

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER BUREAU
DECEMBER 2007

STAFF REPORT

MICHIGAN BEACH MONITORING
YEAR 2006 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.

The Michigan Beach Monitoring Year 2006 Annual Report contains information about the beach monitoring program, rule citations, and water quality data for 2006.

ASSIST LOCAL HEALTH DEPARTMENTS

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.

Funding for Beach Monitoring

Prior to 2000, health departments relied on local funding to conduct beach monitoring programs. Local funding was often not sufficient to execute a comprehensive monitoring program. Beginning in 2000, the Clean Michigan Initiative-Clean Water Fund (CMI-CWF) bond initiative substantially increased annual funding for statewide surface water quality monitoring. The CMI-CWF grant funds and the United States Environmental Protection Agency's (USEPA's) Beaches Environmental Assessment and Coastal Health Act (BEACH Act) grant funds are awarded by the MDEQ to local health departments and nonprofit entities to aid in the

implementation or enhancement of their beach monitoring program. Eligible entities 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 and BEACH Act grants are designed to fund proposals that determine 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.

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

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

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

CMI-CWF Grants

CMI-CWF funds were distributed for inland lakes and Great Lakes beach monitoring programs in 2000 and 2001. Beginning in 2002, CMI-CWF funds were designated for inland beaches only due to the availability of federal funding for Great Lakes beaches. The CMI-CWF offers reliable funding for the monitoring of surface water over a period of approximately 15 years.

The MDEQ distributed \$193,000 in 2000, \$99,934 in 2001, \$112,833 in 2003, \$100,000 in 2004, \$100,000 in 2005, and \$117,576 in 2006 of CMI-CWF funds to aid in the development and implementation of bathing beach monitoring programs throughout the state (Appendix A).

BEACH Act Grants

The USEPA, as authorized by the federal BEACH Act, allocates grant funds to the MDEQ to assist various organizations with their beach monitoring programs. These grant funds have been designated for Great Lakes beaches. 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.

The MDEQ distributed \$269,204 in 2003, \$244,873 in 2004, \$278,157 in 2005, and \$212,766 in 2006 of BEACH Act funds (Appendix B). The 2006 funds were distributed to 21 health departments, 1 city, and 1 nonprofit organization.

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 of 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 (USEPA, 2001) (Appendix C). The USEPA (1986 and 2002) has determined that *E. coli* is an indicator for the presence of waterborne pathogens in fresh water.

Sources of Bacterial Contamination

Combined Sewer Overflows 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 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 five or more sampling events representatively spread over a 30-day period. Each sampling event shall consist of three 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 three 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 for, and shall be 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, combined sewer overflows, and areas influenced by certain agricultural practices is contrary to prudent public health and safety practices, even though water quality standards may be met.

Beach Closures

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

REPORTING BEACH MONITORING DATA

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

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 <http://www.epa.gov/beaches/>, along with an online directory of information regarding the water quality at our nation's beaches entitled, "Beach Advisory Closing Online Notification," that can be found at http://oaspub.epa.gov/beacon/beacon_national_page.main.

COMPILE DATA TO DETERMINE OVERALL WATER QUALITY

List of Beaches

Michigan inland and Great Lakes beaches identified by local health departments and the MDEQ are listed in Appendix D and Appendix E, respectively. The beaches are arranged alphabetically, by county, and the monitoring status for each beach is indicated. The beaches are also listed on the MDEQ's beach Web site. There are 532 identified public beaches on inland lakes and rivers and 593 identified public beaches on the Great Lakes.

Synopsis of Data

In 2006, monitoring was conducted at 440 (233 inland and 207 Great Lake) public beaches in 58 counties in Michigan. Out of 5,631 daily samples collected, 200 (3.6 percent) exceeded Michigan's WQS (Appendix F). The exceedances were reported from 99 beaches (22.5 percent of all monitored beaches), 85 of which reported beach closures or advisories (110 incidents lasting a total of 886 days). The number of beaches with exceedances differed from the number of beaches with closures or advisories due to any of the following: 1) multiple exceedances were reported for a single closure; 2) water samples were tested before or after the swimming season; 3) delays in receiving test results; and 4) a second test (follow-up sample) was used to confirm an exceedance. A summary of exceedances of the *E. coli* WQS for inland and Great Lakes beaches from 2000 to 2006 is provided in Table 2.

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

Year	2006	2005	2004	2003	2002	2001	2000
Closures or Advisories	110	80	92	140	117	119	276
Total Days Closed	886	474	578	>140	211	122	*
Percent of Monitored Beaches with Closure	18.4	19.0	13.5	10.2	*	*	*
Percent of Samples Exceeding WQS	3.6	2.8	3.1	3.0	4.2	3.9	9.2

*data not available

Synopsis of Data from Great Lakes Beaches

In 2006, monitoring was conducted at 207 Great Lakes public beaches in 37 counties in Michigan. Out of 2,422 daily samples collected, 85 (3.5 percent) exceeded Michigan's WQS (Appendix F). The exceedances were reported from 50 beaches (24 percent of monitored Great Lakes beaches), 41 of which reported beach closures or advisories (52 incidents lasting a total of 333 days). A summary of the exceedances of the *E. coli* WQS for Great Lakes beaches is provided in Table 3.

Table 3. Number of exceedances and closures/advisories for Great Lakes beaches monitored in 2006.

a. Number of Exceedances Reported per Beach	b. Number of Beaches with Exceedance(s)	Total Number of Exceedances (a x b)	c. Number of Beaches with Closures or Advisories	d. Number of Closures or Advisories per Beach	Total Number of Closures or Advisories (c x d)
1	33	33	33	1	33
2	10	20	5	2	10
3	4	12	3	3	9
4	1	4	0	0	0
7	1	7	0	0	0
9	1	9	0	0	0
TOTAL	50	85	41		52

A summary of the 2006 beach monitoring and beach closure/advisory data for each of the Great Lakes, Lake St. Clair, and connecting channels is provided in Table 4.

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

Water Body	Number of Counties with Public Beaches	Number of Public Beaches	Number of Beaches that were Monitored	Number of Beach Closures or Advisories	Total Number of Days Closed
Lake Erie	1	2	2	0	0
Lake Huron	12	158	65	16	48
Lake Michigan	18	299	110	25	39
Lake Superior	9	115	21	0	0
Lake St. Clair	2	5	5	8	98
Great Lakes Connecting Channels	4	14	5	3	148

The following figures show the locations of Great Lakes beaches across the state:

- Figure 1: Michigan Great Lakes Public Beaches.
- Figure 2: Michigan Great Lakes Beaches Monitored in 2006.
- Figure 3: Michigan Great Lakes Beaches with WQS Exceedances in 2006.
- Figure 4: Michigan Great Lakes Beaches Not Monitored in 2006.

Synopsis of Data from Inland Beaches

In 2006, monitoring was conducted at 233 inland lake public beaches in 40 counties in Michigan. Out of 3,209 daily samples collected, 115 (3.6 percent) exceeded Michigan's WQS (Appendix F). The exceedances were reported from 49 beaches (21 percent of monitored inland beaches), 41 of which reported beach closures or advisories (58 incidents lasting a total of 553 days). A summary of the exceedances of the *E. coli* WQS for inland lakes beaches is provided in Table 5.

Table 5. Number of exceedances and closures/advisories for inland beaches monitored in 2006.

a. Number of Exceedances Reported per Beach	b. Number of Beaches with exceedance(s)	Total Number of Exceedances (a x b)	c. Number of Beaches with Closures or Advisories	d. Number of Closures or Advisories per Beach	Total Number of Closures or Advisories (c x d)
1	29	29	29	1	29
2	9	18	8	2	16
3	1	3	3	3	9
4	3	12	1	4	4
5	2	10	0	0	0
7	1	7	0	0	0
8	2	16	0	0	0
9	1	9	0	0	0
11	1	11	0	0	0
TOTAL	49	115	41		58

The following figures show the locations of inland beaches across the state:

- Figure 5: Michigan Inland Public Beaches.
- Figure 6: Michigan Inland Beaches Monitored in 2006.
- Figure 7: Michigan Inland Beaches with WQS Exceedances in 2006.
- Figure 8: Michigan Inland Beaches Not Monitored in 2006.

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 review beach water quality data including the number of beach closures or advisories. This information is used in federal, state, and local pollution prevention programs to determine which water bodies are not meeting WQS and to help identify sources of pollution that affect beach water quality.

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

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

- *E. coli* concentrations exceed the geometric average 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. Based on beach monitoring data, 41 beaches have been listed on the Section 303(d) list because they met at least one of the three criteria for placement of a beach on the TMDL list.

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REFERENCES

- MDEQ. 1997. A Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters. Michigan Department of Environmental Quality. 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 for Great Lake and Inland Lake Beaches (2000 and 2001) and Inland Lake Beaches (2003-2006).

Table 1. 2000 CMI-CWF Grants.

2000 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Berrien County Health Department	\$49,012	\$24,450	11
Central Michigan District Health Department	\$94,115	\$46,363	66
Chippewa County Health Department	\$15,882	\$15,882	8
City of Marquette	\$19,071	\$19,071	7
Grand Traverse Bay Watershed Initiative	\$34,768	\$34,768	17
Huron County Health Department	\$18,407	\$18,407	11
Kent County Health Department	\$5,820	\$5,820	9
Macomb County Health Department	\$57,649	\$28,239	6
TOTAL	\$294,724	\$193,000	135

Table 2. 2001 CMI-CWF Grants.

2001 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
District Health Department #4	\$16,782	\$16,782	44
Kalamazoo County Human Services Department	\$35,000	\$35,000	21
Muskegon County Health Department	\$9,073	\$9,073	14
Northwest Michigan Community Health Agency	\$14,079	\$14,079	22
St. Clair County Health Department	\$25,000	\$25,000	26
TOTAL	\$99,934	\$99,934	127

Table 3. 2003 CMI-CWF Grants.

2003 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Barry-Eaton District Health Department	\$14,812.51	\$14,812.51	7
Branch, Hillsdale, St. Joseph Community Health Agency	\$48,690.41	\$10,000	51
Central Michigan District Health Department	\$48,546	\$18,375	45
Chippewa County Health Department	\$12,833.41	\$12,833.41	4
District Health Department #4	\$22,090.69	\$10,000	13
Genesee County Health Department	\$28,849	\$10,000	21
Macomb County Health Department	\$6,543	\$6,543	2
Muskegon County Health Department	\$25,023	\$10,000	15
Oakland County Health Division	\$17,462.68	\$14,725.49	76
Ottawa County Health Department	\$7,403	\$5,544	10
TOTAL	\$232,253.70	\$112,833.41	244

Appendix A. CMI-CWF Grants for Great Lake and Inland Lake Beaches (2000 and 2001) and Inland Lake Beaches (2003-2006).

Table 4. 2004 CMI-CWF Grants.

2004 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Central Michigan District Health Department	\$55,966.20	\$38,117.57	54
Chippewa County Health Department	\$5,759.02	\$5,759.02	2
District Health Department #4	\$9,800.01	\$9,800.01	24
Grand Traverse (Watershed Center)	\$7,736.34	\$7,736.34	3
Muskegon County Health Department	\$1,369.00	\$1,369.00	13
Northwest Michigan Community Health Agency	\$8,440.00	\$8,440.00	5
Wayne County Health Department	\$15,235.50	\$15,235.50	8
Western Upper Peninsula District Health Department	\$9,114.56	\$9,114.56	6
Wexford County Drain Commission	\$4,428.00	\$4,428	5
TOTAL	\$117,848.63	\$100,00.00	120

Table 5. 2005 CMI-CWF Grants.

2005 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Barry-Eaton District Health Department	\$17,333.41	\$10,000.00	9
Central Michigan District Health Department	\$66,981.60	\$20,771.04	73
District Health Department #2	\$34,130.40	\$6,500.00	16
District Health Department #4	\$31,660.92	\$8,000.00	19
Genesee County Health Department	\$29,774.00	\$10,000.00	11
Kalamazoo County health Department	\$49,812.20	\$20,000.00	8
Muskegon County health Department	\$10,895.00	\$5,000.00	15
Northwest Michigan Community Health Agency	\$9,740.00	\$5,000.00	13
Ottawa	\$13,595.00	\$5,000.00	8
Western Upper Peninsula District	\$7,796.42	\$5,000.00	6
Wexford	\$4,728.96	\$4,728.96	5
TOTAL	\$317,336.58	\$100,000.00	199

Table 6. 2006 CMI-CWF Grants.

2006 CMI-CWF Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Barry-Eaton District Health Department	\$ 5,699.23	\$5,699.23	6
Chippewa County Health Department	\$ 12,415.00	\$12,415.00	5
District Health Department #2	\$ 30,342.00	\$30,342.00	16
District Health Department #4	\$ 13,020.26	\$13,020.26	4
Genesee County Health Department	\$ 26,160.00	\$11,000.00	16
Macomb County Health Department	\$ 7,933.24	\$7,933.24	2
Northwest Community Health Agency	\$ 6,938.25	\$6,938.25	18
Ottawa County Health Department	\$ 12,112.00	\$12,112.00	8
Wayne County Health Department	\$ 15,307.50	\$15,307.50	9
Wexford County Drain Commissioner	\$ 2,809.00	\$2,809.00	5
TOTAL	\$132,736.48	\$117,576.48	89

Appendix B. BEACH Act Grants for Great Lakes Beaches.

Table 1. 2003 BEACH Act Grants.

2003 BEACH Act Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Bay County Health Department	\$16,410	\$12,000	6
Berrien County Health Department	\$17,732	\$16,368	13
Central Michigan District Health Department	\$10,152	\$12,152	8
Chippewa County Health Department	\$19,564.38	\$14,590.56	9
City of Marquette	\$11,371.40	\$8,551.20	5
District Health Department #2	\$19,899.75	\$16,000	8
District Health Department #4	\$35,656.46	\$23,000	13
District Health Department #10	\$41,721	\$24,928.11	20
Grand Traverse Bay Watershed	\$23,695	\$23,695	12
Huron County Health Department	\$41,061	\$23,000	13
Macomb County Health Department	\$23,525	\$10,000	4
Muskegon District Health Department	\$11,371	\$11,371	10
Northwest Michigan Community Health Agency	\$24,930.93	\$15,730.93	23
Sanilac County Health Department	\$15,817	\$13,817	7
St. Clair County Health Department	\$24,094.50	\$23,000	13
Western Upper Peninsula District Health Department	\$27,632.79	\$21,000	18
TOTAL	\$367,634.21	\$269,203.80	182

Table 2. 2004 BEACH Act Grants.

2004 BEACH Act Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Bay County Health Department	\$11,082.38	\$11,082.38	6
Berrien County Health Department	\$36,212	\$23,104	19
Central Michigan District Health Department	\$13,899	\$13,899	8
Chippewa County Health Department	\$31,250.17	\$10,944	9
City of Marquette	\$13,848.56	\$6,080	5
District Health Department #2	\$28,042.10	\$10,944	9
District Health Department #4	\$21,293.29	\$15,808	13
District Health Department #10	\$24,999.50	\$24,999.50	23
Huron County Health Department	\$26,210.20	\$10,944	12
Macomb County Health Department	\$24,490	\$4,864	4
Muskegon County Health Department	\$15,000	\$15,000	12
Northwest Michigan Community Health Agency	\$15,649.65	\$15,649.65	26
Ottawa County Health Department	\$10,246.33	\$10,246.33	9
Public Health, Delta and Menominee Counties	\$12,937.18	\$12,937.18	13
Sanilac County Health Department	\$15,146.74	\$8,512	7
St. Clair County Health Department	\$24,641.24	\$17,024	14
The Watershed Center Grand Traverse Bay	\$22,035	\$15,808	13
Wayne County Health Department	\$10,182	\$3,651	3
Western Upper Peninsula District Health Department	\$21,634.92	\$13,376	11
TOTAL	\$378,800.26	\$244,873.04	216

Appendix B. BEACH Act Grants for Great Lakes Beaches.

Table 3. 2005 BEACH Act Grants

2005 BEACH Act Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Allegan County Health Department	\$9,572.00	\$10,881.00	4
Bay County Health Department	\$11,683.50	\$7,500.00	6
Berrien County Health Department	\$16,975.75	\$16,975.75	13
Central Michigan District Health Department	\$14,994.68	\$10,000.00	8
Chippewa County Health Department	\$19,855.53	\$11,000.00	9
District health Department #2	\$50,942.66	\$18,000.00	5
District Health Department #4	\$47,507.93	\$20,000.00	23
District Health Department #10	\$24,999.85	\$24,999.85	20
Grand Traverse (Watershed Center)	\$16,151.17	\$11,000.00	13
Huron County Health Department	\$18,259.39	\$14,290.00	12
Macomb County health Department	\$19,293.88	\$7,000.00	4
Marquette (City of Marquette)	\$14,700.00	\$7,275.96	2
Monroe County Health Department	\$12,416.52	\$6,000.00	12
Muskegon County health Department	\$14,295.00	\$14,295.00	26
Northwest Michigan Community Health Agency	\$19,541.84	\$19,541.84	9
Ottawa County Health Department	\$16,442.00	\$16,442.00	4
Public Health, Delta and Memominee Counties	\$15,084.23	\$10,000.00	7
St. Clair County Health Department	\$23,745.60	\$23,745.60	14
Sanilac County Health Department	\$12,515.53	\$9,000.00	9
Wayne County Health Department	\$6,210.00	\$6,210.00	3
Western UP District Health Department	\$17,736.86	\$14,000.00	11
TOTAL	\$402,923.92	\$278,157.00	214

Appendix B. BEACH Act Grants for Great Lakes Beaches.

Table 4: 2006 BEACH Act Grants

Local Health Department	Allocated Amount	Total Monitored Beaches
Allegan County Health Department	\$5,290.24	4
Bay County Health Department	\$6,685.36	6
Berrien County Health Department	\$12,265.84	14
Central Michigan District Health Department	\$8,080.48	8
Chippewa County Health Department	\$8,778.04	9
Delta-Menominee District Health Department	\$5,290.24	4
District Health Department #2	\$8,778.04	9
District Health Department #4	\$12,265.84	14
District Health Department #10	\$17,846.32	22
Huron County Health Department	\$10,870.72	12
Luce-Mackinac-Alger-Schoolcraft District Health Department	\$9,475.60	10
Macomb County Health Department	\$5,290.24	4
Marquette (city of Marquette)	\$5,987.80	5
Monroe County Health Department	\$3,895.12	2
Muskegon County Health Department	\$10,870.72	12
Northwest Michigan Community Health Agency	\$23,426.80	30
Ottawa County Health Department	\$8,778.04	9
Saint Clair County Health Department	\$12,265.84	14
Sanilac County Health Department	\$5,290.24	4
Van Buren/Cass District Health Department	\$5,290.24	4
Wayne County Health Department	\$3,895.12	2
Watershed Center (Grand Traverse & Benzie-Leelanau)	\$11,278.04	9
Western Upper Peninsula District Health Department	\$10,870.72	12
Total	\$212,765.64	219

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

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County	Monitoring Status	Beach Name	Waterbody Name
Alcona	Monitored	Alcona Park East Campground	Alcona Pond
Alcona	Monitored	Alcona Pond West Campground	Alcona Pond
Alcona	Monitored	Alcona Township Park	Hubbard Lake
Alcona	Monitored	Chain Lake Beach	Chain Lake
Alcona	Not Monitored	City Park	Lake Cadillac
Allegan	Monitored	Dumont Lake County Park Beach	Dumont Lake
Allegan	Monitored	Ely Lake Campground Beach	Ely Lake
Allegan	Monitored	Gun Lake County Park Beach	Gun Lake
Allegan	Monitored	Little John Lake County Park Beach	Little John Lake
Allegan	Monitored	Pine Point Campground Beach	Swan Creek Pond
Alpena	Not Monitored	Beaver Lake Park	Beaver Lake
Alpena	Not Monitored	Long Lake Day Use	Long Lake
Alpena	Not Monitored	Long Lake Park	Long Lake
Antrim	Monitored	Day Park	Torch Lake
Antrim	Not Monitored	Eastport	Torch Lake
Antrim	Monitored	Richard Park	Lake Bellaire
Antrim	Monitored	Thurston Park	Central Lake
Antrim	Monitored	Torch River Bridge	Torch Lake
Antrim	Not Monitored	Torch River Sand Bar	Torch River
Antrim	Monitored	Wooden Shoe Park	Elsworth Lake
Arenac	Not Monitored	Big Bend Campground	Man made Pond
Arenac	Not Monitored	DNR Access	Au Gres River
Arenac	Not Monitored	Flint Park Hunt Club	Flint Park Hunt Club Lake
Arenac	Monitored	Oasis Lake County Park	Oasis Lake
Arenac	Not Monitored	Outdoor Adventures	Man made Pond
Arenac	Not Monitored	Pine River Public Access	Pine River
Barry	Monitored	Charlton Park	Thornapple Lake
Barry	Monitored	Main Beach – Day use Area	Gun Lake
Barry	Monitored	Old Beach – Day use Area	Gun Lake
Barry	Not Monitored	Prairieville Township Park	Gull Lake
Barry	Monitored	Yankee Springs Recreation Area	Gun Lake
Bay	Monitored	Boat Launch on Kawkawlin River	Kawkawlin River
Bay	Monitored	Vet's Park North Bay City	Saginaw River
Bay	Monitored	Vet's Park South River Road	Saginaw River
Benzie	Not Monitored	Bellows	Crystal Lake
Benzie	Not Monitored	South shore near Beulah	Crystal Lake
Berrien	Not Monitored	Bertrand Park	St. Joseph River
Berrien	Not Monitored	Niles - French Paper	St. Joseph River

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County	Monitoring Status	Beach Name	Waterbody Name
Berrien	Not Monitored	Niles - Marmont	St. Joseph River
Berrien	Monitored	Paw Paw Lake	Paw Paw Lake
Branch	Not Monitored	Memorial Park	Messenger Lake
Branch	Not Monitored	Quincy Park	First Lake
Calhoun	Not Monitored	Battle Creek	Goguac Lake
Calhoun	Not Monitored	Springport	Duck Lake
Charlevoix	Not Monitored	Hudson Township Park	Huffman Lake
Charlevoix	Monitored	Melrose Township Park	Walloon Lake
Charlevoix	Monitored	Thumb Lake Beach	Thumb Lake
Cheboygan	Monitored	Aloha State Park	Mullett Lake
Cheboygan	Not Monitored	Black Lake SFCG	Black Lake
Cheboygan	Not Monitored	Bluffs Beach	Black Lake
Cheboygan	Not Monitored	Boy Scout Launch	Mullett Lake
Cheboygan	Monitored	Burt Lake State Park	Burt Lake
Cheboygan	Monitored	Devoe Beach	Burt Lake
Cheboygan	Not Monitored	Foot Road Park	Mullett Lake
Cheboygan	Not Monitored	Grand View Beach	Mullett Lake
Cheboygan	Not Monitored	Hoberts Launch	Mullett Lake
Cheboygan	Not Monitored	Hoppie's Launch	Burt Lake
Cheboygan	Not Monitored	Maple Bay Park	Burt Lake
Cheboygan	Not Monitored	Orchard Beach	Mullett Lake
Cheboygan	Not Monitored	Polish Line Beach	Mullett Lake
Cheboygan	Not Monitored	Ryder's Landing	Douglass Lake
Cheboygan	Not Monitored	Topinabee Park	Mullett Lake
Cheboygan	Not Monitored	Webber Lake State Park	Webber Lake
Chippewa	Monitored	Caribou Lake	Caribou Lake
Chippewa	Monitored	Dukes Lake	Dukes Lake
Chippewa	Monitored	Kinross Lake	Kinross Lake
Chippewa	Not Monitored	Monocle Lake	Monocle Lake
Chippewa	Monitored	Soldiers Lake	Soldiers Lake
Chippewa	Monitored	Trout Lake	Carp Lake
Clare	Not Monitored	Arnold Lake Beach	Arnold Lake
Clare	Monitored	Bertha Lake Beach	Bertha Lake
Clare	Not Monitored	Cedar Shores Beach	Townline Lake
Clare	Not Monitored	City of Clare Park	Shamrock Lake
Clare	Not Monitored	Cranberry Lake South	Cranberry Lake
Clare	Not Monitored	Crooked Lake Beach	Crooked Lake
Clare	Not Monitored	Dodge Lake Beach	Dodge Lake
Clare	Monitored	Herrick County Park	Borrow Pit
Clare	Not Monitored	Hillcrest Public Landing	Crooked Lake
Clare	Not Monitored	Lake George Public Landing	George Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Clare	Not Monitored	Lake of the Pines	Doc and Tom Lake
Clare	Not Monitored	Lilly Lake Beach	Lilly Lake
Clare	Not Monitored	Long Lake Beach	Long Lake
Clare	Not Monitored	Muskegon River Township Park	Muskegon River
Clare	Not Monitored	Oak Hills Children's Camp	Hayes Lake
Clare	Not Monitored	Sand Lake Beach	Sand Lake
Clare	Not Monitored	Sandy Shores Beach	Grass Lake
Clare	Monitored	Shingle Lake Park	Shingle Lake
Clare	Monitored	Silver Lake Park	Silver Lake
Clare	Monitored	Wilson Lake State Park	Budd Lake
Clinton	Not Monitored	Sleepy Hollow State Park Beach	Lake Ovid
Crawford	Monitored	North Higgins State Park	Higgins Lake
Eaton	Monitored	Fox Memorial Park	Fox Memorial Park Beach
Eaton	Monitored	Lincoln Brick Park	Grand River
Emmet	Monitored	Camp Petosega	Pickerel Lake
Emmet	Monitored	Channel Beach	Pickerel Lake
Emmet	Monitored	Little Traverse Township Beach	Crooked Lake
Emmet	Not Monitored	Oden Beach	Crooked Lake
Emmet	Monitored	Pioneer Picnic Park	Larks Lake
Emmet	Monitored	Resort Pike Road Beach	Walloon Lake
Genesee	Not Monitored	at Drain	Lake Ponemah
Genesee	Not Monitored	Barnum Lake	Barnum Lake
Genesee	Not Monitored	Beach at Hasler Lake	Hasler Lake
Genesee	Monitored	Beach at Pinewood Lake	Pinewood Lake
Genesee	Monitored	Bluebell Beach	Mott Lake
Genesee	Not Monitored	Bluegill Boat Ramp	Mott Lake
Genesee	Monitored	Boat Ramp at Buell Lake	Buell Lake
Genesee	Monitored	Buttercup Beach	Holloway Reservoir
Genesee	Monitored	Camp Copneconic	Copneconic Lake
Genesee	Monitored	City Park Beach	Silver Lake
Genesee	Monitored	Clover Beach	Byram Lake
Genesee	Monitored	Copneconic Day Beach	Copneconic Lake
Genesee	Monitored	Covenant Hill Camp	Covenant Hill Camp
Genesee	Not Monitored	Crane Lake Beach	Crane Lake
Genesee	Monitored	Crooked Lake	Crooked Lake
Genesee	Not Monitored	DNR Boat Dock	Fenton Lake
Genesee	Not Monitored	DNR Boat Launch at Lake Ponemah	Lake Ponemah
Genesee	Not Monitored	DNR Boat Launch at Lobdell Lake	Lobdell Lake
Genesee	Monitored	Dollar Lake	Dollar Lake
Genesee	Not Monitored	Fenton Lake Marina	Fenton Lake
Genesee	Not Monitored	Flagstone Point Beach	Flagstone Point
Genesee	Not Monitored	Golden Rod Beach	Golden Rod Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Genesee	Monitored	Hasler Lake Campground	Hasler Lake
Genesee	Not Monitored	Kearsley Reservoir Beach	Kearsley Reservoir
Genesee	Not Monitored	Lake Helene Beach	Lake Helene
Genesee	Monitored	Lake Linda	Lake Linda
Genesee	Not Monitored	Lake Shinangaug	Lake Shinangaug
Genesee	Not Monitored	Linden Mill Pond Beach	Linden Mill Pond
Genesee	Not Monitored	Loon Lake Beach	Loon Lake
Genesee	Not Monitored	Marl Lake Beach	Marl Lake
Genesee	Not Monitored	McCaslin Lake Beach	McCaslin Lake
Genesee	Not Monitored	McKane Lake Beach	McKane Lake
Genesee	Not Monitored	Mott Lake Stepping Stone Beach	Mott Lake Stepping Stone
Genesee	Monitored	Myers Lake	Myers Lake
Genesee	Not Monitored	Pine Lake Beach	Pine Lake
Genesee	Not Monitored	Silver Lake Marina	Silver Lake
Genesee	Not Monitored	Smokerise Beach	Smokerise Lake
Genesee	Not Monitored	Squaw Lake Beach	Squaw Lake
Genesee	Not Monitored	Thread Lake Beach	Thread Lake
Genesee	Monitored	Twp Hall	Fenton Lake
Genesee	Not Monitored	Walleye Pike Dock	Holloway Reservoir
Genesee	Monitored	West Sister Lake	West Sister Lake
Gladwin	Monitored	Beaverton City Park	Ross Lake
Gladwin	Not Monitored	Cedar River Campground Beach	Cedar River
Gladwin	Not Monitored	Estey Road Access	Tittabawassee River
Gladwin	Not Monitored	Gilman Springs Canoe Launch	Tittabawassee River
Gladwin	Not Monitored	Gilman Springs Swimming Area	Flowing well/pond
Gladwin	Monitored	Gladwin City Park	Cedar River
Gladwin	Not Monitored	Gladwin North Park	Cedar River
Gladwin	Not Monitored	Good News Camp	Tittabawassee River
Gladwin	Not Monitored	Hoister Lake Beach	Hoister Lake
Gladwin	Not Monitored	House Lake	House Lake
Gladwin	Not Monitored	Lake Four	Lake Four
Gladwin	Not Monitored	Lost Haven Beach	Lyle Drain/Tobacco River
Gladwin	Not Monitored	Pine Street Public Access	Tittabawassee River
Gladwin	Monitored	Pratt Lake	Pratt Lake
Gladwin	Not Monitored	Secord Lake	Secord Lake
Gladwin	Not Monitored	Secord Lake – East	Secord Lake
Gladwin	Not Monitored	Sugar Springs/Lake Lancer	Lake Lancer
Gladwin	Not Monitored	Trout Lake SFCG	Trout Lake
Gladwin	Not Monitored	West River Drive Boat Launch	Secord Lake
Gladwin	Not Monitored	Wiggins Lake - at Clendening Road	Wiggins Lake South
Gladwin	Not Monitored	Wiggins Lake DNR Boat Launch	Wiggins Lake North
Gladwin	Not Monitored	Wixon Lake - West	Wixon Lake
Gogebic	Monitored	Gogebic County Park	Lake Gogebic
Gogebic	Monitored	Lake Gogebic State Park Beach	Lake Gogebic
Gogebic	Monitored	Sunday Lake Beach	Sunday Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Grand Traverse	Not Monitored	Gilbert Beach	Long Lake (AKA: Mickey Lake)
Grand Traverse	Not Monitored	Taylor Park	Long Lake (AKA: Mickey Lake)
Hillsdale	Not Monitored	Bird Lake Beach	Bird Lake
Hillsdale	Not Monitored	Sandy Beach	Baw Beese Lake
Houghton	Monitored	Twin Lakes State Park	Lake Roland
Ingham	Monitored	Burchfield Park	Burchfield Pond
Ingham	Monitored	Hawk Island County Park	Hawk Island
Ingham	Monitored	Lake Lansing Park South	Lake Lansing
Ingham	Monitored	Valhalla Park	Valhalla Pond
Iosco	Monitored	Footsite Park	Foote Pond
Iosco	Monitored	Greenbush Township beach	Cedar Lake
Iosco	Monitored	Long Lake Public Access	Long Lake
Iosco	Monitored	Loon Lake Park	Loon Lake
Iosco	Monitored	Old Orchard Park	Foote Pond
Iosco	Monitored	Oscoda Township Park- Van Ettan Lake	Van Ettan Lake
Iosco	Monitored	Sand Lake - Sand Lake Road Access	Sand Lake
Isabella	Monitored	Coldwater Park	Coldwater Lake
Isabella	Monitored	Deerfield County Park	Chippewa River
Isabella	Monitored	Halls Lake	Halls Lake
Isabella	Not Monitored	Millpond Park	Millpond
Jackson	Not Monitored	Clark Lake County Park	Clark Lake
Jackson	Not Monitored	Clear Lake County Park	Clear Lake
Jackson	Not Monitored	Gilletts Lake County Park	Gilletts Lake
Jackson	Not Monitored	Grass Lake County Park	Grass Lake
Jackson	Not Monitored	Lime Lake County Park	Lime Lake
Jackson	Not Monitored	Little Wolf Lake County Park	Little Wolf Lake
Jackson	Not Monitored	Pleasant Lake County Park & Campground	Pleasant Lake
Jackson	Not Monitored	Portage Lake County Park	Portage Lake
Jackson	Not Monitored	Round Lake County Park	Round Lake
Jackson	Not Monitored	Swains Lake County Park	Swains Lake
Jackson	Not Monitored	Vandercook Lake County Park	Vandercook Lake
Jackson	Not Monitored	Vineyard Lake County Park	Vineyard Lake
Kalamazoo	Monitored	Cold Brook County Park	Blue Lake
Kalamazoo	Monitored	Fort Custer Recreation Area Beach	Eagle Lake
Kalamazoo	Monitored	Markin Glen County Park	Swimmers Lake
Kalamazoo	Monitored	Prairie View County Park	Hogsett Lake
Kalamazoo	Monitored	Ramona Park	Long Lake
Kalamazoo	Monitored	Robert Morris Park	Campbell Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Kalamazoo	Monitored	Ross Township Park	Gull Lake
Kalamazoo	Monitored	Sunset Lake Park	Sunset Lake
Kalamazoo	Not Monitored	Timber Lake Campground	Timber Lake
Kalamazoo	Monitored	Woods Lake Beach	Woods Lake
Kent	Not Monitored	Collins Park	Reeds Lake
Kent	Not Monitored	Lincoln Lake Baptist Camp	Lincoln Lake
Kent	Not Monitored	Lincoln Pines Resort	Lincoln Lake
Kent	Not Monitored	Long Lake County Park	Long Lake
Kent	Not Monitored	Myers Lake County Park	Myers Lake
Kent	Not Monitored	Scalley Lake Park	Scalley Lake
Kent	Not Monitored	Versluis Park	Versluis Lake
Kent	Not Monitored	Wabasis Lake County Park	Wabasis Lake
Leelanau	Not Monitored	Leelanau Twnp Park Beach	Lake Leelanau
Leelanau	Not Monitored	Nedow's (Barthalomew) Beach	Lake Leelanau
Leelanau	Not Monitored	Popp Rd End	Lake Leelanau
Leelanau	Not Monitored	South Bar Lake - south end	South Bar Lake
Livingston	Monitored	Brighton State Recreation Area	Bishop Lake
Livingston	Monitored	Camp Innisfree	Bentley Lake
Livingston	Monitored	Camp Talahi	Chenago Lake
Livingston	Not Monitored	Green Valley Camp	Dibrova Lake
Livingston	Monitored	Howell City Park	Thompson Lake
Livingston	Monitored	Howell Nature Center	Pleasant Lake
Livingston	Monitored	Island Lake Recreation Area	Spring Mill Pond
Livingston	Monitored	Island Lake Recreation Area - Kent Lake	Kent Lake
Livingston	Monitored	Lake Chemung Outdoor Resort	Lake Chemung
Livingston	Monitored	Lakelands Golf & Country Club	Winans Lake
Livingston	Monitored	Nazarene Camp	Sandy Bottom Lake
Livingston	Monitored	Pine Hills Camp	Haynor Lake
Livingston	Not Monitored	Providence Medical Center	Pickereel Lake
Livingston	Monitored	Taylor's Beach	Cook Lake
Livingston	Monitored	Varsity Day Camp	Cordley Lake
Livingston	Monitored	Waldenwoods Resort	Lake Walden
Livingston	Monitored	Wildwood Ranch	Church Lake
Macomb	Monitored	Stoney Creek Metropark-Baypoint Beach	Stoney Creek Lake-Impoundment
Macomb	Monitored	Stoney Creek Metropark-Eastwood Beach	Stoney Creek Lake-Impoundment
Marquette	Not Monitored	Marquette Tourist Park Beach	Dead River Reservoir
Marquette	Monitored	Shiras Swimming Area	Shiras Pool
Menominee	Not Monitored	Hermansville Beach	Hermansville Lake
Menominee	Not Monitored	Shakey Lakes Campground	Shakey Lakes

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County	Monitoring Status	Beach Name	Waterbody Name
Monroe	Not Monitored	Camp Lord Willing	Camp Lord Willing Pond
Monroe	Not Monitored	Covered Wagon Campground	Covered Wagon Campground Pond
Monroe	Not Monitored	Heath Beach	Heath Beach Pond
Monroe	Not Monitored	K.C. Campground	K.C. Campground Pond
Monroe	Not Monitored	Monroe KOA Campground	Monroe KOA Campground Pond
Monroe	Not Monitored	Pirolli's Campground	Pirollis Campground Pond
Monroe	Not Monitored	The Vine	The Vine campground pond
Monroe	Monitored	Totem Pole Campground Pond	(man-made pond)
Monroe	Not Monitored	Wilderness Retreat Campground	Wilderness Retreat Campground
Montmorency	Not Monitored	Clear Lake Day Use	Clear Lake
Montmorency	Monitored	Clear Lake State Park	Clear Lake
Montmorency	Not Monitored	Crooked Lake Beach	Crooked Lake
Montmorency	Not Monitored	East Twin Beach/Albert Township Park	East Twin Lake
Montmorency	Not Monitored	Ess Lake State Campground	Ess Lake
Muskegon	Monitored	Blue Lake County Park Beach	Big Blue Lake
Muskegon	Monitored	Deremo County Park	Big Blue Lake
Muskegon	Not Monitored	Duck Lake State Park Beach	Duck Lake
Muskegon	Monitored	Fox Lake Park Beach	Fox Lake
Muskegon	Monitored	Fred Jacks Park	Bear Lake
Muskegon	Not Monitored	Goodrich Park	White Lake
Muskegon	Monitored	Harbour Towne Beach	Muskegon Lake
Muskegon	Not Monitored	Laketon Township Beach	Bear Lake
Muskegon	Monitored	Maple Park	White Lake
Muskegon	Not Monitored	Mona Lake Park Beach	Mona Lake
Muskegon	Not Monitored	Moore County Park Beach	Half Moon Lake
Muskegon	Monitored	Muskegon State Park - Muskegon Lake Side	Muskegon Lake
Muskegon	Monitored	Paddley Park	West Lake
Muskegon	Monitored	Ross Park Beach	Mona Lake
Muskegon	Not Monitored	Sunset Park	Wolf Lake
Muskegon	Monitored	Twin Lake County Park Beach	Twin Lake
Muskegon	Monitored	Wolf Lake County Park	Wolf Lake
Oakland	Not Monitored	657 Dunleavy	Upper Pettibone Lake
Oakland	Monitored	Addison Oaks Co. Park	Adams Lake
Oakland	Monitored	Alpha Beach	Union Lake
Oakland	Monitored	Bald Mountain Recreation Area	Lower Trout
Oakland	Not Monitored	Banker's Subdivision	Upper Straits Lake
Oakland	Monitored	Bay Court Park	Green Lake
Oakland	Not Monitored	Birch Park	Loon Lake
Oakland	Monitored	Bird Island Subdivision	Oakland Lake
Oakland	Monitored	Bloomfield Parks & Rec./West Hills H.S.	Walnut Lake
Oakland	Not Monitored	Brendle Heights - Hillwood	Brendel Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Oakland	Monitored	Brown's Landing Mobile Home Park	Tipsico Lake
Oakland	Monitored	Burley & Barnsbury Streets	Union Lake
Oakland	Monitored	Camp Agawam Boy Scout Camp	Tommy's Lake
Oakland	Monitored	Camp Dearborn - Lake #1	Phillips Lake
Oakland	Monitored	Camp Dearborn - Lake #5	Phillips Lake
Oakland	Not Monitored	Camp Gordanwood	Ekelund Lake
Oakland	Monitored	Camp Maas - Rodecker	Phipps Lake
Oakland	Monitored	Camp Maas- Sobell Beach	Phipps Lake
Oakland	Monitored	Camp Oakland - summer	Handsome Lake
Oakland	Monitored	Camp Ohiyesa - North	Fish Lake
Oakland	Monitored	Camp Wathana	Green Lake
Oakland	Not Monitored	Cass Lake Woods	Cass Lake
Oakland	Monitored	Cedar Crest Subdivision	Cedar Island Lake
Oakland	Monitored	Christ the King Church Camp	Long Lake
Oakland	Not Monitored	Cloister-on-the-Lakes	Fox Lake
Oakland	Monitored	Cranberry Lake Village	Cranberry Lake
Oakland	Not Monitored	Cranberry Lake Village	Cranberry Lake
Oakland	Not Monitored	Crescent Highlands	Crescent Lake
Oakland	Not Monitored	Crescent Lake Park	Crescent Lake
Oakland	Not Monitored	Crystal Echo	Middle Straits Lake
Oakland	Not Monitored	Crystal Echo (the point)	Middle Straits Lake
Oakland	Not Monitored	Cunningham Park	Sylvan Lake
Oakland	Monitored	Davisburg Village Beach (Hart Community	Mill Pond
Oakland	Monitored	Dodge Park #4	Cass Lake
Oakland	Not Monitored	Doll's Dock (Skip's Landing)	Lakeville Lake
Oakland	Monitored	E.V. Mercer City Beach	Walled Lake
Oakland	Not Monitored	Family Park	Round Lake
Oakland	Monitored	Ferndale	Sylvan Lake
Oakland	Monitored	Finnish Day Camp	Sun Lake
Oakland	Not Monitored	Green Acres / Green Valley Park	Green Lake
Oakland	Monitored	Greens Park Village Beach	Lake Orion
Oakland	Monitored	Groveland Oaks Co. Park - Paradise Beach	Stewart Lake
Oakland	Monitored	Haas Lake Park #1	Haas Lake
Oakland	Monitored	Haas Lake Park #2	Big Peat Lake
Oakland	Monitored	Haas Lake Park #3	Haas Lake
Oakland	Not Monitored	Hammond Estates	Hammond Lake
Oakland	Not Monitored	Harris Park	Lotus Lake
Oakland	Not Monitored	Harvey Lake Estates	Harvey Lake
Oakland	Not Monitored	Harvey Lake Heights	Harvey Lake
Oakland	Monitored	Heather Lake Estates	Heather Lake
Oakland	Monitored	Holly Recreation Area - Wildwood Beach	Wildwood Lake
Oakland	Monitored	Holly Rec. Area - Heron Beach	Heron Lake
Oakland	Monitored	Holly Township Beach	Bush Lake
Oakland	Not Monitored	Idlewild Subdivision	Bass Lake
Oakland	Monitored	Independence Oaks Co. Park	Crooked Lake
Oakland	Monitored	Independence Township Village Beach	Deer Lake
Oakland	Not Monitored	Indianwood	Loon Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Oakland	Not Monitored	Jacksina Subdivision	Rowe Lake
Oakland	Monitored	Keego Harbor city Beach	Cass Lake
Oakland	Not Monitored	Keego Harbor Trailer Park	Cass Lake
Oakland	Monitored	Kensington - Maple beach	Kent Lake
Oakland	Monitored	Kensington - Martindale Beach	Kent Lake
Oakland	Monitored	Lake Angelus Lakeview Estates	Morgan Lake
Oakland	Not Monitored	Lake Braemar Estates - Tamryn Ct.	Braemar Lake
Oakland	Monitored	Lake Oakland Heights	Oakland Lake
Oakland	Monitored	Lake Oakland Shores	Oakland Lake
Oakland	Not Monitored	Lake Orion Heights	Orion Lake
Oakland	Monitored	Lakeshore Park	Walled Lake
Oakland	Not Monitored	Lakeview	Sylvan Lake
Oakland	Not Monitored	Lakeview Recreation	Carpenter Lake
Oakland	Not Monitored	Lakewood Farms - Crocus Street	Geneva Lake
Oakland	Not Monitored	Lakewood Farms - Sharon Street	Geneva Lake
Oakland	Not Monitored	Lakewood Village	Brendel Lake
Oakland	Not Monitored	Lakewood Village Subdivision	Neva Lake
Oakland	Not Monitored	Lanarh Street	Watkins Lake
Oakland	Not Monitored	Ledgewood	Sherwood Lake
Oakland	Not Monitored	Lotus Park	Lotus Lake
Oakland	Not Monitored	Mary K. Subdivision	Tan Lake
Oakland	Not Monitored	Meagher Park/Woodland Manor	Davis Lake
Oakland	Monitored	Mission Springs Subdivision	Darb Lake
Oakland	Not Monitored	Mountain View	Lotus Lake
Oakland	Monitored	North Beach	Sears Lake
Oakland	Not Monitored	North Cove	Walnut Lake
Oakland	Monitored	Oakridge Subdivision	Sugden Lake
Oakland	Not Monitored	Outlet A	Upper Straits Lake
Oakland	Not Monitored	Pawlaks Campground	Brendel Lake
Oakland	Not Monitored	Pinecrest Shores	Bogie Lake
Oakland	Not Monitored	Pioneer Highlands	Sylvan Lake
Oakland	Not Monitored	Pleasant Lake Highlands	Pleasant Lake
Oakland	Not Monitored	Pleasant Lake Manor	Pleasant Lake
Oakland	Not Monitored	Pleasant Lake Woods	Pleasant Lake
Oakland	Monitored	Pontiac Recreation Area	Pontiac Lake
Oakland	Monitored	Proud Lake Recreation Area Campground	Proud Lake
Oakland	Not Monitored	Ravinewood East	Sherwood Lake
Oakland	Not Monitored	Ravinewood West	Sherwood Lake
Oakland	Not Monitored	Rolling Acres	White Lake
Oakland	Monitored	Rose Hill Center	Mud Lake
Oakland	Monitored	Scripter Village Park Township Beach	Round Lake
Oakland	Monitored	Seven Lakes Park	Big Seven Lake
Oakland	Monitored	Seven Lakes State Park - Campground	Sand Lake
Oakland	Not Monitored	Shady Beach	Upper Straits Lake
Oakland	Not Monitored	Sherwood Boat Ramp	Sherwood Lake
Oakland	Not Monitored	Shores at Bay Point	Lower Straits Lake
Oakland	Not Monitored	Silver Hill Road	Silver Lake

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County	Monitoring Status	Beach Name	Waterbody Name
Oakland	Not Monitored	Silver Valley Subdivision	Carpenter Lake
Oakland	Monitored	South Beach	Sears Lake
Oakland	Monitored	St. Mary's Park	Orchard Lake
Oakland	Monitored	Stanley Beach	White Lake
Oakland	Not Monitored	Stony Beach	Middle Straits Lake
Oakland	Monitored	Stony Lake Park	Stony Lake
Oakland	Monitored	Sunny Beach #1 - Eston Road	Walters Lake
Oakland	Monitored	Sunny Beach #2 - Clarkston Road	Walters Lake
Oakland	Not Monitored	Sunset Club	Orion Lake
Oakland	Monitored	Sunset Subdivision	Cedar Island Lake
Oakland	Not Monitored	Sylvan-on-the-Lakes	Cass Lake
Oakland	Monitored	Teeple Lake Rec. Area - Highland State Park	Teeple Lake
Oakland	Monitored	Thelma Spencer Park	Spencer Lake
Oakland	Not Monitored	Tripps Subdivision Park	Middle Straits Lake
Oakland	Not Monitored	Twin Beach Park	Middle Straits Lake
Oakland	Monitored	Union Lake Heights Subdivision #2	Union Lake
Oakland	Monitored	Upland Hills Farm	Prince Lake
Oakland	Not Monitored	Walnut Lake Park	Walnut Lake
Oakland	Monitored	Waterford Hill	Van Norman Lake
Oakland	Not Monitored	West Acres	Middle Straits Lake
Oakland	Not Monitored	Westwood Manor	Wing Lake
Oakland	Monitored	Whipple Shores Subdivision	Whipple Lake
Oakland	Not Monitored	Whitney Street	Watkins Lake
Oakland	Not Monitored	Willow Beach Subdivision	Cass Lake
Ogemaw	Monitored	Lake George Campground	Lake George
Ogemaw	Monitored	Rifle River Recreation Area	Devoe Lake
Ogemaw	Monitored	Rifle River Recreation Area Campground	Grousehaven Lake
Ogemaw	Monitored	Rifle River Recreation Area Day Use Area	Grousehaven Lake
Ontonagon	Monitored	Bergland Township Park	Lake Gogebic
Ontonagon	Monitored	Ontonagon County Park	Lake Gogebic
Osceola	Not Monitored	Center Lake Bible Camp	Center Lake
Osceola	Monitored	Center Lake Park	Center Lake
Osceola	Not Monitored	City of Evert Campground	Muskegon River
Osceola	Monitored	Crawford Park	Muskegon River
Osceola	Monitored	Crittenton Park	Big Lake
Osceola	Not Monitored	Diamond Lake	Diamond Lake
Osceola	Not Monitored	DNR Access Diamond Lake	Diamond Lake
Osceola	Not Monitored	DNR Access Hicks Lake	Hicks Lake
Osceola	Not Monitored	DNR Access McCoy Lake	McCoy Lake
Osceola	Not Monitored	DNR Access Todd Lake	Todd Lake
Osceola	Not Monitored	DNR Access Wells Lake	Wells Lake
Osceola	Not Monitored	Hersey Road Access	Muskegon River
Osceola	Not Monitored	Kettunen Center	Center Lake
Osceola	Monitored	Rose Lake County Park	Rose Lake

Appendix D. Michigan List of Inland Beaches - 2006

County	Monitoring Status	Beach Name	Waterbody Name
Osceola	Not Monitored	Rose Lake Youth Camp	Rose Lake
Osceola	Monitored	Sunrise Lake Park	Sunrise Lake
Oscoda	Monitored	Mio Pond Campground	Mio Pond
Otsego	Not Monitored	Arbutus Beach	Otsego Lake
Otsego	Monitored	Arbutus Beach	Otsego Lake
Otsego	Monitored	Bear Lake SFCG	Bear Lake
Otsego	Monitored	Otsego County Park	Otsego Lake
Otsego	Monitored	Otsego State Park	Otsego Lake
Otsego	Monitored	Pickeral Lake SFCG	Pickeral Lake
Otsego	Monitored	Wah Wah Soo Beach	Otsego Lake
Otsego	Monitored	Dunton Park	Lake Macatawa
Otsego	Monitored	Fallen Leaf Park	Lake Macatawa
Otsego	Monitored	Georgetown Community Park	Georgetown Lake
Otsego	Monitored	Grose Park	Crockery Lake
Otsego	Monitored	Holland State Park	Lake Macatawa
Otsego	Monitored	Lakeside Beach	Spring Lake
Otsego	Monitored	Maplewood Lake Park	Maplewood Lake
Otsego	Monitored	Pottawattomie Park	Pottawattomie Bayou
Presque Isle	Not Monitored	Grand Lake Northwest	Grand Lake
Presque Isle	Not Monitored	Grand Lake Public Access	Grand Lake
Presque Isle	Not Monitored	Lake May Public Access	Lake May
Presque Isle	Not Monitored	Millersburg Park	Ocquoec River
Presque Isle	Not Monitored	Ocquoec Falls Park	Ocquoec River
Presque Isle	Not Monitored	Onaway State Park	Black Lake
Presque Isle	Not Monitored	Shoepac Lake Camp Ground	Shoepac Lake
Presque Isle	Not Monitored	Sunken Lake County Park	Sunken Lake
Presque Isle	Not Monitored	Tomahawk Lake Camp Ground	Tomahawk Lake
Roscommon	Not Monitored	Backus Township Park	Backus Pond
Roscommon	Not Monitored	Bambi Lake Camp	Bambi Lake/Sinkhole Lake
Roscommon	Not Monitored	Beaver Creek Road End	Higgins Lake
Roscommon	Not Monitored	Camp Co-Be-Ac	Owens Lake
Roscommon	Monitored	Denton Township Public Beach	Houghton Lake
Roscommon	Not Monitored	DNR Public Fishing site	Higgins Lake
Roscommon	Monitored	Gerrish Township Park	Higgins Lake
Roscommon	Not Monitored	H.L. DNR Boat Launch and Park	Houghton Lake
Roscommon	Not Monitored	H.L.State Forest Campground	Houghton Lake
Roscommon	Not Monitored	Higgins Lake Public Fishing Site	Higgins Lake
Roscommon	Monitored	Houghton Lake Heights	Houghton Lake
Roscommon	Not Monitored	Houghton Lake Public Fishing Site	Houghton Lake
Roscommon	Not Monitored	Kelly Beach	Higgins Lake
Roscommon	Not Monitored	Old 27 DNR Access	Houghton Lake
Roscommon	Not Monitored	Phoenix Park	Higgins Lake
Roscommon	Monitored	Richfield Township Public Fishing Site	Lake St. Helen

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County	Monitoring Status	Beach Name	Waterbody Name
Roscommon	Monitored	S. Higgins Lake State Park	Higgins Lake
Roscommon	Not Monitored	Sam-O-Set Road End	Higgins Lake
Saginaw	Not Monitored	Haithco Recreation Area	Haithco Lake
Saginaw	Not Monitored	Lake of Dreams Campground	Lake of Dreams
St. Clair	Monitored	Emmett KOA	Beechgrove Lake
St. Clair	Monitored	Fort Trodd Campground North	Fort Trodd Lake
St. Clair	Monitored	Fort Trodd South	Fort Trodd Lake
St. Clair	Monitored	Kimball Township Pond	Kimball Pond
St. Clair	Not Monitored	Ruby Campground	Ruby Campground Pond
St. Joseph	Not Monitored	Cade Lake Beach	Cade Lake
St. Joseph	Not Monitored	Nottawa Park	Sand Lake
St. Joseph	Not Monitored	Palmer Lake Beach	Palmer Lake
Tuscola	Not Monitored	Murphy Lake	Murphy Lake
Washtenaw	Monitored	Independence Lake County Park	Independence Lake
Washtenaw	Monitored	Pinckney Recreation Area	Half Moon Lake
Washtenaw	Monitored	Pinckney Recreation Area	Bruin Lake
Washtenaw	Monitored	Pinckney Recreation Area	Silver Lake
Washtenaw	Monitored	Waterloo Recreation Area	Sugarloaf Lake
Wayne	Not Monitored	Phoenix Lake	Rouge River
Wayne	Monitored	Van Buren Township Park	Belleville Lake
Wayne	Not Monitored	Wilcox Lake	Rouge River
Wexford	Monitored	City Park	Lake Cadillac
Wexford	Monitored	Colfax Township Park	Lake Meauwataka
Wexford	Monitored	Kenwood Park	Lake Cadillac
Wexford	Monitored	Manton Park	Billings Lake
Wexford	Monitored	Mitchell State Park	Lake Mitchell

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County	Monitoring Status	Beach Name	Waterbody Name
Alcona			
	Not Monitored	Black River Public Access	Lake Huron
	Not Monitored	Greenbush Township	Lake Huron
	Not Monitored	Harrisville Public Access	Lake Huron
	Monitored	Harrisville State Park	Lake Huron
	Not Monitored	Negwegon State Park	Lake Huron
	Not Monitored	Public Shoreline Beach-Huron National Forest North	Lake Huron
	Not Monitored	Public Shoreline Beach-Huron National Forest South	Lake Huron
	Not Monitored	Sturgeon Point State Park	Lake Huron
	Not Monitored	Trask Lake Road Beach	Lake Huron
Alger			
	Not Monitored	Au Train Beach	Lake Superior
	Not Monitored	Bay Furnace Recreation Area Beach	Lake Superior
	Not Monitored	Christmas Beach	Lake Superior
	Not Monitored	Grand Marais Harbor Beach	Lake Superior
	Not Monitored	Grand Marais Township Beach	Lake Superior
	Not Monitored	Miners Beach	Lake Superior
	Not Monitored	Munising Beach	Lake Superior
	Not Monitored	Public Shoreline Beach-Au Train Bay	Lake Superior
	Not Monitored	Public Shoreline Beach-Au Train to Five Mile Pts	Lake Superior
	Not Monitored	Public Shoreline Beach-East County BoRoader area	Lake Superior
	Not Monitored	Public Shoreline Beach-Grand Sable Dunes	Lake Superior
	Not Monitored	Rathfoot Park Beach	Lake Superior
	Not Monitored	Roadside Park	Lake Superior
	Monitored	Sand Point	Lake Superior
	Not Monitored	Twelve mile Beach	Lake Superior
Allegan			
	Not Monitored	Castle Park	Lake Michigan
	Monitored	Douglas Beach	Lake Michigan
	Monitored	Oval Beach	Lake Michigan
	Monitored	Pier Cove Beach	Lake Michigan
	Not Monitored	Saugatuck Dunes State Park Shoreline Beach	Lake Michigan
	Monitored	West Side County Park Beach	Lake Michigan
Alpena			
	Not Monitored	Bay View Park	Lake Huron
	Monitored	Blair Street Park	Lake Huron
	Not Monitored	Elcajon Bay	Lake Huron
	Not Monitored	Issineke HaRoadwood Point	Lake Huron
	Monitored	Michekewis Beach	Lake Huron
	Not Monitored	Negwegon State Park-Ossineke South Point	Lake Huron
	Monitored	Ossineke Beach	Lake Huron
	Not Monitored	Ossineke Campground	Lake Huron
	Not Monitored	Ossineke State Park	Lake Huron
	Not Monitored	Partridge Point	Lake Huron
	Not Monitored	Rock Port Beach	Lake Huron
	Monitored	Starlite Beach	Lake Huron
	Monitored	Thompson Park	Lake Huron
	Not Monitored	Whitefish Bay	Lake Huron
Antrim			
	Not Monitored	Antrim County Day Park North	Lake Michigan

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County	Monitoring Status	Beach Name	Waterbody Name
	Monitored	Antrim County Day Park South	Lake Michigan
	Not Monitored	Antrim Creek Natural Area	Lake Michigan
	Monitored	Banks Township Park	Lake Michigan
	Monitored	Barnes Park	Lake Michigan
	Monitored	Elk Rapids	Lake Michigan
	Not Monitored	Elk Rapids Park	Lake Michigan
	Not Monitored	Erickson Road	Lake Michigan
	Not Monitored	Lore Road End Beach	Lake Michigan
	Not Monitored	Michigan Trail	Lake Michigan
	Not Monitored	Nature Preserve	Lake Michigan
	Not Monitored	North Bay Shore (Conservancy)	Lake Michigan
	Not Monitored	O'Dell Road	Lake Michigan
	Not Monitored	Petobego Pond Area	Grand Traverse Bay-East
	Not Monitored	Road Crossing near Winters Road	Lake Michigan
	Monitored	Veterans Memorial Park	Lake Michigan
Arenac			
	Monitored	Arenac County Park	Saginaw Bay-Lake Huron
	Not Monitored	Au Sable State Forest- Greens Point	Saginaw Bay Inner-Lake Huron
	Not Monitored	Augres Township Park Beach	Inner Saginaw Bay
	Monitored	Bessinger Road Beach	Saginaw Bay-Lake Huron
	Not Monitored	Booth Road Beach	Inner Saginaw Bay
	Not Monitored	City of Augres Public Access	Inner Saginaw Bay
	Monitored	Dyer Road Beach	Saginaw Bay-Lake Huron
	Monitored	Foster Road Beach	Saginaw Bay-Lake Huron
	Not Monitored	GoRoadon Road Beach	Inner Saginaw Bay
	Monitored	Hammel Beach Road Access	Saginaw Bay-Lake Huron
	Not Monitored	Pump Station	Saginaw Bay-Lake Huron
	Monitored	Singing Bridge Beach	Saginaw Bay-Lake Huron
	Not Monitored	Terrace Road	Inner Saginaw Bay
	Monitored	Twining Road Beach	Saginaw Bay-Lake Huron
	Monitored	Whites Beach	Saginaw Bay-Lake Huron
Baraga			
	Not Monitored	Arvon Township Park	Huron Bay / Lake Superior
	Not Monitored	Baraga State Park	Keweenaw Bay
	Not Monitored	First Sand Beach	Keweenaw Bay
	Not Monitored	Keweenaw Bay Village Public Roadside Park	Lake Superior
	Not Monitored	Lanse Township Park	Keweenaw Bay
	Monitored	Lanse Waterfront Park	Keweenaw Bay
	Not Monitored	Mouth of the Huron River	Lake Superior
	Not Monitored	Public Shoreline Beach-Cooper Country Huron Bay	Lake Superior
	Not Monitored	Public Shoreline Beach-NW Abbaye Peninsula	Lake Superior
	Not Monitored	Public Shoreline Beach-Point Abbaye	Lake Superior
	Not Monitored	Public Shoreline Beach-Sand Point	Lake Superior
	Not Monitored	Second Sands Beach	Keweenaw Bay / Lake Superior
Bay			
	Monitored	Bay City State Recreation Area	Saginaw Bay-Lake Huron
	Monitored	Brissette Beach Township Park	Saginaw Bay-Lake Huron
	Not Monitored	Nayanquing point wildlife area	Saginaw Bay
	Monitored	Pinconning Park	Saginaw Bay-Lake Huron
	Monitored	South Linwood Beach Township Park	Saginaw Bay-Lake Huron
	Monitored	Wenona Beach	Saginaw Bay-Lake Huron

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County	Monitoring Status	Beach Name	Waterbody Name
Benzie			
	Not Monitored	Alberta Village Beach & Bluffs	Lake Michigan
	Not Monitored	Esch Road/Otter Creek	Lake Michigan
	Monitored	Frankfort: Anchor Road Beach	Lake Michigan
	Not Monitored	Platte River Point	Lake Michigan
	Not Monitored	Point Betsie Lighthouse Beach	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-North of Esch Road	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Platte Bay South	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Platte River	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-South of Esch Road	Lake Michigan
	Not Monitored	Zettenberg Preserve	Lake Michigan
Berrien			
	Monitored	Cherry Beach	Lake Michigan
	Not Monitored	Galien River Park	Lake Michigan
	Not Monitored	GoRoadon Beach	Lake Michigan
	Monitored	Grand Beach	Lake Michigan
	Not Monitored	Grand Mere State Park- Rosemary Beach	Lake Michigan
	Not Monitored	Grand Mere State Park- Shoreline beach	Lake Michigan
	Not Monitored	Grand Mere State Park- Waverland Beach	Lake Michigan
	Monitored	Hagar Township Park	Lake Michigan
	Monitored	Harbert Beach	Lake Michigan
	Monitored	Jean Klock Park	Lake Michigan
	Monitored	Lincoln Township Park	Lake Michigan
	Monitored	Lions Park	Lake Michigan
	Monitored	Michiana Village	Lake Michigan
	Not Monitored	Mizpah Park	Lake Michigan
	Monitored	New Buffalo City	Lake Michigan
	Monitored	Rocky Gap	Lake Michigan
	Monitored	Silver Beach	Lake Michigan
	Monitored	Tiscornia Park	Lake Michigan
	Monitored	Warren Dunes Beach	Lake Michigan
	Not Monitored	Warren Dunes State Park North	Lake Michigan
	Monitored	Weko Beach	Lake Michigan
Charlevoix			
	Not Monitored	Beaver Island Public Beach	Lake Michigan
	Not Monitored	Bill Wagner Memorial Campground Beach	Lake Michigan
	Monitored	Depot Beach	Lake Charlevoix
	Monitored	East JoRoadan Bridge	Lake Charlevoix
	Monitored	East JoRoadan Tourist Park	Lake Charlevoix
	Monitored	Elm Point Beach	Lake Charlevoix
	Monitored	Ferry Beach	Lake Charlevoix
	Monitored	Fisherman's Island State Park	Lake Michigan
	Not Monitored	Harbor Beach	Lake Michigan
	Not Monitored	Hayes Township Park	Lake Charlevoix
	Not Monitored	Iron Ore Bay Beach	Lake Michigan
	Monitored	Lake Michigan Beach	Lake Michigan
	Monitored	Mt. McSauba Beach	Lake Michigan
	Monitored	Norwood Park	Lake Michigan
	Monitored	Peninsula Beach	Lake Charlevoix
	Monitored	Tannery Park	Lake Charlevoix
	Not Monitored	Washington Street Beach	Lake Charlevoix

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County	Monitoring Status	Beach Name	Waterbody Name
	Monitored	Whiting Park Beach	Lake Charlevoix
	Monitored	Young State Park Beach	Lake Charlevoix
Cheboygan			
	Monitored	Cheboygan City Park	Lake Huron
	Monitored	Cheboygan State Park Duncan Bay	Lake Huron
	Not Monitored	Cheboygan State Park- Lighthouse Point	Lake Huron
	Monitored	Ditta Park	Lake Huron
	Not Monitored	Huron Street Beach	Lake Huron
	Not Monitored	Mackinaw City Beach	Lake Huron
	Monitored	Mackinaw City Lighthouse Park	Lake Huron
	Monitored	Mill Creek public access	Lake Huron
	Not Monitored	Old State Dock	Lake Huron
	Not Monitored	Pinewood Circle Road End Beach	Lake Huron
	Not Monitored	Roadside Park MDOT, US-23	Lake Huron
	Not Monitored	Roadside Park- Village of Mackinac	Lake Huron
	Not Monitored	Stoney Point Road End Beach	Lake Huron
	Monitored	Wawatam City Park	Lake Huron
Chippewa			
	Not Monitored	Bass Cove Beach-Drummond Island	Lake Huron
	Monitored	Bayview Campground	Lake Superior
	Not Monitored	Betsey Seaman Memorial Park-Drummond Island	Lake Huron
	Monitored	Big Pines Beach	Lake Superior
	Not Monitored	Big Shoal Cove Beach	Lake Huron
	Monitored	Brimley State Park	Lake Superior
	Not Monitored	De Tour State Park Shoreline Beach	Lake Huron
	Monitored	Detour Albany Beach	Lake Huron
	Not Monitored	Drummond Island Township Park	Lake Huron
	Not Monitored	Dunbar Park	St. Mary's River
	Monitored	Four Mile Beach	St. Mary's River
	Not Monitored	Hiawatha National Forest- Nodoway Point Area	Lake Superior
	Not Monitored	Hiawatha National Forest- North of Big Pine Picnic	Lake Superior
	Not Monitored	Hiawatha National Forest- North Pond	St. Mary's River
	Not Monitored	Hiawatha National Forest- Pendills Bay	Lake Superior
	Not Monitored	Hiawatha National Forest- Pendills Lake	Lake Superior
	Not Monitored	Hiawatha National Forest- Point Iroquois Light	Lake Superior
	Not Monitored	Hiawatha National Forest- Tahquamenon Bay	Lake Superior
	Not Monitored	Hiawatha National Forest- Waiska Bay	St. Mary's River
	Not Monitored	Hiawatha National Forest- West of Salt Point	Lake Superior
	Not Monitored	Lake Superior State Forest- Munuscong Lake	St. Mary's River
	Not Monitored	Public Shoreline Beach-Browns Creek Area	Lake Superior
	Not Monitored	Public Shoreline Beach-Brush Point	St. Mary's River
	Not Monitored	Public Shoreline Beach-Marsh Lake Area	Lake Superior
	Not Monitored	Public Shoreline Beach-Northwest of Two Mile Lake	Lake Superior
	Not Monitored	Public Shoreline Beach-Point Aux Frenes	St. Mary's River
	Not Monitored	Public Shoreline Beach-Raber Bay stretch	St. Mary's River
	Not Monitored	Public Shoreline Beach-Weatherhog Lake East area	Lake Superior
	Not Monitored	Public Shoreline Beach-Weatherhog Lake West	Lake Superior
	Not Monitored	Public Shoreline Beach-West of Whitefish Pt	Lake Superior
	Not Monitored	Sand Bay Beach-Drummond Island	Lake Huron
	Monitored	Sherman Park	Lake Superior
	Monitored	Sugar Island Township Park	St. Mary's River
	Not Monitored	Tahquamenon Falls State Park-River Mouth Unit	Lake Superior

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County	Monitoring Status	Beach Name	Waterbody Name
	Not Monitored	Wilderness Beach	St. Mary's River
Delta			
	Not Monitored	Big Bay De Noc/ Fishdam River Public Access	Lake Michigan
	Monitored	Escanaba Bathing Beach	Lake Michigan
	Not Monitored	Fayette State Park	Lake Michigan
	Not Monitored	Fuller Park	Lake Michigan
	Monitored	Gladstone Bathing Beach/Van Cleve Park	Lake Michigan
	Not Monitored	Little Bay De Noc Public Beach Access	Lake Michigan
	Not Monitored	Portage Bay Forest Campground	Lake Michigan
	Not Monitored	Public Shoreline Beach-Charboneau Point	Lake Michigan
	Not Monitored	Public Shoreline Beach-CO Road 481	Lake Michigan
	Not Monitored	Public Shoreline Beach-East Wilsey Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-Fishdam River	Lake Michigan
	Not Monitored	Public Shoreline Beach-Gilnet Haven	Lake Michigan
	Not Monitored	Public Shoreline Beach-Indian Point	Lake Michigan
	Not Monitored	Public Shoreline Beach-Indian Town Lake USFS	Lake Michigan
	Not Monitored	Public Shoreline Beach-Jacks Bluff	Lake Michigan
	Not Monitored	Public Shoreline Beach-Martin Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-Nahma	Lake Michigan
	Not Monitored	Public Shoreline Beach-North end of Kregg Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-North of Stonington	Lake Michigan
	Not Monitored	Public Shoreline Beach-Ogontz Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-Peninsula Point	Lake Michigan
	Not Monitored	Public Shoreline Beach-Point Detour	Lake Michigan
	Not Monitored	Public Shoreline Beach-Portage Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-Portage Peninsula	Lake Michigan
	Not Monitored	Public Shoreline Beach-St Vitals Island	Lake Michigan
	Not Monitored	Public Shoreline Beach-USFS West Wilsey Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-West side of Kregg Bay	Lake Michigan
	Not Monitored	Sac Bay County Park	Lake Michigan
	Not Monitored	Sac Bay County Park	Lake Michigan
	Not Monitored	Twin Springs Campground and Bathing Beach	Lake Michigan
Emmet			
	Not Monitored	Bliss Township Beach	Lake Michigan
	Not Monitored	Church Beach	Lake Michigan
	Not Monitored	Colonial Michilimackinac State Park	Lake Michigan
	Monitored	Cross Village Beach	Lake Michigan
	Not Monitored	Forest Beach	Lake Michigan
	Monitored	Mackinaw City Beach #1	Lake Michigan
	Monitored	Mackinaw City Beach #2	Lake Michigan
	Monitored	Magnus Park	Lake Michigan
	Monitored	Middle Village Park	Lake Michigan
	Not Monitored	Petoskey Harbor	Lake Michigan
	Monitored	Petoskey State Park	Lake Michigan
	Monitored	Readmond Township Beach	Lake Michigan
	Not Monitored	The Headlands County Park	Lake Michigan
	Monitored	Thorne Swift Preserve	Lake Michigan
	Monitored	Wilderness State Park	Lake Michigan
	Not Monitored	Wilderness State Park-East of the Beach	Lake Michigan
	Not Monitored	Wilderness State Park-Sturgeon Bay	Lake Michigan
	Not Monitored	Wilderness State Park-West of Beach	Lake Michigan
	Monitored	Zoll Street Beach	Lake Michigan

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County	Monitoring Status	Beach Name	Waterbody Name
	Monitored	Zorn Park - Harbor Springs	Lake Michigan
Gogebic			
	Not Monitored	Black River Harbor Beach	Lake Superior
	Not Monitored	Little Girls Point Park	Lake Superior
	Not Monitored	Mouth of the Montreal River	Lake Superior
	Not Monitored	Porcupine Mountain State Park-North	Lake Superior
	Not Monitored	Presque Isle Beach	Lake Superior
	Not Monitored	Presque Isle State Campground	Lake Superior
	Not Monitored	Public Shoreline Beach-West of Black River	Lake Superior
Grand Traverse			
	Not Monitored	Acme Roadside Park & Beach M-DOT	Grand Traverse Bay
	Not Monitored	Acme Roadside Park (DNR)	Grand Traverse Bay
	Not Monitored	Bayside Acme Twp Park	Grand Traverse Bay
	Not Monitored	Bowers Harbor Public Access	Grand Traverse Bay
	Monitored	Bryant Park Beach	Grand Traverse Bay-West
	Monitored	Clinch Park	Grand Traverse Bay-West
	Not Monitored	Deep Water Point	Grand Traverse Bay-East
	Not Monitored	DNR Launch/Beach Center Road	Grand Traverse Bay
	Monitored	East Bay Beach at Traverse City State Park	Grand Traverse Bay-East
	Monitored	East Bay Park	Grand Traverse Bay
	Not Monitored	East Bay Township Four Mile Road	Grand Traverse Bay-East
	Not Monitored	Haserot Beach	Grand Traverse Bay
	Not Monitored	Kroupa Road Access	Grand Traverse Bay
	Not Monitored	Leffingwell Point Beach	Grand Traverse Bay-East
	Not Monitored	Marion Island Bay Park	Grand Traverse Bay-West
	Monitored	Milliken Beach	Grand Traverse Bay-East
	Not Monitored	Mouth of BoaRoadman	Grand Traverse Bay
	Not Monitored	Old Mission Lighthouse	Grand Traverse Bay-East
	Not Monitored	Old Mission Park	Grand Traverse Bay-East
	Not Monitored	Old Mission Peninsula Twp Park-West of light house	Grand Traverse Bay-East
	Not Monitored	Old Mission Peninsula Twp Park -East of Light house	Grand Traverse Bay-East
	Not Monitored	Old Mission Road	Grand Traverse Bay
	Not Monitored	Peninsula Vol. Fire Station Point#2	Grand Traverse Bay
	Not Monitored	Rose Street Access	Grand Traverse Bay
	Not Monitored	Sayler Park	Grand Traverse Bay
	Not Monitored	Senior Center	Grand Traverse Bay-West
	Not Monitored	Sunset Park	Grand Traverse Bay
	Not Monitored	Swaney Road	Grand Traverse Bay
	Monitored	West End Beach	Grand Traverse Bay-West
	Not Monitored	Yuba Beach	Grand Traverse Bay-East
Houghton			
	Monitored	Agate Beach	Lake Superior
	Not Monitored	Calument Waterworks Beach	Lake Superior
	Monitored	Chassell Beach	Pike Bay at Portage Canal
	Monitored	Hancock City Beach	Portage Canal / Lake Superior
	Monitored	Houghton City Beach	Portage Canal / Lake Superior
	Not Monitored	Hubbell Park	Torch Lake / Portage Canal
	Monitored	Lake Linden Campground Beach	Torch Lake / Portage Canal
	Monitored	McLain State Park Beach	Lake Superior
	Not Monitored	Mink Farm	Lake Superior
	Not Monitored	Public Shoreline Beach-Le Chance Creek	Lake Superior

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County	Monitoring Status	Beach Name	Waterbody Name
	Not Monitored	Public Shoreline Beach-Mc Lain State Park	Lake Superior
	Not Monitored	Public Shoreline Beach-S. of Portage Entry	Lake Superior
	Not Monitored	Public Shoreline Beach-SW County BoRoader	Lake Superior
	Monitored	Sandy Bottom Beach	Portage Canal / Lake Superior
	Not Monitored	White City	Lake Superior
Huron			
	Monitored	BiRoad Creek County Park	Lake Huron
	Monitored	Caseville County Park	Lake Huron
	Not Monitored	County Road End	Lake Huron
	Not Monitored	Geiger Road Public Access	Lake Huron
	Not Monitored	Grindstone Public Access	Lake Huron
	Monitored	Harbor Beach City Park	Lake Huron
	Not Monitored	Harbor Beach Marina	Lake Huron
	Not Monitored	Helena Road End	Lake Huron
	Monitored	Jenks County Park	Lake Huron
	Not Monitored	Kinch Road End	Lake Huron
	Not Monitored	Larned Road End	Lake Huron
	Monitored	Lighthouse County Park	Lake Huron
	Not Monitored	Lighthouse County Park-South	Lake Huron
	Monitored	McGraw County Park	Lake Huron
	Not Monitored	Mud Creek Public Access	Lake Huron
	Monitored	Oak Beach County Park	Lake Huron
	Monitored	Philp County Park	Lake Huron
	Monitored	Port Crescent State Park - Camping Area	Saginaw Bay-Lake Huron
	Monitored	Port Crescent State Park - Day Use	Lake Huron
	Monitored	Sleeper State Park	Lake Huron
	Not Monitored	StaffoRoad County Park	Lake Huron
	Monitored	Thompson Park	Lake Huron
	Not Monitored	Wagener County Park	Lake Huron
Iosco			
	Monitored	Alabaster Township	Lake Huron
	Not Monitored	Au Sable Point Beach	Lake Huron
	Monitored	AuSable Township Park	Lake Huron
	Not Monitored	County Road End	Lake Huron (Tawas Bay)
	Monitored	East Tawas City Park	Tawas Bay
	Not Monitored	Gateway Park	Lake Huron (Tawas Bay)
	Not Monitored	Lake To Lake Road	Lake Huron
	Monitored	M-DOT Roadside Park	Lake Huron
	Monitored	Oscoda Township Beach	Lake Huron
	Monitored	Tawas City Park	Tawas Bay
	Monitored	Tawas Point State Park campground	Lake Huron
	Not Monitored	Tawas Point State Park-Central	Lake Huron
	Monitored	Tawas Point State Park-Day Use area	Lake Huron
Keweenaw			
	Not Monitored	Bete de Gris Beach	Lake Superior at Bete de Gris
	Not Monitored	Brunette Park	Lake Superior
	Not Monitored	Cat Harbor Beach	Lake Superior
	Not Monitored	Cooper Harbor Lighthouse Complex	Lake Superior
	Monitored	Eagle Harbor Beach	Lake Superior
	Not Monitored	Eagle River Beach	Lake Superior
	Not Monitored	Fort Wilkins State Park	Lake Superior

Appendix E. Michigan List of Beaches for Great Lakes - 2006

County	Monitoring Status	Beach Name	Waterbody Name
	Not Monitored	Fort Wilkins State Park-East	Lake Superior
	Not Monitored	Fort Wilkins State Park-West	Lake Superior
	Not Monitored	Great Sands Bay Beach	Lake Superior
	Not Monitored	Mouth of the Gratiot River Beach	Lake Superior
	Not Monitored	Point Isabelle Beach	Lake Superior
	Not Monitored	Public Shoreline Beach-Big Traverse Bay	Lake Superior
	Not Monitored	Public Shoreline Beach-Gay Park	Lake Superior
Leelanau			
	Not Monitored	4th Street Beach Northport	Lake Michigan
	Not Monitored	5th Street Beach Northport	Grand Traverse Bay
	Not Monitored	7th Street Beach Northport	Grand Traverse Bay
	Not Monitored	Bay Front Park	Lake Michigan
	Not Monitored	Boughy Park & Beach	Grand Traverse Bay
	Not Monitored	Cathead Bay, Leelanau State Park	Grand Traverse Bay
	Not Monitored	Cedar Street Beach	Lake Michigan
	Not Monitored	Christmas Cove	Grand Traverse Bay
	Not Monitored	County Road # 669	Lake Michigan
	Not Monitored	Elmwood/Greilikville Park & Beach	Grand Traverse Bay
	Monitored	Empire Municipal Beach	Lake Michigan
	Not Monitored	G. Marsten Dame Marina	Lake Michigan
	Not Monitored	Gils Pier	Lake Michigan
	Not Monitored	Glen Arbor/Manitou Blvd Each	Lake Michigan
	Not Monitored	Graham Green Park	Grand Traverse Bay
	Not Monitored	Haserot Beach, Rose Street	Lake Michigan
	Not Monitored	Hendryx County Roadside Park	Grand Traverse Bay-West
	Not Monitored	Lake Street Beach, Glen Arbor	Lake Michigan
	Not Monitored	Leelanau State Park, Lighthouse	Lake Michigan
	Not Monitored	Leland Harbor	Lake Michigan
	Not Monitored	M-DOT Roadside Park & Beach	Grand Traverse Bay
	Not Monitored	North Bar	Lake Michigan
	Not Monitored	North Street Beach	Lake Michigan
	Monitored	Northport Bay	Grand Traverse Bay-West
	Not Monitored	Omena Beach & Park	Grand Traverse Bay
	Not Monitored	Peterson Park	Lake Michigan
	Not Monitored	Reynolds Street Beach	Lake Michigan
	Not Monitored	Roadside Park & Beach	Grand Traverse Bay
	Not Monitored	Sleeping Bear Dunes-Empire Bluffs	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Empire/North Bar Stretch	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Glen Haven	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Glen Haven Beach	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Good Harbor Bay Beach East	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Good Harbor Bay Beach West	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Good Harbor Bay Middle stretch	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-North Bar Lake Area	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Pyramid Point	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Scenic Overlook	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-Scenic Sleeping Bear Dune	Lake Michigan
	Not Monitored	Sleeping Bear Dunes-South of Empire	Lake Michigan
	Not Monitored	Smith St Beach Northport	Lake Michigan
	Not Monitored	South Shore Park	Grand Traverse Bay
	Not Monitored	Stoney Point County Roadside Park	Grand Traverse Bay
	Not Monitored	Suttons Bay Marina Park & Beach South	Grand Traverse Bay

Appendix E. Michigan List of Beaches for Great Lakes - 2006

County	Monitoring Status	Beach Name	Waterbody Name
	Monitored	Suttons Bay Park	Grand Traverse Bay-West
	Not Monitored	Suttons Bay Public Launch and Beach	Grand Traverse Bay
	Not Monitored	Thompson Street Beach	Lake Michigan
	Not Monitored	W. Grand Traverse Bay Access Site	Grand Traverse Bay
Luce			
	Not Monitored	Blind Sucker River No. 1	Lake Superior
	Not Monitored	Blind Sucker River No. 2	Lake Superior
	Not Monitored	Crisp Point Light House	Lake Superior
	Not Monitored	Lake Superior Campground Beach	Lake Superior
	Not Monitored	Mouth of the Two Hearted River Campground	Lake Superior
	Not Monitored	Muskallonge Lake State Park Beach	Lake Superior
	Not Monitored	Public Shoreline Beach	Lake Superior
	Not Monitored	Public Shoreline Beach-Blind Sucker Flooding Area	Lake Superior
	Not Monitored	Public Shoreline Beach-Coast GuaRoad Line Road	Lake Superior
	Not Monitored	Public Shoreline Beach-County Road 407	Lake Superior
	Not Monitored	Public Shoreline Beach-County Road 412 and Crisp Pt	Lake Superior
	Not Monitored	Public Shoreline Beach-Ltl Sucker R-Two Harted R	Lake Superior
	Not Monitored	Public Shoreline Beach-Three Mile Creek Area	Lake Superior
	Not Monitored	Public Shoreline Beach-West County BoRoader Beach	Lake Superior
	Not Monitored	Unnamed Road End #1	Lake Superior
	Not Monitored	Unnamed Road End #2	Lake Superior
	Not Monitored	Unnamed Road End #3	Lake Superior
Mackinac			
	Not Monitored	American Legion Memorial Park	Lake Huron
	Not Monitored	Antoine Road End	Lake Huron
	Not Monitored	Big Knob State Forest Campground	Lake Michigan
	Not Monitored	Black River State Forest Campground	Lake Michigan
	Not Monitored	Boot Island	Lake Huron
	Not Monitored	Coast GuaRoad Pier Boat Launch and City Park	Lake Huron
	Not Monitored	Epoufette Bay Campground	Lake Michigan
	Not Monitored	Foley Creek Campground	Lake Huron
	Not Monitored	Harbour Light	Lake Huron
	Not Monitored	Hazelton Road End	Lake Huron
	Not Monitored	Hiawatha National Forest- Carp River Access	Lake Huron
	Not Monitored	Horseshoe Bay Wilderness-North	Lake Huron
	Not Monitored	Horseshoe Bay Wilderness-South	Lake Huron
	Not Monitored	Kiwanis Beach	Lake Huron
	Not Monitored	M-DOT Overlook	Lake Michigan
	Not Monitored	M-DOT Roadside Park on US 2	Lake Michigan
	Not Monitored	Mouth of Cut River Roadside Beach	Lake Michigan
	Not Monitored	Naubinway Bay Access	Lake Michigan
	Not Monitored	Public Shoreline Beach-Epoufette Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-Fox Point Area	Lake Michigan
	Not Monitored	Public Shoreline Beach-Little Hog Island area	Lake Michigan
	Not Monitored	Public Shoreline Beach-Manitou Paymen Highbanks	Lake Michigan
	Not Monitored	Public Shoreline Beach-MI DNR Matrix Point Area	Lake Michigan
	Not Monitored	Public Shoreline Beach-Morean Twp sec 25	Lake Michigan
	Not Monitored	Public Shoreline Beach-Naubinway area	Lake Michigan
	Not Monitored	Public Shoreline Beach-Pte. Aux Chenes Bay	Lake Michigan
	Not Monitored	Public Shoreline Beach-Seiners Point	Lake Michigan
	Not Monitored	Public Shoreline Beach-South of Brevoort River	Lake Michigan
	Not Monitored	Public Shoreline Beach-State Forest Matrix Pt	Lake Michigan

Appendix E. Michigan List of Beaches for Great Lakes - 2006

County	Monitoring Status	Beach Name	Waterbody Name
	Not Monitored	Sand Point	Lake Michigan
	Not Monitored	State Roadside Park Beach	Lake Michigan
	Not Monitored	Straits State Park	Lake Huron
	Monitored	US 2 Roadside East of Brevort	Lake Michigan
	Not Monitored	US 2 Roadside/Campground	Lake Michigan
Macomb			
	Monitored	HCMA - Metropolitan Beach Metropark	Lake St. Clair
	Not Monitored	HCMA-Huron Point	Lake St. Clair
	Monitored	New Baltimore Park Beach	Lake St. Clair
	Monitored	SCS Blossom Heath Beach	Lake St. Clair
	Monitored	St. Clair Shores Memorial Park Beach	Lake St. Clair
Manistee			
	Monitored	Arcadia Park	Lake Michigan
	Monitored	Bar Lake Outlet	Lake Michigan
	Monitored	Fifth Avenue Beach	Lake Michigan
	Monitored	First Street Beach	Lake Michigan
	Monitored	Magoon Creek	Lake Michigan
	Monitored	Onekama Township Beach	Lake Michigan
	Monitored	OrchaRoad Beach State Park	Lake Michigan
	Monitored	Pierport Township Beach	Lake Michigan
	Not Monitored	Portage Park	Lake Michigan
	Monitored	Sundling Park	Lake Michigan
Marquette			
	Monitored	Marquette South Beach	Lake Superior
	Monitored	McCartys Cove	Lake Superior
	Monitored	North Beach	Lake Superior
	Monitored	North of Picnic Rocks	Lake Superior
	Monitored	Picnic Rocks	Lake Superior
	Not Monitored	Public Shoreline Beach-Big Huron River	Lake Superior
	Not Monitored	Public Shoreline Beach-Little Presque Isle	Lake Superior
Mason			
	Monitored	Bass Lake Outlet Beach	Lake Michigan
	Monitored	Buttersville Park Beach	Lake Michigan
	Monitored	Ludington State Park Campground Beach	Lake Michigan
	Not Monitored	Ludington State Park Public shoreline Beach North	Lake Michigan
	Not Monitored	Ludington State Park Public shoreline beach South	Lake Michigan
	Not Monitored	Manistee National Forest Campground Beach	Lake Michigan
	Not Monitored	Manistee National Forest-Public Shoreline beach N	Lake Michigan
	Not Monitored	Manistee National Forest-Public Shoreline beach S	Lake Michigan
	Not Monitored	Pere Marquette Harbor	Lake Michigan
	Monitored	South Pier Beach	Lake Michigan
	Monitored	South Summit Beach	Lake Michigan
	Monitored	Sterns Park Beach	Lake Michigan
	Monitored	Summit Township Beach	Lake Michigan
Menominee			
	Not Monitored	Airport Park	Lake Michigan
	Not Monitored	Fox Park	Lake Michigan
	Monitored	Henes Park	Lake Michigan
	Not Monitored	Klienke Park	Lake Michigan
	Monitored	Memorial Beach	Lake Michigan
	Not Monitored	Public Shoreline Beach-Cedar River	Lake Michigan

Appendix E. Michigan List of Beaches for Great Lakes - 2006

County	Monitoring Status	Beach Name	Waterbody Name
	Not Monitored	Public Shoreline Beach-Fox village	Lake Michigan
	Not Monitored	Wells State Park	Lake Michigan
Monroe			
	Monitored	Luna Pier City Beach	Lake Erie
	Monitored	Sterling State Park	Lake Erie
Muskegon			
	Monitored	Bronson/Kruse Park	Lake Michigan
	Monitored	Duck Lake Channel Beach	Lake Michigan
	Monitored	Lake Harbor Park	Lake Michigan
	Monitored	Lighthouse/Sylvan Beach	Lake Michigan
	Monitored	Medbury Park Beach	Lake Michigan
	Monitored	Meinert County Park	Lake Michigan
	Monitored	Muskegon State Park	Lake Michigan
	Not Monitored	Muskegon State Park-Shoreline Beach North	Lake Michigan
	Monitored	Old Channel Beach	Lake Michigan
	Monitored	Pere Marquette Park	Lake Michigan
	Monitored	Pioneer County Park	Lake Michigan
	Monitored	PJ Hoffmaster State Park - Campground	Lake Michigan
	Monitored	PJ Hoffmaster State Park - Public Beach Area	Lake Michigan
Oceana			
	Not Monitored	Cedar Point County Park	Lake Michigan
	Monitored	Claybanks Township Park	Lake Michigan
	Monitored	Lighthouse Beach at Silver Lake State Park	Lake Michigan
	Monitored	Mears State Park	Lake Michigan
	Monitored	Silver Creek Channel	Silver Lake-Lake Michigan
	Not Monitored	Silver Lake State Park	Lake Michigan
	Monitored	Stony Lake Channel	Stony Lake and Lake Michigan
	Monitored	Whiskey Creek	Lake Michigan
Ontonagon			
	Not Monitored	Green Park	Lake Superior
	Not Monitored	Gull Point Beach	Lake Superior
	Not Monitored	Mouth of the Big Iron River Beach	Lake Superior
	Monitored	Ontonagon Township Park and Campground	Lake Superior
	Not Monitored	Porcupine Mountain State Park	Lake Superior
	Monitored	Porcupine Mountains State Park	Lake Superior
	Not Monitored	Porcupine Mountains Wilderness State Park-West	Lake Superior
	Not Monitored	Public Shoreline Beach-Misery Bay	Lake Superior
	Not Monitored	Public Shoreline Beach-Sleeping Bay	Lake Superior
	Not Monitored	Public Shoreline Beach-Wolf Point	Lake Superior
	Not Monitored	Union Bay Beach	Lake Superior
Ottawa			
	Monitored	Grand Haven City Beach	Lake Michigan
	Monitored	Grand Haven State Park	Lake Michigan
	Monitored	Holland State Park	Lake Michigan
	Monitored	Kirk Park	Lake Michigan
	Monitored	Kouw Park	Lake Michigan
	Not Monitored	Mountain Beach	Lake Michigan
	Monitored	North Beach Park	Lake Michigan
	Not Monitored	PJ Hoffmaster State Park- Shoreline Beach	Lake Michigan
	Monitored	Rosy Mound Recreation Area	Lake Michigan
	Monitored	Tunnel Park	Lake Michigan

Appendix E. Michigan List of Beaches for Great Lakes - 2006

County	Monitoring Status	Beach Name	Waterbody Name
	Monitored	Windsnest Park	Lake Michigan
Presque Isle			
	Not Monitored	40 Mile Pt Park	Lake Huron
	Not Monitored	Ball Diamond Park	Lake Huron
	Not Monitored	Bell Bay	Lake Huron
	Not Monitored	Evergreen Beach	Lake Huron
	Not Monitored	Golden Beach	Lake Huron
	Not Monitored	Grace Access Site	Lake Huron
	Not Monitored	Hammond Bay Access Site	Lake Huron
	Not Monitored	Hammond Bay Harbor	Lake Huron
	Not Monitored	Hoefl State Park-North	Lake Huron
	Monitored	Hoefl State Park-South	Lake Huron
	Not Monitored	Lakeside Park Beach	Lake Huron
	Monitored	Lakeside Park (Rogers City)	Lake Huron
	Not Monitored	Lakeview Park Beach	Lake Huron
	Not Monitored	Manitou Beach	Lake Huron
	Not Monitored	New Lighthouse Park	Lake Huron
	Not Monitored	Presque Isle Harbor	Lake Huron
	Monitored	Presque Isle Harbor Beach	Lake Huron
	Not Monitored	Public Shoreline Beach-False Presque Isle Harbor	Lake Huron
	Not Monitored	Seagull Point Park	Lake Huron
	Not Monitored	Thompson's Harbor State Park	Lake Huron
	Not Monitored	US 23 Hammond Bay	Lake Huron
	Not Monitored	US 23 Roger City	Lake Huron
Sanilac			
	Not Monitored	Birch Beach	Lake Huron
	Not Monitored	Birch Beach Middle #2	Lake Huron
	Not Monitored	Birch Beach North #3	Lake Huron
	Not Monitored	Delaware Park	Lake Huron
	Monitored	Forester County Park	Lake Huron
	Not Monitored	Forestville Beach	Lake Huron
	Not Monitored	Great Lakes Beach	Lake Huron
	Monitored	Lexington Beach	Lake Huron
	Monitored	Lexington County Park	Lake Huron
	Monitored	Port Sanilac Park	Lake Huron
	Not Monitored	Sanilac County Park No. 4	Lake Huron
	Not Monitored	Sanilac County Roadside Park #1	Lake Huron
Schoolcraft			
	Not Monitored	Doyle Township Park	Lake Michigan
	Not Monitored	Lakeview Park	Lake Michigan
	Not Monitored	Manistique Township Park	Lake Michigan
	Not Monitored	Public Shoreline Beach-Goudreou's Harbor	Lake Michigan
	Not Monitored	Public Shoreline Beach-S. of McDonald Lake	Lake Michigan
	Not Monitored	Public Shoreline Beach-Thompson	Lake Michigan
	Not Monitored	Public Shoreline Beach-Thompson Village	Lake Michigan
	Not Monitored	Roadside Park Beach	Lake Michigan
	Monitored	Rogers Beach	Lake Michigan
St. Clair			
	Monitored	Burtchville Township Park	Lake Huron
	Monitored	Chrysler Park Beach	St. Clair River
	Monitored	Conger-Lighthouse Beach	Lake Huron

Appendix E. Michigan List of Beaches for Great Lakes - 2006

County	Monitoring Status	Beach Name	Waterbody Name
	Monitored	Holland Road Beach	Lake Huron
	Monitored	Jeddo Road Beach	Lake Huron
	Monitored	Keewadhin Road Beach	Lake Huron
	Monitored	Krafft Road Beach	Lake Huron
	Monitored	Lakeport State Campground	Lake Huron
	Monitored	Lakeport State Park	Lake Huron
	Monitored	Lakeside Beach	Lake Huron
	Monitored	Marine City Beach	St. Clair River
	Monitored	Marine City Diving Area	St. Clair River
	Monitored	Metcalf Road Beach	Lake Huron
	Monitored	Washington Street Park	Lake Huron
Van Buren			
	Monitored	Covert Township Park Beach	Lake Michigan
	Monitored	South Haven North Beach	Lake Michigan
	Monitored	South Haven South Beach	Lake Michigan
	Monitored	Van Buren State Park Beach	Lake Michigan
Wayne			
	Not Monitored	Belle Isle Beach	Detroit River
	Monitored	Pier Park	Lake St. Clair

Appendix F. Exceedances of WQS (300 *E. coli* per 100 ml daily geometric mean) for inland and Great Lakes beaches during 2006.

County	Beach Name	Waterbody Name	Testing Date	E. coli/100 mL
Allegan	West Side County Park Beach	Lake Michigan	7/17/2006	307.34
Antrim	Banks Twp. Park	Lake Michigan	8/15/2006	394.79
Arenac	Singing Bridge Beach	Saginaw Bay-Lake Huron	6/20/2006	410.48
	Twining Rd. Beach	Saginaw Bay-Lake Huron	6/20/2006	1418.5
	Whites Beach	Saginaw Bay-Lake Huron	6/27/2006	377.44
	Dyer Rd. Beach	Saginaw Bay-Lake Huron	7/18/2006	590.42
	Singing Bridge Beach	Saginaw Bay-Lake Huron	7/18/2006	1680.69
	Twining Rd. Beach	Saginaw Bay-Lake Huron	7/18/2006	1748.53
	Whites Beach	Saginaw Bay-Lake Huron	7/25/2006	375.33
	Whites Beach	Saginaw Bay-Lake Huron	8/8/2006	516.28
	Foster Rd. Beach	Saginaw Bay-Lake Huron	8/29/2006	387.21
Bay	Boat Launch on Kawkawlin River	Kawkawlin River	6/19/2006	2419
	Brissette Beach Township Park	Saginaw Bay-Lake Huron	7/17/2006	727
	South Linwood Beach Township Park	Saginaw Bay-Lake Huron	8/21/2006	517
	Vet's Park South River Rd.	Saginaw River	8/28/2006	517
	Boat Launch on Kawkawlin River	Kawkawlin River	8/28/2006	326
Charlevoix	East Jordan Bridge	Lake Charlevoix	7/26/2006	649.89
	Ferry Beach	Lake Charlevoix	8/2/2006	649.47
	Peninsula Beach	Lake Charlevoix	8/2/2006	535.38
	Norwood Park	Lake Michigan	8/8/2006	380.1
Cheboygan	Mackinaw City Lighthouse Park	Lake Huron	7/17/2006	488.2
	Wawatam City Park	Lake Huron	7/17/2006	2121.34
	Mackinaw City Lighthouse Park	Lake Huron	7/24/2006	1539.59
	Mackinaw City Lighthouse Park	Lake Huron	7/26/2006	325
	Devoe Beach	Burt Lake	9/18/2006	2419.6
	Aloha State Park	Mullett Lake	9/18/2006	1531.11
Chippewa	Sugar Island Township Park	St. Mary's River	7/31/2006	2419.6
	Sugar Island Township Park	St. Mary's River	9/18/2006	337.3
Emmet	Mackinaw City Beach #1	Lake Michigan	7/17/2006	603.31
	Zoll Street Beach	Lake Michigan	7/17/2006	923.59
	Wilderness State Park	Lake Michigan	7/17/2006	2022.73
	Thorne Swift Preserve	Lake Michigan	7/24/2006	533.82
	Cross Village Beach	Lake Michigan	7/24/2006	996.62
	Mackinaw City Beach #2	Lake Michigan	7/24/2006	489.22

Appendix F. Exceedances of WQS (300 *E. coli* per 100 ml daily geometric mean) for inland and Great Lakes beaches during 2006.

County	Beach Name	Waterbody Name	Testing Date	E. coli/100 mL
	Wilderness State Park	Lake Michigan	7/31/2006	374.85
	Petoskey State Park	Lake Michigan	8/14/2006	671.19
	Cross Village Beach	Lake Michigan	8/14/2006	410.9
	Wilderness State Park	Lake Michigan	8/15/2006	309.45
	Resort Pike Rd. Beach	Walloon Lake	8/16/2006	1871.64
Genesee				
	Hasler Lake Campground	Hasler Lake	5/23/2006	432
	Clover Beach	Byram Lake	6/26/2006	329
Gladwin				
	Beaverton City Park	Ross Lake	8/23/2006	394.48
Grand Traverse				
	Traverse City State Park	Grand Traverse Bay-East	7/10/2006	1106
	Bryant Park Beach	Grand Traverse Bay-West	7/10/2006	557
	West End Beach	Grand Traverse Bay-West	7/10/2006	497
	Bryant Park Beach	Grand Traverse Bay-West	8/7/2006	544
	Clinch Park	Grand Traverse Bay-West	8/14/2006	354
	Milliken Beach	Grand Traverse Bay-East	9/11/2006	546.8
	Traverse City State Park	Grand Traverse Bay-East	9/11/2006	890.1
Kalamazoo				
	Cold Brook County Park	Blue Lake	7/15/2006	345.7
	Ramona Park	Long Lake	7/15/2006	545.6
	Ramona Park	Long Lake	8/8/2006	426.2
	Ramona Park	Long Lake	8/8/2006	309.5
	Woods Lake Beach	Woods Lake	8/10/2006	481.7
	Woods Lake Beach	Woods Lake	8/10/2006	533.8
	Woods Lake Beach	Woods Lake	8/10/2006	781
	Ramona Park	Long Lake	8/14/2006	1684.5
	Ramona Park	Long Lake	8/15/2006	527
	Cold Brook County Park	Blue Lake	8/24/2006	469.9
	Markin Glen County Park	Swimmers Lake	9/13/2006	585.6
	Woods Lake Beach	Woods Lake	9/13/2006	452.3
Livingston				
	Lakelands Golf & Country Club	Winans Lake	6/8/2006	330
Macomb				
	St. Clair Shores Memorial Park Beach	Lake St. Clair	5/17/2006	449.05
	SCS Blossom Heath Beach	Lake St. Clair	6/26/2006	624.77
	SCS Blossom Heath Beach	Lake St. Clair	6/28/2006	1871.39
	HCMA - Metropolitan Beach Metropark	Lake St. Clair	6/28/2006	1704.92
	SCS Blossom Heath Beach	Lake St. Clair	6/29/2006	327.2
	SCS Blossom Heath Beach	Lake St. Clair	7/5/2006	1452.67
	SCS Blossom Heath Beach	Lake St. Clair	7/10/2006	434.33
	St. Clair Shores Memorial Park Beach	Lake St. Clair	7/12/2006	1165.65
	SCS Blossom Heath Beach	Lake St. Clair	7/19/2006	592.33

Appendix F. Exceedances of WQS (300 *E. coli* per 100 ml daily geometric mean) for inland and Great Lakes beaches during 2006.

County	Beach Name	Waterbody Name	Testing Date	E. coli/100 mL
	New Baltimore Park Beach	Lake St. Clair	8/2/2006	529.04
	HCMA - Metropolitan Beach Metropark	Lake St. Clair	8/14/2006	560.83
	SCS Blossom Heath Beach	Lake St. Clair	8/21/2006	380.32
	SCS Blossom Heath Beach	Lake St. Clair	8/23/2006	321.43
	SCS Blossom Heath Beach	Lake St. Clair	8/30/2006	639.43
	HCMA - Metropolitan Beach Metropark	Lake St. Clair	8/30/2006	858.53
	Stoney Creek Metropark-Baypoint Beach	Stoney Creek Lake-Impoundment	8/30/2006	410.69
	New Baltimore Park Beach	Lake St. Clair	9/11/2006	434.36
	New Baltimore Park Beach	Lake St. Clair	9/13/2006	362.41
	Stoney Creek Metropark-Baypoint Beach	Stoney Creek Lake-Impoundment	9/13/2006	1568.79
	New Baltimore Park Beach	Lake St. Clair	9/18/2006	478.58
Manistee				
	Magoon Creek	Lake Michigan	7/17/2006	1102.74
	Onekama Township Beach	Lake Michigan	7/17/2006	1747.53
	Sundling Park	Lake Michigan	7/17/2006	389.97
Menominee				
	Henes Park	Lake Michigan	8/2/2006	2419.6
	Henes Park	Lake Michigan	8/29/2006	818.86
Muskegon				
	Fox Lake Park Beach	Fox Lake	7/31/2006	381
	Fox Lake Park Beach	Fox Lake	8/7/2006	727
	Fox Lake Park Beach	Fox Lake	8/9/2006	736
	Fox Lake Park Beach	Fox Lake	8/14/2006	2257
	Harbour Towne Beach	Muskegon Lake	8/21/2006	1094
Oakland				
	Mission Springs Sub.	Darb Lake	6/19/2006	568
	Woodhull Lake Civic Assoc.	Woodhull Lake	6/19/2006	628
	Sunny Beach #2 - Clarkston Rd.	Walters Lake	6/19/2006	451
	Sunny Beach #1 - Eston Rd.	Walters Lake	6/19/2006	613
	Woodhull Lake Civic Assoc.	Woodhull Lake	6/20/2006	315
	Holly Township Beach	Bush Lake	6/20/2006	357
	Holly Township Beach	Bush Lake	6/21/2006	477
	Woodhull Lake Civic Assoc.	Woodhull Lake	6/22/2006	845
	Emerald Lake	Emerald Lake	6/27/2006	559
	Sherwood Property Owners	Sherwood Lake	6/27/2006	715
	Seven Lakes Park	Big Seven Lake	6/27/2006	687
	E.V. Mercer City Beach	Walled Lake	6/27/2006	770
	Woodhull Lake Civic Assoc.	Woodhull Lake	6/28/2006	475
	Emerald Lake	Emerald Lake	6/28/2006	594
	E.V. Mercer City Beach	Walled Lake	6/28/2006	579
	Wing Lake Farms Assoc.	Wing Lake	7/10/2006	349
	Bunny Run C.C.	Long Lake	7/12/2006	716
	Heather Lake Estates	Heather Lake	7/12/2006	410
	Rose Hill Center	Mud Lake	7/12/2006	788

Appendix F. Exceedances of WQS (300 *E. coli* per 100 ml daily geometric mean) for inland and Great Lakes beaches during 2006.

County	Beach Name	Waterbody Name	Testing Date	E. coli/100 mL
	Twin Shores Sub.	Long Lake	7/12/2006	314
	Union Lake Beach Club	Union Lake	7/12/2006	507
	E.V. Mercer City Beach	Walled Lake	7/12/2006	448
	Beachwalk Apartments	Walled Lake	7/12/2006	961
	Reed Lake Property Owners	Reed Lake	7/12/2006	589
	Mission Springs Sub.	Darb Lake	7/12/2006	679
	St. Mary's Park	Orchard Lake	7/12/2006	625
	Pontiac Yacht Club	Cass Lake	7/12/2006	1041
	Walnut Lake Estates	Walnut Lake	7/12/2006	373
	Camp Dearborn - Lake #1	Phillips Lake	7/12/2006	953
	Camp Dearborn - Lake #5	Phillips Lake	7/12/2006	2419
	Camp Dearborn - Lake #5	Phillips Lake	7/13/2006	2419
	Bunny Run C.C.	Long Lake	7/13/2006	327
	Camp Dearborn - Lake #5	Phillips Lake	7/17/2006	371
	Woodhull Lake Civic Assoc.	Woodhull Lake	7/17/2006	1867
	Woodhull Lake Civic Assoc.	Woodhull Lake	7/19/2006	851
	Woodhull Lake Civic Assoc.	Woodhull Lake	7/20/2006	2087
	Camp Dearborn - Lake #5	Phillips Lake	7/25/2006	414
	Woodhull Lake Civic Assoc.	Woodhull Lake	7/25/2006	629
	Rose Hill Center	Mud Lake	7/25/2006	303
	Camp Dearborn - Lake #5	Phillips Lake	7/26/2006	340
Oceana				
	Whiskey Creek	Lake Michigan	7/10/2006	1392.34
Osceola				
	Crawford Park	Muskegon River	6/27/2006	365.72
Otsego				
	Otsego State Park	Otsego Lake	7/11/2006	341.71
	Otsego State Park	Otsego Lake	7/18/2006	687.41
Ottawa				
	Maplewood Lake Park	Maplewood Lake	6/7/2006	707.8782
	Dunton Park	Lake Macatawa	6/21/2006	2420
	Tunnel Park	Lake Michigan	6/21/2006	1381.652
	Kirk Park	Lake Michigan	6/21/2006	661.6484
	Fallen Leaf Park	Lake Macatawa	6/21/2006	2420
	Kouw Park	Lake Michigan	6/21/2006	884.6897
	Windsnest Park	Lake Michigan	6/21/2006	697.0477
	Dunton Park	Lake Macatawa	7/12/2006	2420
	Maplewood Lake Park	Maplewood Lake	7/12/2006	651.61
	Maplewood Lake Park	Maplewood Lake	7/13/2006	567.02
	Dunton Park	Lake Macatawa	7/13/2006	402.39
	Dunton Park	Lake Macatawa	7/18/2006	553.9355
	Maplewood Lake Park	Maplewood Lake	7/18/2006	653.3719
	Maplewood Lake Park	Maplewood Lake	7/26/2006	387.0179
	Maplewood Lake Park	Maplewood Lake	8/2/2006	1125.35

Appendix F. Exceedances of WQS (300 *E. coli* per 100 ml daily geometric mean) for inland and Great Lakes beaches during 2006.

County	Beach Name	Waterbody Name	Testing Date	E. coli/100 mL
	Maplewood Lake Park	Maplewood Lake	8/9/2006	549.18
	Dunton Park	Lake Macatawa	8/16/2006	1019.97
	Maplewood Lake Park	Maplewood Lake	8/16/2006	496.69
	Dunton Park	Lake Macatawa	8/23/2006	469.13
	Dunton Park	Lake Macatawa	8/30/2006	403.36
Roscommon				
	Richfield Twp. Public Fishing Site	Lake St. Helen	7/24/2006	321.01
Sanilac				
	Lexington County Park	Lake Huron	7/11/2006	325
St. Clair				
	Keewadhin Road Beach	Lake Huron	7/10/2006	637
	Chrysler Park Beach	St. Clair River	7/12/2006	742
	Chrysler Park Beach	St. Clair River	7/26/2006	852
	Keewadhin Road Beach	Lake Huron	7/31/2006	479
	Washington Street Park	Lake Huron	7/31/2006	411
	Conger-Lighthouse Beach	Lake Huron	8/7/2006	616
	Holland Road Beach	Lake Huron	8/15/2006	313
	Lakeside Beach	Lake Huron	8/15/2006	387
Van Buren				
	Van Buren State Park Beach	Lake Michigan	6/19/2006	443.39
Washtenaw				
	Independence Lake County Park	Independence Lake	8/10/2006	343
Wayne				
	Pier Park	Lake St. Clair	5/12/2006	1565
	Wilcox Lake	Rouge River	5/15/2006	374.64
	Pier Park	Lake St. Clair	5/15/2006	462
	Wilcox Lake	Rouge River	6/20/2006	646
	Pier Park	Lake St. Clair	6/22/2006	1407
	Phoenix Lake	Rouge River	6/23/2006	969.42
	Phoenix Lake	Rouge River	6/30/2006	707.61
	Pier Park	Lake St. Clair	7/3/2006	397
	Pier Park	Lake St. Clair	7/12/2006	366
	Phoenix Lake	Rouge River	7/13/2006	1142.9
	Wilcox Lake	Rouge River	7/18/2006	1414.21
	Wilcox Lake	Rouge River	7/21/2006	559.67
	Phoenix Lake	Rouge River	7/21/2006	832.35
	Van Buren Township Park	Belleville Lake	7/21/2006	478
	Pier Park	Lake St. Clair	7/31/2006	337
	Wilcox Lake	Rouge River	8/1/2006	735
	Wilcox Lake	Rouge River	8/18/2006	335.04
	Phoenix Lake	Rouge River	8/25/2006	1331.93
	Wilcox Lake	Rouge River	8/30/2006	995.72
	Phoenix Lake	Rouge River	8/30/2006	349.52

Appendix F. Exceedances of WQS (300 *E. coli* per 100 ml daily geometric mean) for inland and Great Lakes beaches during 2006.

County	Beach Name	Waterbody Name	Testing Date	E. coli/100 mL
	Wilcox Lake	Rouge River	9/6/2006	1105.94
	Phoenix Lake	Rouge River	9/6/2006	778.11
	Pier Park	Lake St. Clair	9/13/2006	500
	Phoenix Lake	Rouge River	9/15/2006	967.13
	Wilcox Lake	Rouge River	9/18/2006	1602.58
	Wilcox Lake	Rouge River	9/20/2006	1135.05
	Phoenix Lake	Rouge River	9/20/2006	700.22
	Wilcox Lake	Rouge River	9/26/2006	734.59
Wexford				
	Manton Park	Billings Lake	6/20/2006	526.4
	Manton Park	Billings Lake	6/22/2006	314
	Manton Park	Billings Lake	6/28/2006	469.1
	Manton Park	Billings Lake	8/28/2006	944.2