake Huron	7	Harbour Light
291	Mackinac	Lake Huron	8	Hazelton Road End
292	Mackinac	Lake Huron	9	Hiawatha National Forest- Carp River Access
293	Mackinac	Lake Huron	10	Horseshoe Bay Wilderness-North
294	Mackinac	Lake Huron	11	Horseshoe Bay Wilderness-South
295	Mackinac	Lake Huron	12	Straits State Park
296	Mackinac	Lake Michigan	13	Big Knob State Forest Campground
297	Mackinac	Lake Michigan	14	Black River State Forest Campground
298	Mackinac	Lake Michigan	15	Epoufette Bay Campground
299	Mackinac	Lake Michigan	16	Hog Island Campground
300	Mackinac	Lake Michigan	17	Lake Michigan US-2 Campground Beach
301	Mackinac	Lake Michigan	18	MDOT Overlook
302	Mackinac	Lake Michigan	19	MDOT Roadside Park on US 2
303	Mackinac	Lake Michigan	20	Mouth of Cut River Roadside Beach
304	Mackinac	Lake Michigan	21	Naubinway Bay Access
305	Mackinac	Lake Michigan	22	Public Shoreline Beach #2-Little Hog Island area
306	Mackinac	Lake Michigan	23	Public Shoreline Beach #2-Manitou Paymen Highbanks
307	Mackinac	Lake Michigan	24	Public Shoreline Beach #3-Little Hog Island area
308	Mackinac	Lake Michigan	25	Public Shoreline Beach #4-Little Hog Island area
309	Mackinac	Lake Michigan	26	Public Shoreline Beach #5-Little Hog Island area
310	Mackinac	Lake Michigan	27	Public Shoreline Beach-Epoufette Bay
311	Mackinac	Lake Michigan	28	Public Shoreline Beach-Fox Point Area
312	Mackinac	Lake Michigan	29	Public Shoreline Beach-Little Hog Island area
313	Mackinac	Lake Michigan	30	Public Shoreline Beach-Manitou Paymen Highbanks
314	Mackinac	Lake Michigan	31	Public Shoreline Beach-MDNR Matrix Point Area

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
315	Mackinac	Lake Michigan	32	Public Shoreline Beach-Morean Township, Section 25
316	Mackinac	Lake Michigan	33	Public Shoreline Beach-Naubinway Area
317	Mackinac	Lake Michigan	34	Public Shoreline Beach-Pointe Aux Chenes Bay
318	Mackinac	Lake Michigan	35	Public Shoreline Beach-Seiners Point
319	Mackinac	Lake Michigan	36	Public Shoreline Beach-South of Brevort River
320	Mackinac	Lake Michigan	37	Public Shoreline Beach-State Forest Matrix Point
321	Mackinac	Lake Michigan	38	Sand Point
322	Mackinac	Lake Michigan	39	State Roadside Park Beach
<u>25</u>	Manistee	Lake Michigan	1	Portage Park
<u>26</u>	Marquette	Lake Superior	1	Public Shoreline Beach-Big Huron River
324	Marquette	Lake Superior	2	Public Shoreline Beach-Little Presque Isle
<u>27</u>	Mason	Lake Michigan	1	Ludington State Park Public Shoreline Beach North
326	Mason	Lake Michigan	2	Ludington State Park Public Shoreline Beach South
327	Mason	Lake Michigan	3	Manistee National Forest Campground Beach
328	Mason	Lake Michigan	4	Manistee National Forest-Public Shoreline Beach N
329	Mason	Lake Michigan	5	Manistee National Forest-Public Shoreline Beach S
330	Mason	Lake Michigan	6	Pere Marquette Harbor
331	Mason	Lake Michigan		
<u>28</u>	Menominee	Lake Michigan	1	Airport Park
332	Menominee	Lake Michigan	2	Fox Park
333	Menominee	Lake Michigan	3	Klienke Park
334	Menominee	Lake Michigan	4	Public Shoreline Beach-Cedar River
335	Menominee	Lake Michigan	5	Public Shoreline Beach-Fox village
336	Menominee	Lake Michigan	6	Wells State Park
337	Menominee	Lake Michigan		
<u>29</u>	Muskegon	Lake Michigan	1	Muskegon State Park-Shoreline Beach North
<u>30</u>	Oceana	Lake Michigan	1	Cedar Point County Park
339	Oceana	Lake Michigan	2	Silver Lake State Park
340	Oceana	Lake Michigan		
341	Oceana	Silver Lake-Lake Michigan	3	Silver Creek Channel
<u>31</u>	Ontonagon	Lake Superior	1	Green Park
342	Ontonagon	Lake Superior	2	Gull Point Beach
343	Ontonagon	Lake Superior	3	Mouth of the Big Iron River Beach
344	Ontonagon	Lake Superior	4	Porcupine Mountain State Park
345	Ontonagon	Lake Superior	5	Porcupine Mountains Wilderness State Park-West
346	Ontonagon	Lake Superior	6	Public Shoreline Beach-Misery Bay
347	Ontonagon	Lake Superior	7	Public Shoreline Beach-Sleeping Bay
348	Ontonagon	Lake Superior	8	Public Shoreline Beach-Wolf Point
349	Ontonagon	Lake Superior	9	Union Bay Beach
350	Ontonagon	Lake Superior		
<u>32</u>	Ottawa	Lake Michigan	1	Mountain Beach
351	Ottawa	Lake Michigan	2	P.J. Hoffmaster State Park- Shoreline Beach
352	Ottawa	Lake Michigan		
	Presque			
<u>33</u>	Isle	Lake Huron	1	40 Mile Point Park

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
354	Presque Isle	Lake Huron	2	Ball Diamond Park
355	Presque Isle	Lake Huron	3	Bell Bay
356	Presque Isle	Lake Huron	4	Evergreen Beach
357	Presque Isle	Lake Huron	5	Golden Beach
358	Presque Isle	Lake Huron	6	Grace Access Site
359	Presque Isle	Lake Huron	7	Hammond Bay Access Site
360	Presque Isle	Lake Huron	8	Hammond Bay Harbor
361	Presque Isle	Lake Huron	9	Hoeft State Park-South
362	Presque Isle	Lake Huron	10	Lakeside Park Beach
363	Presque Isle	Lake Huron	11	Lakeview Park Beach
364	Presque Isle	Lake Huron	12	Manitou Beach
365	Presque Isle	Lake Huron	13	New Lighthouse Park
366	Presque Isle	Lake Huron	14	Presque Isle Harbor
367	Presque Isle	Lake Huron	15	Public Shoreline Beach-False Presque Isle Harbor
368	Presque Isle	Lake Huron	16	Seagull Point Park
369	Presque Isle	Lake Huron	17	Thompson's Harbor State Park
370	Presque Isle	Lake Huron	18	US 23 Hammond Bay
371	Presque Isle	Lake Huron	19	US 23 Roger City
<u>34</u> 372	Sanilac	Lake Huron	1	Birch Beach
373	Sanilac	Lake Huron	2	Birch Beach Middle #2
374	Sanilac	Lake Huron	3	Birch Beach North #3
375	Sanilac	Lake Huron	4	Delaware Park
376	Sanilac	Lake Huron	5	Great Lakes Beach
377	Sanilac	Lake Huron	6	Sanilac County Park #4
378	Sanilac	Lake Huron	7	Sanilac County Roadside Park #1
<u>35</u> 379	Schoolcraft	Lake Michigan	1	Doyle Township Park
380	Schoolcraft	Lake Michigan	2	Lakeview Park
381	Schoolcraft	Lake Michigan	3	Manistique Township Park
382	Schoolcraft	Lake Michigan	4	Public Shoreline Beach-Goudreou's Harbor
383	Schoolcraft	Lake Michigan	5	Public Shoreline Beach-S. of McDonald Lake

Appendix E.2. Great Lakes Beaches not Monitored.

	County	Water Body		Location
384	Schoolcraft	Lake Michigan	6	Public Shoreline Beach-Thompson
385	Schoolcraft	Lake Michigan	7	Public Shoreline Beach-Thompson Village

Appendix F. Daily Water Samples that Exceeded Michigan's WQS.

	County	Water Body	Location	Sampling Date	E. coli Test Results
1	Allegan	Lake Michigan	Pier Cove Beach	01-Jun-10	368
2	Allegan	Lake Michigan	West Side County Park Beach	01-Jun-10	649
2	Alpena	Lake Huron	Blair Street Park	09-Aug-10	311
4	Alpena	Lake Huron	Blair Street Park	10-Aug-10	443
5	Alpena	Lake Huron	Blair Street Park	18-Aug-10	366
6	Alpena	Lake Huron	Starlite Beach	09-Aug-10	323
7	Alpena	Lake Huron	Starlite Beach	10-Aug-10	359
3	Arenac	Saginaw Bay-Lake Huron	Dyer Road Beach	12-Jul-10	460
9	Arenac	Saginaw Bay-Lake Huron	Singing Bridge Beach	17-Jun-10	589
10	Arenac	Saginaw Bay-Lake Huron	Singing Bridge Beach	24-Jun-10	403
11	Arenac	Saginaw Bay-Lake Huron	Singing Bridge Beach	28-Jun-10	745
12	Arenac	Saginaw Bay-Lake Huron	Singing Bridge Beach	29-Jun-10	640
13	Arenac	Saginaw Bay-Lake Huron	Singing Bridge Beach	08-Jul-10	447
14	Arenac	Saginaw Bay-Lake Huron	Singing Bridge Beach	19-Jul-10	675
15	Arenac	Saginaw Bay-Lake Huron	Whites Beach	17-Aug-10	305
4	Barry	Thornapple Lake	Charlton Park	02-Aug-10	617
5	Bay	Saginaw Bay-Lake Huron	Bay City State Recreation Area	15-Jun-10	511
18	Bay	Kawkawlin River	Boat Launch on Kawkawlin River	01-Jun-10	2,165
19	Bay	Kawkawlin River	Boat Launch on Kawkawlin River	07-Jun-10	802
20	Bay	Kawkawlin River	Boat Launch on Kawkawlin River	28-Jun-10	2,164
21	Bay	Saginaw Bay-Lake Huron	South Linwood Beach Township Park	15-Jun-10	1,279
6	Benzie	Otter Creek	Sleeping Bear Dunes-Otter Creek	16-Jun-10	800
23	Benzie	Otter Creek	Sleeping Bear Dunes-Otter Creek	30-Jun-10	334
24	Benzie	Otter Creek	Sleeping Bear Dunes-Otter Creek	28-Jul-10	536
7	Berrien	Lake Michigan	Cherry Beach	01-Jun-10	345
26	Berrien	Lake Michigan	Cherry Beach	02-Jun-10	334
27	Berrien	Lake Michigan	Cherry Beach	03-Jun-10	336
28	Berrien	Lake Michigan	Grand Beach	01-Jun-10	345
29	Berrien	Lake Michigan	Grand Beach	26-Jul-10	524
30	Berrien	Lake Michigan	Jean Klock Park	06-Jul-10	429
31	Berrien	Lake Michigan	Michiana Village	26-Jul-10	857
32	Berrien	Lake Michigan	New Buffalo City	19-Jul-10	327
33	Berrien	Lake Michigan	New Buffalo City	26-Jul-10	607
34	Berrien	Lake Michigan	Warren Dunes Beach	01-Jun-10	1,000
35	Berrien	Lake Michigan	Warren Dunes Beach	02-Jun-10	474
36	Berrien	Lake Michigan	Warren Dunes Beach	03-Jun-10	459
37	Berrien	Lake Michigan	Warren Dunes Beach	12-Jul-10	437
38	Berrien	Lake Michigan	Warren Dunes Beach	26-Jul-10	464
39	Berrien	Lake Michigan	Weko Beach	12-Jul-10	416
40	Berrien	Lake Michigan	Weko Beach	26-Jul-10	1,000
8	Charlevoix	Lake Michigan	Norwood Township Park	29-Jun-10	1,527

Appendix F. Daily Water Samples that Exceeded Michigan's WQS.

	County	Water Body	Location	Sampling Date	E. coli Test Results
9	Cheboygan	Lake Huron	Cheboygan City Park	10-Aug-10	452
10	Chippewa	Lake Superior	Brimley State Park	22-Jun-10	398
44	Chippewa	Lake Superior	Brimley State Park	12-Jul-10	2,165
45	Chippewa	Lake Superior	Brimley State Park	13-Jul-10	442
46	Chippewa	Lake Superior	Brimley State Park	15-Jul-10	1,693
47	Chippewa	Lake Superior	Brimley State Park	03-Aug-10	380
48	Chippewa	Lake Superior	Brimley State Park	04-Aug-10	835
49	Chippewa	Lake Superior	Brimley State Park	05-Aug-10	1,795
50	Chippewa	Lake Superior	Brimley State Park	10-Aug-10	361
51	Chippewa	Lake Superior	Brimley State Park	16-Aug-10	417
52	Chippewa	Lake Superior	Brimley State Park	04-Sep-10	435
53	Chippewa	Lake Superior	Sherman Park	29-Jun-10	1,070
54	Chippewa	Lake Superior	Sherman Park	03-Aug-10	2,420
55	Chippewa	Lake Superior	Sherman Park	16-Aug-10	759
56	Chippewa	Lake Superior	Sherman Park	04-Sep-10	326
57	Chippewa	St. Mary's River	Sugar Island Township Park	17-Aug-10	374
58	Chippewa	St. Mary's River	Sugar Island Township Park	31-Aug-10	373
11	Genesee	Pinewood Lake	Beach at Pinewood Lake	05-Jul-10	380
60	Genesee	Pinewood Lake	Beach at Pinewood Lake	12-Jul-10	380
61	Genesee	Holloway Reservoir	Buttercup Beach	05-Jul-10	463
62	Genesee	Fenton Lake	Township Hall	02-Aug-10	482
12	Gladwin	Ross Lake	Beaverton City Park	16-Jun-10	418
64	Gladwin	Ross Lake	Beaverton City Park	29-Jun-10	1,425
13	Grand Traverse	Grand Traverse Bay-West	Bryant Park Beach	28-Jul-10	433
66	Grand Traverse	Grand Traverse Bay-West	Bryant Park Beach	19-Aug-10	1,143
67	Grand Traverse	Grand Traverse Bay-East	East Bay Park (Milliken Park)	16-Jun-10	1,419
14	Huron	Lake Huron	Bird Creek County Park	29-Jun-10	470
69	Huron	Lake Huron	Lighthouse County Park	29-Jun-10	2,266
70	Huron	Lake Huron	Lighthouse County Park	13-Jul-10	398
71	Huron	Lake Huron	Lighthouse County Park	10-Aug-10	958
72	Huron	Lake Huron	McGraw County Park	13-Jul-10	690
73	Huron	Lake Huron	Port Crescent State Park - Day Use	07-Jun-10	558
74	Huron	Lake Huron	Port Crescent State Park - Day Use	19-Jul-10	314
75	Huron	Lake Huron	Veterans Park	08-Sep-10	327
15	Ingham	Valhalla Pond	Valhalla Park	02-Aug-10	352
16	Iosco	Lake Huron	Au Sable Township Park	03-Aug-10	516
78	Iosco	Tawas Bay	East Tawas City Park	22-Jun-10	610
79	Iosco	Tawas Bay	East Tawas City Park	23-Jun-10	1,008
80	Iosco	Tawas Bay	Tawas City Park	22-Jun-10	565
81	Iosco	Tawas Bay	Tawas City Park	20-Jul-10	364

Appendix F. Daily Water Samples that Exceeded Michigan's WQS.

	County	Water Body	Location	Sampling Date	<i>E. coli</i> Test Results
17	82 Isabella	Coldwater Lake	Coldwater Park	27-Jul-10	1,760
	83 Isabella	Borrow Pit	Herrick County Park	20-Jul-10	395
	84 Isabella	Borrow Pit	Herrick County Park	27-Jul-10	1,872
18	85 Kalamazoo	Long Lake	Ramona Park	16-Aug-10	1,052
	86 Kalamazoo	Campbell Lake	Robert Morris Park	01-Jun-10	328
	87 Kalamazoo	Woods Lake	Woods Lake Beach	01-Jun-10	688
	88 Kalamazoo	Woods Lake	Woods Lake Beach	26-Jul-10	864
19	89 Leelanau	inland lake	Sleeping Bear Dunes-Little Glen Lake	09-Jun-10	619
20	90 Livingston	Bentley Lake	Camp Innisfree	10-Aug-10	714
21	91 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	02-Jun-10	1,500
	92 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	09-Jun-10	832
	93 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	16-Jun-10	836
	94 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	12-Jul-10	905
	95 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	02-Aug-10	354
	96 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	03-Aug-10	528
	97 Macomb	Lake St. Clair	H.C.M.A. - Metropolitan Beach Metropark	11-Aug-10	659
	98 Macomb	Lake St. Clair	New Baltimore Park Beach	09-Jun-10	2,419
	99 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	26-Apr-10	436
	100 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	12-May-10	1,373
	101 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	17-May-10	442
	102 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	19-May-10	1,049
	103 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	24-May-10	426
	104 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	07-Jun-10	782
	105 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	14-Jun-10	327
	106 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	16-Jun-10	1,760
	107 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	21-Jun-10	1,558
	108 Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	23-Jun-10	359

Appendix F. Daily Water Samples that Exceeded Michigan's WQS.

	County	Water Body	Location	Sampling Date	<i>E. coli</i> Test Results
109	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	12-Jul-10	1,052
110	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	14-Jul-10	1,648
111	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	21-Jul-10	426
112	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	18-Aug-10	598
113	Macomb	Lake St. Clair	St. Clair Shores Blossom Heath Beach	23-Aug-10	1,209
114	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	12-May-10	2,419
115	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	17-May-10	419
116	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	19-May-10	320
117	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	07-Jun-10	2,265
118	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	09-Jun-10	1,813
119	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	16-Jun-10	1,237
120	Macomb	Lake St. Clair	St. Clair Shores Memorial Park Beach	12-Jul-10	2,027
121	Macomb	Stony Creek Lake-Impoundment	Stony Creek Metropark-Baypoint Beach	03-May-10	1,695
122	Macomb	Stony Creek Lake-Impoundment	Stony Creek Metropark-Baypoint Beach	21-Jul-10	476
123	Macomb	Stony Creek Lake-Impoundment	Stony Creek Metropark-Baypoint Beach	30-Aug-10	1,186
124	Macomb	Stony Creek Lake-Impoundment	Stony Creek Metropark-Eastwood Beach	25-Aug-10	435
<u>22</u>	Marquette	Lake Superior	Marquette South Beach	16-Aug-10	583
126	Marquette	Lake Superior	Marquette South Beach	17-Aug-10	387
127	Marquette	Lake Superior	McCarty's Cove	26-Jun-10	388
<u>23</u>	Menominee	Lake Michigan	Henes Park	24-Jun-10	688
<u>24</u>	Monroe	Lake Erie	Luna Pier City Beach	20-Jul-10	653
130	Monroe	Lake Erie	Sterling State Park	06-Jul-10	573
<u>25</u>	Muskegon	Muskegon Lake	Harbor Towne Beach	26-Jul-10	423
132	Muskegon	Lake Michigan	Lighthouse/Sylvan Beach	12-Jul-10	479
133	Muskegon	Lake Michigan	Meinert County Park	28-Jun-10	1,183
134	Muskegon	Lake Michigan	Meinert County Park	29-Jun-10	420
135	Muskegon	Lake Michigan	Muskegon State Park	26-Jul-10	624
<u>26</u>	Oakland	Lower Trout	Bald Mountain Recreation Area	22-Jun-10	1,354
137	Oakland	Phillips Lake	Camp Dearborn - Lake #1	12-Jul-10	1,065

Appendix F. Daily Water Samples that Exceeded Michigan's WQS.

	County	Water Body	Location	Sampling Date	E. coli Test Results
138	Oakland	Phillips Lake	Camp Dearborn - Lake #5	07-Jun-10	452
139	Oakland	Handsome Lake	Camp Oakland - summer	12-Jul-10	334
140	Oakland	Handsome Lake	Camp Oakland - summer	13-Jul-10	574
141	Oakland	Handsome Lake	Camp Oakland - summer	14-Jul-10	426
142	Oakland	Fish Lake	Camp Ohiyesa - North	12-Jul-10	1,354
143	Oakland	Mill Pond	Davisburg Village Beach (Hart Community Center)	27-Jul-10	434
144	Oakland	Mill Pond	Davisburg Village Beach (Hart Community Center)	28-Jul-10	369
145	Oakland	Walled Lake	E.V. Mercer City Beach	20-Jul-10	825
146	Oakland	Sun Lake	Finnish Day Camp	22-Jun-10	432
147	Oakland	Bush Lake	Holly Village Beach	28-Jun-10	497
148	Oakland	Pontiac Lake	Pontiac Recreation Area	27-Jul-10	406
149	Oakland	Prince Lake	Upland Hills Farm	12-Jul-10	460
<u>27</u>	Oceana	Lake Michigan	Whiskey Creek	16-Aug-10	330
151	Osceola	Muskegon River	Crawford Park	02-Jun-10	771
152	Osceola	Rose Lake	Rose Lake County Park	20-Jul-10	440
<u>28</u>	Ottawa	Lake Macatawa	Dunton Park	01-Jun-10	2,420
154	Ottawa	Lake Macatawa	Dunton Park	07-Jun-10	2,027
155	Ottawa	Lake Macatawa	Dunton Park	23-Jun-10	1,800
156	Ottawa	Lake Macatawa	Dunton Park	18-Aug-10	846
157	Ottawa	Lake Macatawa	Fallen Leaf Park	18-Aug-10	367
158	Ottawa	Lake Michigan	Holland State Park	04-Aug-10	454
159	Ottawa	Spring Lake	Lakeside Beach	19-Aug-10	410
160	Ottawa	Lake Michigan	Tunnel Park	05-Aug-10	635
161	Ottawa	Lake Michigan	Windsnest Park	04-Aug-10	411
<u>29</u>	Roscommon	Houghton Lake	Denton Township Public Beach	16-Jun-10	835
163	Roscommon	Houghton Lake	Houghton Lake Heights	16-Jun-10	793
164	Roscommon	Lake St. Helen	Richfield Township Public Fishing Site	16-Jun-10	975
165	Roscommon	Higgins Lake	South Higgins Lake State Park	16-Jun-10	666
<u>30</u>	Sanilac	Lake Huron	Forester County Park	13-Jul-10	651
167	Schoolcraft	Quarry Beach	Quarry Beach	05-Aug-10	2,420
168	Schoolcraft	Lake Michigan	Roadside Park Beach	15-Jul-10	703
169	Schoolcraft	Lake Michigan	Rogers Park-MDOT	15-Jul-10	681
<u>31</u>	St. Clair	Lake Huron	Burtchville Township Park	19-Jul-10	326
171	St. Clair	St. Clair River	Chrysler Park Beach	21-Jul-10	336
172	St. Clair	St. Clair River	Chrysler Park Beach	22-Jul-10	1,531
173	St. Clair	Lake Huron	Conger-Lighthouse Beach	29-Jun-10	340
174	St. Clair	Lake Huron	Conger-Lighthouse Beach	19-Jul-10	547
175	St. Clair	Lake Huron	Fort Gratiot County Park	01-Jun-10	688
176	St. Clair	Lake Huron	Fort Gratiot County Park	19-Jul-10	315
177	St. Clair	Lake Huron	Holland Road Beach	29-Jun-10	395
178	St. Clair	Lake Huron	Holland Road Beach	19-Jul-10	590

Appendix F. Daily Water Samples that Exceeded Michigan's WQS.

	County	Water Body	Location	Sampling Date	<i>E. coli</i> Test Results
179	St. Clair	Lake Huron	Jeddo Road Beach	07-Jun-10	579
180	St. Clair	Lake Huron	Keewadhin Road Beach	14-Jul-10	335
181	St. Clair	Lake Huron	Krafft Road Beach	19-Jul-10	547
182	St. Clair	Lake Huron	Lakeport State Campground	07-Jun-10	715
183	St. Clair	Lake Huron	Lakeport State Park	07-Jun-10	806
184	St. Clair	Lake Huron	Lakeport State Park	19-Jul-10	536
185	St. Clair	Lake Huron	Lakeside Beach	29-Jun-10	433
186	St. Clair	Lake Huron	Lakeside Beach	19-Jul-10	758
187	St. Clair	Lake Huron	Metcalf Road Beach	01-Jun-10	409
188	St. Clair	Lake Huron	Washington Street Park	07-Jun-10	2,419
32	Van Buren	Lake Michigan	South Haven South Beach	08-Jun-10	384
189	Van Buren	Lake Michigan	South Haven South Beach	22-Jun-10	359
190	Van Buren	Lake Michigan	South Haven South Beach	28-Jun-10	885
191	Van Buren	Lake Michigan	Van Buren State Park Beach	28-Jun-10	359
192					
33	Washtenaw	Independence Lake	Independence Lake County Park	30-Jul-10	324
193	Washtenaw	Independence Lake	Independence Lake County Park	25-Aug-10	624
194	Washtenaw	Bruin Lake	Pinckney Recreation Area	09-Jul-10	641
195	Washtenaw	Sugarloaf Lake	Waterloo Recreation Area	09-Jul-10	735
196	Washtenaw	Sugarloaf Lake	Waterloo Recreation Area	12-Jul-10	590
197	Washtenaw	Sugarloaf Lake	Waterloo Recreation Area	16-Jul-10	688
198	Washtenaw	Sugarloaf Lake	Waterloo Recreation Area	19-Jul-10	704
199					
34	Wayne	Lake St. Clair	Pier Park	06-Jun-10	343
200	Wayne	Lake St. Clair	Pier Park	10-Jul-10	519
201	Wayne	Lake St. Clair	Pier Park	25-Jul-10	498
202	Wayne	Lake St. Clair	Pier Park	01-Aug-10	422
203	Wayne	Lake St. Clair	Pier Park	02-Aug-10	389
204	Wayne	Lake St. Clair	Pier Park	03-Aug-10	324
205	Wayne	Lake St. Clair	Pier Park	04-Aug-10	365
206	Wayne	Lake St. Clair	Pier Park	07-Aug-10	664
207	Wayne	Lake St. Clair	Pier Park	09-Aug-10	312
208	Wayne	Lake St. Clair	Pier Park	12-Aug-10	401
209	Wayne	Rouge River	Wilcox Lake	02-Aug-10	456
210	Wayne	Rouge River	Wilcox Lake	28-Jun-10	356
211	Wayne	Rouge River	Wilcox Lake	07-Jun-10	1,115
212	Wayne	Rouge River	Newburgh Lake	07-Jun-10	758
213	Wayne	Rouge River	Phoenix Lake	07-Jun-10	603
214					