MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY WATER BUREAU MARCH 2006

STAFF REPORT

MICHIGAN BEACH MONITORING YEAR 2004 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.
- 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 2004 Annual Report contains information about the beach monitoring program, rule citations, and water quality data for 2004.

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. Representatives of health departments that are authorized to test the water at bathing beaches are required to notify various entities of the test results within 36 hours of conducting a test or evaluation. The 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. Beaches offered to the public must have signs posted as to whether they are tested. These requirements are stated in R 333.12541 of Act 368.

Funding for Beach Monitoring

Prior to 2000, health departments relied on local funding to conduct beach monitoring programs. Local funding is often not sufficient to execute a comprehensive monitoring program. The MDEQ awards Clean Michigan Initiative-Clean Water Fund (CMI-CWF) and Beaches Environmental Assessment and Coastal Health Act (BEACH Act) grants 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.

Prior to the availability of grant funding in 2000, 20 counties monitored their beaches with local funding. Since then, the number of counties with a beach monitoring program has increased with the assistance of state and federal grants. Twenty-four counties monitored at least 1 of their beaches in 2000, 36 counties monitored in 2001, 26 counties monitored in 2002, 38 counties monitored in 2003, and 53 counties monitored in 2004. See Appendices A and B for beaches that were monitored in inland areas and along the Great Lakes, respectively, in 2004.

CMI-CWF Grants

The CMI-CWF bond initiative resulted in a substantial increase in annual funding for statewide surface water quality monitoring beginning in 2000. The CMI-CWF offers reliable funding for the monitoring of surface water over a period of approximately 15 years. In 2000 and 2001, CMI-CWF monies were distributed for inland and Great Lakes beach monitoring programs. Beginning in 2002, CMI-CWF funds were designated for inland beaches only due to the availability of federal funding for Great Lakes beaches.

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

BEACH Act Grants

The MDEQ is allocated grant funds by the United States Environmental Protection Agency (USEPA), as authorized by the federal BEACH Act. These grant funds have been designated for Great Lakes beaches and assist various organizations with their beach monitoring programs. State, local, and tribal governments having coastal waters are eligible to apply for the BEACH Act grants. The USEPA (2002) has published performance criteria that must be met by grant recipients.

The MDEQ distributed \$269,204 of BEACH Act funds in 2003, to monitor beaches in 29 counties located along the Great Lakes. The MDEQ distributed \$244,873 of BEACH Act funds in 2004, to monitor beaches in 33 counties located along the Great Lakes (Appendix D).

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 result of swimming in contaminated water although other illnesses can occur. Table 1 provides a list of waterborne pathogens and the illnesses associated with them. The severity of the disease or illness depends on the exposure and the type of pathogen. The USEPA (1986, 2002) has determined that *E. coli* is the best indicator for the presence of waterborne pathogens. *E. coli* is also used as the indicator because testing for other pathogens in a water sample is virtually impossible because of the cost and the lack of analytical methods.

Sources of Bacterial Contamination

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

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

Failing septic systems can cause leaching and/or runoff into the waterways, causing bacterial contamination. Urban storm water runoff from roads, roofs, construction sites, parking lots, etc., may contain fecal matter from pets and urban wildlife. Excessive waterfowl near the beaches and animal waste runoff from farms and large Concentrated Animal Feeding Operations (CAFOs) 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, WQS, 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.

CREATE AND MAINTAIN A STATEWIDE DATABASE

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 closings, 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) of Act 368, 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, whereas all other health departments are encouraged to report their data via the Web site. Data for 54 counties are currently available on the Web site.

COMPILE DATA TO DETERMINE OVERALL WATER QUALITY

List of Beaches

Michigan inland and Great Lakes beaches that have been identified by local health departments and the MDEQ are listed in Appendix A and Appendix B, respectively. The beaches are arranged alphabetically, by county, and the monitoring status for each beach is indicated. The beaches are also listed on the beach Web site. There are 472 public beaches on inland lakes and rivers and 411 public beaches on the Great Lakes. 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 2004.
- Figure 3: Michigan Great Lakes Beaches with WQS Exceedances in 2004.
- Figure 4: Michigan Great Lakes Beaches Not monitored in 2004.

The MDEQ is planning to create similar maps for public beaches on Michigan's inland lakes.

Synopsis of Data

In 2004, beach monitoring was conducted in 54 out of the 83 counties in Michigan. A total of 494 public beaches (290 inland, 204 Great Lakes) were monitored in these counties. Two hundred of the 6,551 daily samples (3 percent) collected at these 494 beaches exceeded the WQS of 300 *E. coli* per 100 ml (Appendix E). The exceedances were reported for 119 beaches, which represent 24 percent of the monitored beaches (Appendix E). Sixty-five inland beaches accounted for 103 exceedances: 42 beaches reported 1 exceedance, 17 beaches reported 2, 2 beaches reported 3, 1 beach reported 4, 2 beaches reported 5, and 1 beach reported 7 exceedances. Fifty-four Great Lakes beaches accounted for 97 exceedances: 35 beaches reported 1 exceedance, 9 beaches reported 2, 5 beaches reported 3, 1 beach reported 4, 1 beach reported 5, two beaches reported 6, and 1 beach reported 8 exceedances.

In 2004, there were 92 beach closures or advisories, totaling 578 days. In previous years, there were 100 beach closures or advisories in 1999, 276 in 2000, 119 in 2001, 117 in 2002, and 140 in 2003.

EVALUATE THE EFFECTIVENESS OF MDEQ PROGRAMS IN ATTAINING WQS FOR PATHOGEN INDICATORS

Beach Water Quality Data that does not Meet WQS

Water quality protection has been a great concern in Michigan and depends on the collective efforts of water pollution prevention programs. As part of the beach monitoring program, described in the Strategy, 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 help identify sources of pollution that affect beach water quality and to determine which water bodies are not meeting WQS.

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 1 (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 the 2002 and 2003 beach monitoring data, 26 beaches were added to the Section 303(d) list because they met at least one of the three criteria for placement of a beach on the TMDL list. Based on the 2003 and 2004 beach monitoring data, 14 beaches were added to the Section 303(d) list because they met at least one of the three criteria for placement of a beach on the TMDL list. There are a total of 40 beaches on the Section 303(d) list.

ADDITONAL PROJECTS

There are several ongoing efforts at the federal level concerning beach monitoring. These include:

• Epidemiological Studies

As a requirement of the BEACH Act, the USEPA is developing faster laboratory test methods (rapid test) and more effective indicators to determine potential health risks from exposure to pathogens in coastal recreational waters. The USEPA is conducting the National Epidemiologic and Environmental Assessment of Recreational (NEEAR) Water Study to help meet these program goals. Individuals at selected beaches were asked about their contact with beach water and approximately a week later, a follow-up phone interview is conducted to record any illness or symptoms experienced since the original interview. Water samples are collected the day of the initial interview and analyzed for indicators of bacterial loads using the trial rapid test. Data from the NEEAR study will be evaluated for correlations between swimming in bacterial polluted waters and the occurrence of human illness.

Informing the Public

As a requirement of the BEACH Act, the USEPA created several web pages for beach information that are accessible from the home page at https://www.epa.gov/beaches, along with an online directory of information regarding the water quality at our nation's beaches called, "Beach Advisory Closing Online Notification," which can be found at (The link provided was broken and has been removed). The Web site is updated as information becomes available.

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Water Bureau

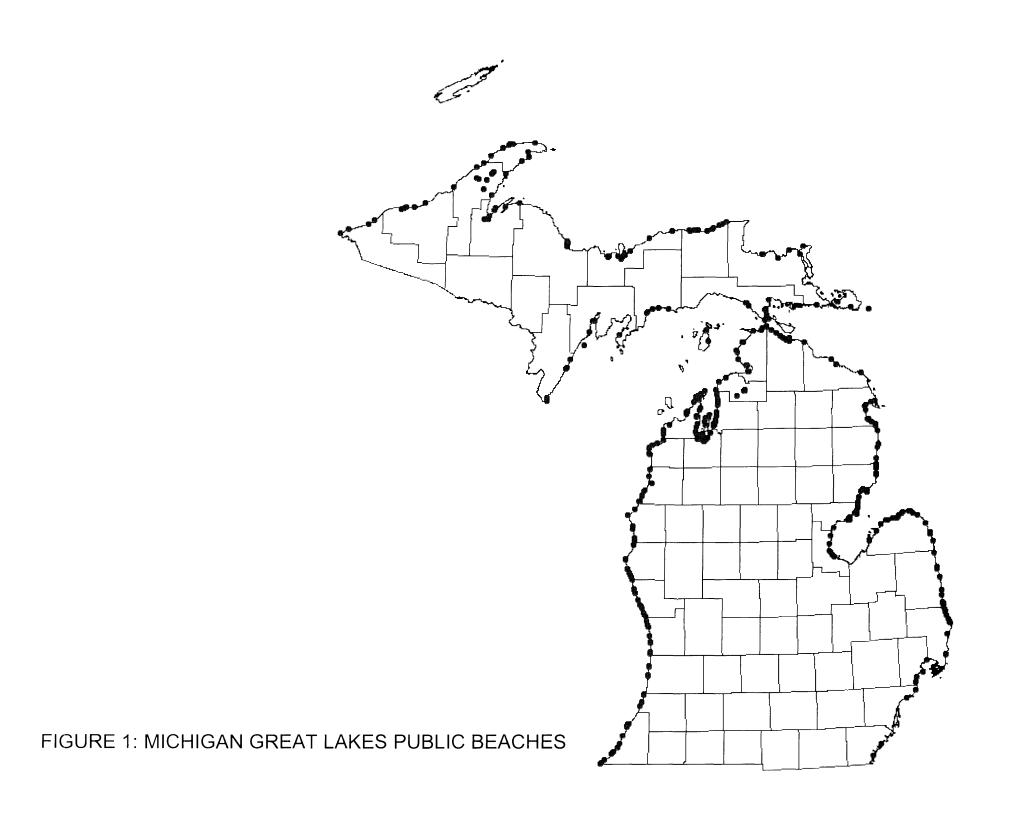
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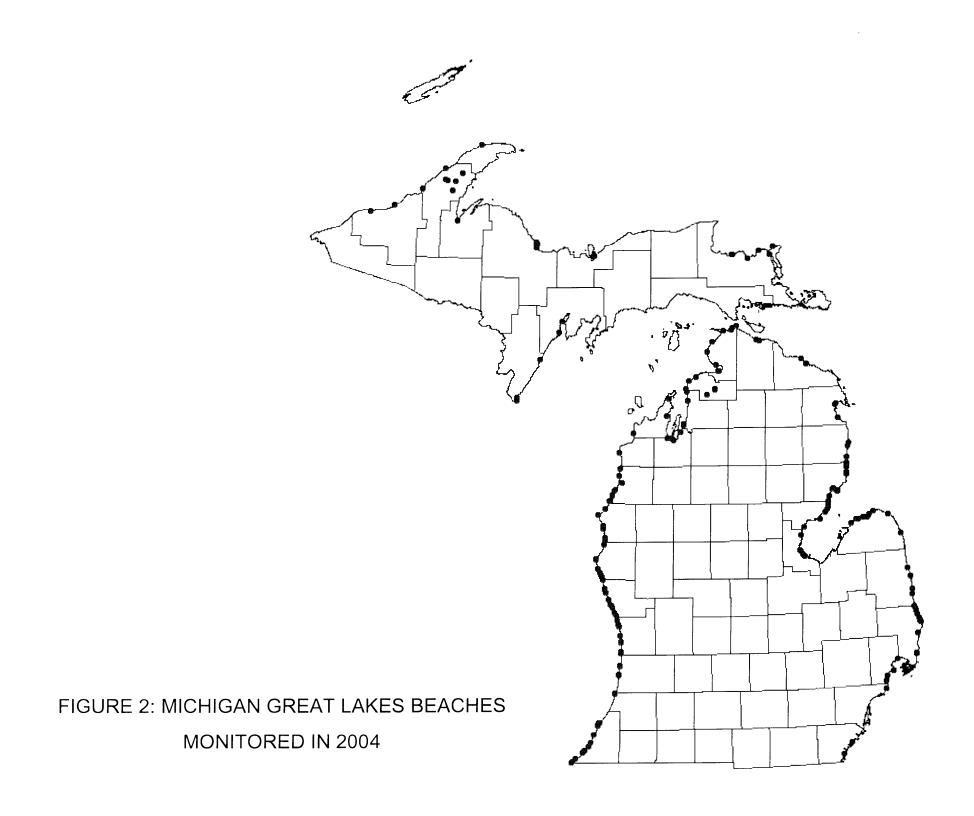
- MDEQ. 1997. A Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters. Michigan Department of Environmental Quality. Staff Report #MI/DEQ/SWQ-96/152. January 1997.
- USEPA. 1986. Ambient Water Quality Criteria for Bacteria-1986. EPA 440/5-84/002.
- USEPA. 2001. Protocol for 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.

Table 1. Waterborne Pathogens

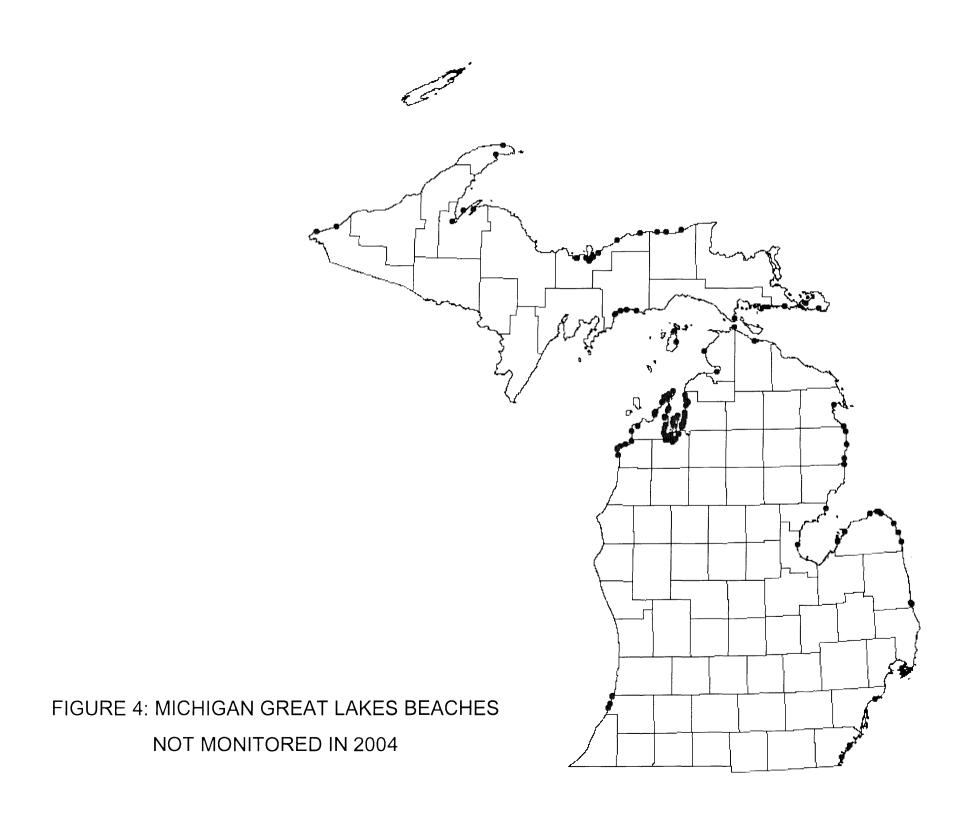
Pathogen		Disease	Effects
Bacteria	Escherichia coli (enteropathogenic)	Gastroenteritis	Vomiting, diarrhea, death in susceptible populations
	Helicobacter pylori	Gastritis	Diarrhea. Peptic ulcers are a long-term sequela
	Legionella pneumophila	Legionellosis	Acute respiratory illness
	Leptospira	Leptospirosis	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 enterolitica	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









County	Monitoring Status	Beach Name	Waterbody Name
Alcona			
	Not Monitored	Alcona Park	Alcona Pond
	Not Monitored	City Park	Lake Cadillac
	Not Monitored	Tyler Creek Bear Creek	Tyler Creek Bear Creek
Allegan			
	Monitored	Dumont Lake County Park Beach	Dumont Lake
	Monitored	Ely Lake Campground Beach	Ely Lake
	Monitored	Gun Lake County Park Beach	Gun Lake
	Monitored	Little John Lake County Park Beach	Little John Lake
	Monitored	Pine Point Campground Beach	Swan Creek Pond
Alpena			
-	Monitored	Beaver Lake Park	Beaver Lake
	Monitored	Long Lake Day Use	Long Lake
	Monitored	Long Lake Park	Long Lake
	Monitored	Sunken Lake County Park	Sunken Lake
Antrim			
	Not Monitored	Day Park, Alden	Torch Lake
	Monitored	Day Park, Torch Lake Township Park	Torch Lake
	Monitored	Richardi Park	Lake Bellaire
	Monitored	Thurston Park	Central Lake
	Monitored	Torch River Bridge	Torch Lake
	Not Monitored	Torch River Sand Bar	Torch River
	Monitored	Wooden Shoe Park	Elsworth Lake
Arenac			
	Monitored	Big Bend Campground	Man made Pond
	Not Monitored	DNR Access	Au Gres River
	Monitored	Flint Park Hunt Club	Lake
	Monitored	Oasis Lake County Park	Oasis Lake
	Monitored	Outdoor Adventures	Man made Pond
	Not Monitored	Pine River Public Access	Pine River
Barry			
•	Monitored	Charlton Park	Thornapple Lake
	Monitored	Main Beach - Day use Area	Gun Lake
	Monitored	Old Beach - Day use Area	Gun Lake
	Monitored	Prairieville Township Park	Gull Lake
	Monitored	Yankee Springs Recreation Area Campground Beach	Gun Lake
Bay			
	Monitored	Boat Launch on Kawkawlin River	Kawkawlin River
	Monitored	Vet's Park North Bay City	Saginaw River
	Monitored	Vet's Park South River Rd.	Saginaw River
Benzie			
	Monitored	Bellows	Crystal Lake
	Monitored	South shore near Beulah	Crystal Lake

County	Monitoring Status	Beach Name	Waterbody Name
Berrien	N . N . 5 . 1		C. T. I.D.
	Not Monitored	Bertrand Park	St. Joseph River
	Not Monitored	Niles - French Paper	St. Joseph River
	Not Monitored	Niles - Marmont	St. Joseph River
_	Not Monitored	Paw Paw Lake	Paw Paw Lake
Branch			
	Monitored	Memorial Park	Messenger Lake
	Monitored	Quincy Park	First Lake
Calhou	n		
	Not Monitored	Battle Creek	Goguac Lake
	Not Monitored	Springport	Duck Lake
Charley	voix		
	Monitored	Hudson Township Park	Huffman Lake
	Monitored	Melrose Township Park	Walloon Lake
	Monitored	Thumb Lake Beach	Thumb Lake
Cheboy	gan		
•	Monitored	Aloha State Park	Mullett Lake
	Not Monitored	Black Lake SFCG	Black Lake
	Not Monitored	Bluffs Beach	Black Lake
	Not Monitored	Boy Scout Launch	Mullett Lake
	Monitored	Burt Lake State Park	Burt Lake
	Monitored	Devoe Beach	Burt Lake
	Not Monitored	Foot Road Park	Mullett Lake
	Monitored	Hoberts Launch	Mullett Lake
	Monitored	Hoppie's Launch	Burt Lake
	Monitored	Maple Bay Park	Burt Lake
	Monitored	Polish Line Beach	Mullett Lake
	Not Monitored	Ryder's Landing	Douglass Lake
	Monitored	Topinabee Park	Mullett Lake
	Not Monitored	Webber Lake State Park	Webber Lake
Chipp	ewa		
Спірр	Monitored	Caribou Lake	Caribou Lake
	Monitored	Dukes Lake	Dukes Lake
	Monitored	Kinross Lake	Kinross Lake
	Monitored	Monocle Lake	Monocle Lake
	Monitored	Soldiers Lake	Soldiers Lake
	Monitored	Trout Lake	Carp Lake
Clare	Monted	, wat zame	Curp Lune
Clare	Maritania	A ald Lulia Danak	A old Lulu
	Monitored	Arnold Lake Beach	Arnold Lake Bertha Lake
	Monitored	Bertha Lake Beach	
	Monitored	Cedar Shores Beach	Townline Lake
	Not Monitored	City of Clare Park	Shamrock Lake
	Monitored	Cranberry Lake South	Cranberry Lake
	Monitored	Crooked Lake Beach	Crooked Lake
	Monitored	Dodge Lake Beach	Dodge Lake
	Not Monitored	Hillerest Public Landing	Crooked Lake
	Not Monitored	Lake George Public Landing	George Lake

County Monitoring Status	Beach Name	Waterbody Name
Clare-continued		
Monitored	Lake of the Pines	Doc and Tom Lake
Monitored	Lilly Lake Beach	Lilly Lake
Monitored	Long Lake Beach	Long Lake
Monitored	Muskegon River Twp. Park	Muskegon River
Monitored	Oak Hills Children's Camp	Hayes Lake
Monitored	Sand Lake Beach	Sand Lake
Monitored	Sandy Shores Beach	Grass Lake
Monitored	Shingle Lake Park	Shingle Lake
Monitored	Silver Lake Park	Silver Lake
Monitored	Wilson Lake State Park	Budd Lake
Crawford		
	Neath III aim Casa Deal	Itinaina Lata
Monitored	North Higgins State Park	Higgins Lake
Eaton		
Monitored	Fox Memorial Park	Fox Memorial Park
Monitored	Lincoln Brick Park	Grand River
Emmet		
Monitored	Little Traverse Township Beach	Crooked Lake
Monitored	Oden Beach	Crooked Lake
Genesee		
Not Monitored	McCaslin Lake	McCaslin Lake
Not Monitored	McKane Lake	McKane Lake
Not Monitored	Lake Shinangaug	Lake Shinangaug
Not Monitored	Crane Lake	Crane Lake
Not Monitored	Linden Mill Pond	Linden Mill Pond
Not Monitored	Loon Lake	Loon Lake
Not Monitored	Marl Lake	Marl Lake
Not Monitored	Pine Lake	Pine Lake
Not Monitored	Squaw Lake	Squaw Lake
Not Monitored	Thread Lake	Thread Lake
Not Monitored	Flagstone Point	Flagstone Point
Not Monitored	Kearsley Reservoir	Kearsley Resrvoir
Not Monitored	Mott Lake Stepping	Mott Lake Stepping
Not Monitored	Lake Helene	Lake Helene
Not Monitored	Golden Rod	Golden Rod
Not Monitored	Smokerise	Smokerise
Not Monitored	Lake Ponemah at Drain	Lake Ponemah
Not Monitored	Barnum Lake	Barnum Lake
Not Monitored	Beach at Hasler Lake	Hasler Lake
Monitored	Beach at Pinewood Lake	Pinewood Lake
Monitored	Bluebell Beach	Mott Lake
Monitored	Bluegill Boat Ramp	Mott Lake
Monitored	Boat Ramp at Buell Lake	Buell Lake
Monitored	Buttercup Beach	Holloway Reservoir
Monitored	Camp Copneconic	Copneconic Camp
Monitored	City Park Beach	Silver Lake
Monitored	Clover Beach	Byram Lake
Not Monitored	Copneconic Camp	Copneconic Lake
Monitored	Covenant Hill Camp	Covenant Hill Camp
	· · · · · · · · · · · · · · · · · · ·	3

County	Monitoring Status	Beach Name	Waterbody Name
Genesee-	continued		
	Monitored	Crooked Lake	Crooked Lake
	Monitored	DNR Boat Dock	Fenton Lake
	Monitored	DNR Boat Launch at Lake Ponemah	Lake Ponemah
	Monitored	DNR Boat Launch at Lobdell Lake	Lobdell Lake
	Monitored	Dollar Lake	Dollar Lake
	Not Monitored	Fenton Lake Marina	Fenton Lake
	Monitored	Hasler Lake Campground	Hasler Lake
	Monitored	Lake Linda	Lake Linda
	Monitored	Myers Lake	Myers Lake
	Monitored	Silver Lake Marina	Silver Lake
	Monitored	Township Hall	Fenton Lake
	Monitored	Walleye Pike Dock	Holloway Reservoir
	Monitored	West Sister Lake	West Sister Lake
Gladw	in		
	Monitored	Beaverton City Park	Ross Lake
	Monitored	Cedar River Campground Beach	Cedar River
	Not Monitored	Estey Rd. Access	Tittabawassee River
	Monitored	Gilman Springs Canoe Launch	Tittabawassee River
	Monitored	Gilman Springs Swimming Area	Flowing well/pond
	Monitored	Gladwin City Park	Cedar River
	Monitored	Gladwin North Park	Cedar River
	Monitored	Good News Camp	Tittabawassee River
	Monitored	Hoister Lake Beach	Hoister Lake
	Monitored	House Lake	House Lake
	Monitored	Lake Four	Lake Four
	Monitored	Lost Haven Beach	Lyle Drain/Tobacco
	Monitored	Pine Street Public Access	Tittabawassee River
	Monitored	Pratt Lake	Pratt Lake
	Not Monitored	Secord Lake	Secord Lake
	Not Monitored	Secord Lake - East	Secord Lake
	Monitored	Sugar Springs/Lake Lancer	Lake Lancer
	Monitored	Trout Lake State Forest Campground	Trout Lake
	Monitored	West River Dr. Boat Launch	Secord Lake
	Monitored	Wiggins Lake - at Clendening Rd.	Wiggins Lake
	Monitored	Wiggins Lake DNR Boat Launch	Wiggins Lake
	Monitored	Wixon Lake - West	Wixon Lake
Goge	bic		
8	Monitored	Gogebic County Park	Lake Gogebic
	Monitored	Lake Gogebic State Park Beach	Lake Gogebic
	Monitored	Sunday Lake Beach	Sunday Lake
Gran	nd Traverse	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Gi an	Monitored	Gilbert Beach	Long Lake (Mickey Lake)
	Monitored	Taylor Park	Long Lake (Mickey Lake) Long Lake (Mickey Lake)
¥¥211		TUSKA TUK	Long Dake (Mickey Lake)
Hills		D: 11 1 D 1	D: 11.
	Monitored	Bird Lake Beach	Bird Lake
	Monitored	Sandy Beach	Baw Beese Lake

County Houghton	Monitoring Status	Beach Name	Waterbody Name
Houghton	Monitored	Twin Lakes State Park	Lake Roland
Ingham		TWIN BARCE BARC LAIN	zake Kolana
mgnam	Monitored	Burchfield Park	Burchfield Pond
	Monitored	Hawk Island County Park	Hawk Island
	Monitored	•	
	Monitored	Lake Lansing Park South Valhalla Park	Lake Lansing Valhalla Pond
•	Widilliored	Valuatia ratk	Valliana Fond
Iosco			
	Not Monitored	Old Orchard Park	Foote Pond
	Not Monitored	Oscoda Township Park- Van Ettan Lake	Van Ettan Lake
Isabella	1		
	Monitored	Coldwater Park	Coldwater Lake
	Monitored	Deerfield County Park	Chippewa River
	Monitored	Halls Lake	Halls Lake
	Monitored	Herrick County Park	Borrow Pit
	Monitored	Millpond Park	Millpond
Jackso	n		
	Not Monitored	Clark Lake County Park	Clark Lake
	Not Monitored	Clear Lake County Park	Clear Lake
	Not Monitored	Gilletts Lake County Park	Gilletts Lake
	Not Monitored	Grass Lake County Park	Grass Lake
	Not Monitored	Lime Lake County Park	Lime Lake
	Not Monitored	Little Wolf Lake County Park	Little Wolf Lake
	Not Monitored	Pleasant Lake County Park & Campground	Pleasant Lake
	Not Monitored	Portage Lake County Park	Portage Lake
	Not Monitored	Round Lake County Park	Round Lake
	Not Monitored	Swains Lake County Park	Swains Lake
	Not Monitored	Vandercook Lake County Park	Vandercook Lake
	Not Monitored	Vineyard Lake County Park	Vineyard Lake
Kalan	1200		
	Monitored	Cold Brook County Park	Blue Lake
	Monitored	Fort Custer Recreation Area Beach	Eagle Lake
	Monitored	Markin Glen County Park	Swimmers Lake
	Monitored	Prarie View County Park	Hogsett Lake
	Monitored	Ramona Park	Long Lake
	Monitored	Robert Morris Park	Campbell Lake
	Monitored	Ross Township Park	Gull Lake
	Monitored	Sunset Lake Park	Sunset Lake
	Monitored	Timber Lake Campground	Timber Lake
	Monitored	Woods Lake Beach	Woods Lake
Kent			
22011	Not Monitored	Collins Park	Reeds Lake
	Not Monitored	Lincoln Lake Bantist Camp	Lincoln Lake
	Not Monitored	Lincoln Pines Resort	Lincoln Lake
	Not Monitored	Long Lake County Park	Long Lake
	Not Monitored	Myers Lake County Park	Myers Lake
	. tot . romitined	yers bane county rain	Myers care

County	Monitoring Status	Beach Name	Waterbody Name
Kent-con	tinued		
	Not Monitored	Scalley Lake Park	Scalley Lake
	Monitored	Tyler Creek Bear Creek	Tyler Creek Bear Creek
	Not Monitored	Versluis Park	Versluis Lake
	Not Monitored	Wabasis Lake County Park	Wabasis Lake
Leelana	u		
	Monitored	Nedow's (Barthalomew) Beach	Lake Leelanau
	Not Monitored	South Bar Lake - South end	South Bar Lake
Livings	ton		
	Monitored	Brighton State Recreation Area	Bishop Lake
	Monitored	Camp Innisfree	Bentley Lake
	Monitored	Camp Talahi	Chenago Lake
	Monitored	Green Valley Camp	Dibrova Lake
	Monitored	Howell City Park	Thompson Lake
	Monitored	Howell Nature Center	Pleasant Lake
	Monitored	Island Lake Recreation Area	Spring Mill Pond
	Monitored	Island Lake Recreation Area - Kent Lake	Kent Lake
	Monitored	Lake Chemung Outdoor Resort	Lake Chemung
	Monitored	Lakelands Golf & Country Club	Winans Lake
	Monitored	Nazarene Camp	Sandy Bottom Lake
	Monitored	Pine Hills Camp	Haynor Lake
	Monitored	Providence Medical Center	Pickerel Lake
	Monitored	Taylor's Beach	Cook Lake
	Monitored	Varsity Day Camp	Cordley Lake
	Monitored	Waldenwoods Resort	Lake Walden
	Monitored	Wildwood Ranch	Church Lake
Macon	nb		
	Monitored	Stoney Creek Metropark-Baypoint Beach	Stoney Creek Lake
	Monitored	Stoney Creek Metropark-Eastwood Beach	Stoney Creek Lake
Marqı	uette		
•	Not Monitored	Marquette Tourist Park Beach	Dead River Reservoir
	Not Monitored	Shiras Swimming Area	Shiras Pool
Meno	minee	-	
	Not Monitored	Hermansville Beach	Hermansville Lake
	Not Monitored	Shakey Lakes Campground	Shakey Lakes
Monr			y =======
:VIOIII	Not Monitored	Camp Lord Willing	Camp Lord Willing
	Not Monitored	Covered Wagon Campground	Covered Wagon
	Not Monitored	Heath Beach	Heath Beach Pond
	Not Monitored	K.C. Campground	K.C. Campground
	Not Monitored	Monroe KOA Campground	Monroe KOA
	Not Monitored	Pirolli's Campground	Pirollis
	Not Monitored	The Vine	The Vine
	Not Monitored	Totem Pole Campground Pond	(man-made pond)
	Not Monitored	Wilderness Retreat Campground	Wilderness Retreat
Mont			raciness inches
.v10111	morency Monitored	Clear Lake Day Use	Clear Lake
	.violiniouv.	Cital Lanciday CSC	CICAL LANC

County	Monitoring Status	Beach Name	Waterbody Name
Montmo	rency-continued		
	Monitored	Clear Lake State Park	Clear Lake
	Not Monitored	Crooked Lake Beach	Crooked Lake
	Monitored	East Twin Beach Albert Township Park	East Twin Lake
	Monitored	Ess Lake State Campground	Ess Lake
Muskeg	gon		
	Monitored	Blue Lake County Park Beach	Big Blue Lake
	Monitored	Deremo County Park	Big Blue Lake
	Monitored	Duck Lake State Park Beach	Duck Lake
	Monitored	Fox Lake Park Beach	Fox Lake
	Monitored	Fred Jacks Park	Bear Lake
	Not Monitored	Goodrich Park	White Lake
	Monitored	Harbour Towne Beach	Muskegon Lake
	Not Monitored	Laketon Township Beach	Bear Lake
	Monitored	Maple Park	White Lake
	Monitored	Mona Lake Park Beach	Mona Lake
	Monitored	Moore County Park Beach	Half Moon Lake
	Monitored	Muskegon State Park - Muskegon Lake Side	Muskegon Lake
	Monitored	Ross Park Beach	Mona Lake
	Monitored	Sunset Park	Wolf Lake
	Monitored	Twin Lake County Park Beach	Twin Lake
	Monitored	Wolf Lake County Park	Wolf Lake
Oakla	nd		
	Not Monitored	657 Dunleavy	Upper Pettibone
	Monitored	Addison Oaks Co. Park	Adams Lake
	Not Monitored	Alpha	Union Lake
	Monitored	Bald Mountain Rec. Area	Lower Trout
	Not Monitored	Banker's Sub.	Upper Straits Lake
	Monitored	Bay Court Park	Green Lake
	Not Monitored	Birch Park	Loon Lake
	Not Monitored	Bird Island Sub.	Oakland Lake
	Monitored	Bloomfield Parks & Rec./West Hills H.S.	Walnut Lake
	Not Monitored	Brendle Heights - Hillwood	Brendel Lake
	Monitored	Brown's Landing Mobile Home Park	Tipsico Lake
	Not Monitored	Burley & Barnsbury Streets	Union Lake
	Monitored	Camp Agawam Boy Scout Camp	Tommys Lake
	Monitored	Camp Dearborn - Lake #1	Phillips Lake
	Monitored	Camp Dearborn - Lake #5	Phillips Lake
	Monitored	Camp Gordanwood	Ekelund Lake
	Monitored	Camp Maas - Rodecker	Phillips Lake
	Monitored	Camp Maas- Sobell Beach	Phillips Lake
	Not Monitored	Camp Nahelu	Perry Lake
	Monitored	Camp Oakland - summer	Handsome Lake
	Monitored	Camp Ohiyesa - North	Fish Lake
	Monitored	Camp Wathana	Green Lake
	Not Monitored	Cass Lake Woods	Cass Lake
	Not Monitored	Cedar Crest Sub.	Cedar Island Lake
	Monitored	Christ the King Church Camp	Long Lake

County	Monitoring Status	Beach Name	Waterbody Name
Oakland-	continued		
	Not Monitored	Cloister-on-the-Lakes	Fox Lake
	Not Monitored	Cranberry Lake Village	Cranberry Lake
	Not Monitored	Crescent Highlands	Crescent Lake
	Not Monitored	Crescent Lake Park	Crescent Lake
	Not Monitored	Crystal Echo	Middle Straits Lake
	Not Monitored	Crystal Echo (the point)	Middle Straits Lake
	Not Monitored	Cunningham Park	Sylvan Lake
	Monitored	Davisburg Village Beach (Hart Community Center)	Mill Pond
	Monitored	Dodge Park #4	Cass Lake
	Not Monitored	Doll's Dock (Skip's Landing)	Lakeville Lake
	Monitored	E.V. Mercer City Beach	Walled Lake
	Monitored	Family Park	Round Lake
	Monitored	Ferndale	Sylvan Lake
	Monitored	Finnish Day Camp	Sun Lake
	Not Monitored	Green Acres / Green Valley Park	Green Lake
	Monitored	Greens Park Village Beach	Orion Lake
	Monitored	Groveland Oaks Co. Park - Paradise Beach	Stewart Lake
	Monitored	Haas Lake Park #1	Haas Lake
	Monitored	Haas Lake Park #2	Big Peat Lake
	Monitored	Haas Lake Park #3	Haas Lake
	Not Monitored	Hammond Estates	Hammond Lake
	Not Monitored	Harris Park	Lotus Lake
	Not Monitored	Harvey Lake Estates	Harvey Lake
	Not Monitored	Harvey Lake Heights	Harvey Lake
	Monitored	Heather Lake Estates	Heather Lake
	Monitored	Holly Recreation Area - Wildwood Beach	Wildwood Lake
	Monitored	Holly Rec. Area - Heron Beach	Heron Lake
	Monitored	Holly Township Beach	Bush Lake
	Not Monitored	Idlewild Sub.	Bass Lake
	Monitored	Independence Oaks Co. Park	Crooked Lake
	Monitored	Independence Twp. Village Beach	Deer Lake
	Monitored	Indianwood	Loon Lake
	Not Monitored	Jacksina Sub.	Rowe Lake
	Monitored	Keego Harbor city Beach	Cass Lake
	Not Monitored	Keego Harbor Trailer Park	Cass Lake
	Monitored	Kensington - Maple Beach	Kent Lake
	Monitored	Kensington - Martindale Beach	Kent Lake
	Monitored	Lake Angelus Lakeview Estates	Morgan Lake
	Not Monitored	Lake Braemar Estates - Tamryn Ct.	Braemar Lake
	Not Monitored	Lake Oakland Heights	Oakland Lake
	Not Monitored	Lake Oakland Shores	Oakland Lake
	Not Monitored	Lake Orion Heights	Orion Lake
	Monitored	Lakeshore Park	Walled Lake
	Not Monitored	Lakeview	Sylvan Lake
	Not Monitored	Lakeview Recreation	Carpenter Lake
	Not Monitored	Lakewood Farms - Crocus St.	Geneva Lake
	Not Monitored	Lakewood Farms - Sharon St.	Geneva Lake

County	Monitoring Status	Beach Name	Wodanka la V
Oakland	-continued		Waterbody Name
	Not Monitored	Lakewood Village	B
	Not Monitored	Lakewood Village Sub.	Brendel Lake
	Not Monitored	Lanarh St	Neva Lake
	Not Monitored	Ledgewood	Watkins Lake
	Not Monitored	Lotus Park	Sherwood Lake
	Not Monitored	Mary K. Sub.	Lotus Lake
	Not Monitored	Meagher Park'Woodland Manor	Tan Lake
	Not Monitored	Mission Springs Sub.	Davis Lake
	Not Monitored	Mountain View	Darb Lake
	Not Monitored	North	Lotus Lake
	Not Monitored	North Cove	Sears Lake
	Not Monitored	Oakridge Sub.	Walnut Lake
	Not Monitored	Outlot A	Sugden Lake
	Not Monitored	Pawlaks Campground	Upper Straits Lake
	Not Monitored	Pinecrest Shores	Brendel Lake
	Not Monitored	Pioneer Highlands	Bogie Lake
	Not Monitored	Pleasant Lake Highlands	Sylvan Lake
	Not Monitored	Pleasant Lake Manor	Pleasant Lake
	Not Monitored	Pleasant Lake Woods	Pleasant Lake
	Monitored	Pontiac Rec. Area	Pleasant Lake
	Monitored	Powers Picnic Sites	Pontiac Lake
	Monitored		Huron River
	Not Monitored	Proud Lake Rec. Area Campground Ravinewood East	Proud Lake
	Not Monitored	Ravinewood West	Sherwood Lake
	Not Monitored		Sherwood Lake
	Not Monitored	Rolling Acres	White Lake
	Monitored	Rose Hill Center	Mud Lake
	Monitored	Scripter Village Park Twp. Beach	Round Lake
	Monitored	Scuba Company	Stony Lake
	Monitored	Seven Lakes Park	Big Seven Lake
	Not Monitored	Seven Lakes State Park - campground	Sand Lake
	Not Monitored	Shady Beach	Upper Straits Lake
	Not Monitored	Sherwood Boat Ramp	Sherwood Lake
	Not Monitored	Shore Cliffs Estates	Orchard Lake
	Monitored	Shores at Bay Point	Lower Straits Lake
	Not Monitored	Silver Hill Road	Silver Lake
	Not Monitored	Silver Valley Sub.	Carpenter Lake
	Not Monitored Not Monitored	South	Sears Lake
	Not Monitored	St. Mary's	Orchard Lake
	Not Monitored	Stanley Beach	White Lake
	_	Stony	Middle Straits Lake
	Not Monitored	Stony Lake Park	Stony Lake
	Not Monitored	Sunny Beach #1 - Eston Rd.	Walters Lake
	Not Monitored	Sunny Beach #2 - Clarkston Rd.	Walters Lake
	Not Monitored	Sunset Club	Orion Lake
	Not Monitored	Sunset Sub.	Cedar Island Lake
	Not Monitored Monitored	Sylvan-on-the-Lakes	Cass Lake
	MORRING	Teeple Lake Rec. Area - Highland State Park	Teeple Lake

County Monitoring Status	Beach Name	Waterbody Name
Oakland-continued		
Monitored	Thelma Spencer Park	Avon Lake
Not Monitored	Tripps Sub. Park	Middle Straits Lake
Not Monitored	Twin Beach Park	Middle Straits Lake
Not Monitored	Union Lake Heights Sub. #1	Union Lake
Not Monitored	Union Lake Heights Sub. #2	Union Lake
Monitored	Upland Hills Farm	Prince Lake
Not Monitored	Walnut Lake Park	Walnut Lake
Not Monitored	Waterford Hill	Van Norman Lake
Not Monitored	West Acres	Middle Straits Lake
Not Monitored	Westwood Manor	Wing Lake
Not Monitored	Whipple Shores Sub.	Whipple Lake
Not Monitored	White Lake Trailer Park	White Lake
Not Monitored	Whitney St.	Watkins Lake
Not Monitored	Willow Beach Sub.	Cass Lake
Ogemaw		
Not Monitored	Rifle River Recreation Area, Campground Beach	Grousehaven Lake
Not Monitored	Rifle River Recreation Area, Day Use Area	Grousehaven Lake
Not Monitored	Rifle River Recreation Area, Devoe Lake Beach	Devoe Lake
Ontonagon		
Monitored	Bergland Township Park	Lake Gogebic
Monitored	Ontonagon County Park	Lake Gogebic
Osceola		
Monitored	Center Lake Bible Camp	Center Lake
Monitored	Center Lake Park	Center Lake
Monitored	City of Evart Campground	Muskegon River
Monitored	Crawford Park	Muskegon River
Monitored	Crittenton Park	Big Lake
Not Monitored	Diamond Lake	Diamond Lake
Monitored	DNR Access Diamond Lake	Diamond Lake
Monitored	DNR Access Hicks Lake	Hicks Lake
Monitored	DNR Access McCoy Lake	McCoy Lake
Monitored	DNR Access Todd Lake	Todd Lake
Monitored	DNR Access Wells Lake	Wells Lake
Monitored	Hersey Rd. Access	Muskegon River
Monitored	Kettunen Center	Center Lake
Monitored	Rose Lake County Park	Rose Lake
Monitored	Rose Lake Youth Camp	Rose Lake
Monitored	Sunrise Lake Park	Sunrise Lake
	Suitive Bane Fund	Summer Sunc
Otsego	Otenas County Produ	Chausa Lalia
Monitored	Otsego County Park Otsego State Park	Otsego Lake
Monitored	Otsego State Park	Otsego Lake
Ottawa		
Monitored	Dunton Park	Lake Macatawa
Monitored	Fallen Leaf Park	Fallen Leaf Lake
Monitored	Georgetown Community Park	Georgetown Lake
Monitored	Grose Park	Crookery Lake

County	Monitoring Status	Beach Name	Waterbody Name
Ottawa-c	ontinued		
	Monitored	Holland State Park	Lake Macatawa
	Monitored	Lakeside Beach	Spring Lake
	Monitored	Maplewood Lake Park	Maplewood Lake
	Monitored	Pottawattomie Park	Pottawattomie Bayou
Presque	Isle		
	Monitored	Grand Lake Northwest	Grand Lake
	Monitored	Grand Lake Public Access	Grand Lake
	Not Monitored	Lake May Public Access	Lake May
	Not Monitored	Millersburg Park	Ocquoec River
	Not Monitored	Ocquoec Falls Park	Ocquoec River
	Monitored	Onaway State Park	Black Lake
	Not Monitored	Shoepac Lake Camp Ground	Shoepac Lake
	Not Monitored	Tomahawk Lake Camp Ground	Tomahawk Lake
Roscon	nmon		
	Monitored	Backus Twp. Park	Backus Pond
	Monitored	Bambi Lake Camp	Bambi Lake (Sinkhole Lake)
	Monitored	Beaver Creek Road End	Higgins Lake
	Monitored	Camp Co-Be-Ac	Owens Lake
	Monitored	Denton Twp. Public Beach	Houghton Lake
	Not Monitored	DNR Public Fishing site	Higgins Lake
	Monitored	Gerrish Township Park	Higgins Lake
	Monitored	H.L. DNR Boat Launch and Park	Houghton Lake
	Monitored	H.L.State Forest Campground	Houghton Lake
	Monitored	Higgins Lake Public Fishing Site	Higgins Lake
	Monitored	Houghton Lake Heights	Houghton Lake
	Monitored	Houghton Lake Public Fishing Site	Houghton Lake
	Monitored	Kelly Beach	Higgins Lake
	Monitored	Old 27 DNR Access	Houghton Lake
	Monitored	Phoenix Park	Higgins Lake
	Monitored	Richfield Twp. Public Fishing Site	Lake St. Helen
	Monitored	S. Higgins Lake State Park	Higgins Lake
	Monitored	Sam-O-Set Road End	Higgins Lake
Sagin	aw		
	Not Monitored	Haithco Recreation Area	Haithco Lake
	Not Monitored	Lake of Dreams Campground	Lake of Dreams
St. Cl	air		
	Monitored	Beechgrove Campground	Beechgrove Lake
	Monitored	Fort Trodd Campground North	Fort Trodd Lake
	Monitored	Fort Trodd South	Fort Trodd Lake
	Monitored	Kimball Township Pond	Kimball Pond
St. Jo	seph		
	Monitored	Cade Lake Beach	Cade Lake
	Monitored	Nottawa Park	Sand Lake
	Monitored	Palmer Lake Beach	Palmer Lake
Tusc			
1 430	Not Monitored	Murphy Lake	Murphy Lake
	, vec mentioned	enjarj. earce	, respire bare

Appendix A. Michigan List of Beaches for Inland Lakes - 2004

County	Monitoring Status	Beach Name	Waterbody Name
Washte	naw		
	Monitored	Independence Lake County Park	Independence Lake
	Monitored	Pinckney Recreation Area	Half Moon Lake
	Monitored	Pinckney Recreation Area	Bruin Lake
	Monitored	Pinckney Recreation Area	Silver Lake
	Monitored	Waterloo Recreation Area	Sugarloaf Lake
Wayne			
	Monitored	Phoenix	Rouge River
	Monitored	Van Buren Township Park	Belleville Lake
	Monitored	Wilcox Lake	Rouge River
Wexfor	·d		
	Monitored	City Park	Lake Cadillac
	Monitored	Colfax Township Park	Lake Meauwataka
	Monitored	Kenwood Park	Lake Cadillac
	Monitored	Manton Park	Billings Lake
	Monitored	Mitchell State Park	Lake Mitchell

County	Monitoring Status	Beach Name	Waterbody Nam
Alcona			
	Not Monitored	Black River Public Access	Lake Huron
	Not Monitored	Greenbush Township	Lake Huron
	Monitored	Harrisville State Park	Lake Huron
	Not Monitored	Negwegon State Park	Lake Huron
	Not Monitored	Trask Lake Rd. Beach	Lake Huron
Alger			
	Not Monitored	Au Train Beach	Lake Superior
	Not Monitored	Bay Furnace Recreation Area Beach	Lake Superior Lake Superior
	Not Monitored	Christmas Beach	•
	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	Rathfoot Park Beach	Lake Superior
	Not Monitored	Roadside Park	Lake Superior
	Not Monitored	Sand Point	Lake Superior
	Not Monitored	Twelvemile Beach	Lake Superior
Allegan	rot montored	i weivemile Beach	Lake Superior
Megan	A.C. 15		
	Monitored	Douglas Beach	Lake Michigan
	Monitored	Oval Beach	Lake Michigan
	Monitored	Pier Cove 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 Hardwood Point	Lake Huron
	Monitored	Michekewis Beach	Lake Huron
	Monitored	Ossineke Beach	Lake Huron
	Not Monitored	Ossineke Campground	Lake Huron
	Not Monitored	Ossineke South Point	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	
	Monitored	Thompson Park	Lake Huron
	Not Monitored	Whitefish Bay	Lake Huron
Antrim		Winterian Bay	Lake Huron
	Not Monitored	A	
	Monitored Monitored	Antrim Creek Natural Area	Lake Michigan
	Monitored	Banks Twp. Park	Lake Michigan
		Barnes Park	Lake Michigan
	Monitored	Elk Rapids	Lake Michigan
	Not Monitored	Elk Rapids Bathing Beach	Lake Michigan
	Not Monitored	Elk Rapids County Park	Lake Michigan
	Not Monitored	Elk Rapids Park	Lake Michigan

County	Monitoring Status	Beach Name	Waterbody Name
Antrim-c	ontinued		
	Not Monitored	Erickson Road	Lake Michigan
	Not Monitored	Lore Road 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	Road Crossing near Winters Road	Lake Michigan
	Not Monitored	Veterans Memorial Park	Lake Michigan
Arenac		,	
	Monitored	Arenac County Park	Saginaw Bay-Lake Huron
	Not Monitored	Augres Township Park Beach	Inner Saginaw Bay-Lake Huron
	Monitored	Bessinger Rd. Beach	Saginaw Bay-Lake Huron
	Not Monitored	Booth Rd Beach	Inner Saginaw Bay-Lake Huron
	Not Monitored	City of Augres Public Access	Inner Saginaw Bay-Lake Huron
	Monitored	Dyer Rd. Beach	Saginaw Bay-Lake Huron
	Monitored	Foster Rd. Beach	Saginaw Bay-Lake Huron
	Not Monitored	Gordon Rd Beach	Inner Saginaw Bay-Lake Huron
	Monitored	Hammel Beach Rd. 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-Lake Huron
	Monitored	Twining Rd. 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-Lake Superior
	Not Monitored	First Sand Beach	Keweenaw Bay-Lake Superior
	Not Monitored	Lanse Township Park	Keweenaw Bay-Lake Superior
	Monitored	LAnse Waterfront Park	Keweenaw Bay-Lake Superior
	Not Monitored	Mouth of the Huron River	Lake Superior
	Not Monitored	Second Sands Beach	Keweenaw Bay-Lake Superior
Bay			• •
	Monitored	Bay City State Recreation Area	Inner Saginaw Bay-Lake Huron
	Monitored	Brissette Beach Township Park	Inner Saginaw Bay-Lake Huron
	Not Monitored	Nayanquing Point Wildlife Area	Inner Saginaw Bay-Lake Huron
	Monitored	Pinconning Park	Inner Saginaw Bay-Lake Huron
	Monitored	South Linwood Beach Township Park	Inner Saginaw Bay-Lake Huron
	Monitored	Wenona Beach	Inner Saginaw Bay-Lake Huron
Benzie			Ç ,
Denzie	Not Monitored	Alberta Village Beach & Bluffs	Lake Michigan
	Not Monitored	Esch Road Otter Creek	Lake Michigan
	Monitored	Frankfort: Anchor Rd Beach	Lake Michigan
	Not Monitored	North Bar	Lake Michigan
	Not Monitored Not Monitored	Platte River Point	Lake Michigan
	Not Monitored	Point Betsie Lighthouse Beach	Lake Michigan
	Not Monitored	Zettenberg Preserve	Lake Michigan
	. vot . ronnored	Zettenberg Freserve	East Memgan

County	Monitoring Status	Beach Name	Waterbody Name
Berrien			
	Monitored	Cherry Beach	Lake Michigan
	Monitored	Grand 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
	Monitored	New Buffalo City	Lake Michigan
	Monitored	Rocky Gap	Lake Michigan
	Monitored	Silver Beach	Lake Michigan
	Monitored	Tiscornia Park	Lake Michigan
	Monitored	Warren Dunes	Lake Michigan
	Monitored	Weko Beach	Lake Michigan
Charlevoi	ix		bake wienigan
	Not Monitored	Beaver Island Public Beach	Lake Michigan
	Not Monitored	Bill Wagner Memorial Campground Beach	Lake Michigan
	Monitored	Depot Beach	-
	Monitored	East Jordan Tourist Park	Lake Charlevoix-Lake Michigan
	Monitored	Elm Point Beach	Lake Charlevoix-Lake Michigan
	Monitored	Ferry Beach	Lake Charlevoix-Lake Michiga
	Monitored	Fisherman's Island State Park	Lake Charlevoix-Lake Michiga
	Monitored	Harbor Beach	Lake Michigan
	Not Monitored	Hayes Township Park	Lake Michigan
	Not Monitored	Iron Ore Bay Beach	Lake Charlevoix-Lake Michigan
	Monitored	Lake Michigan Beach	Lake Michigan
	Monitored	Mt. McSauba Beach	Lake Michigan
	Monitored	Norwood Park	Lake Michigan
	Monitored	Peninsula Beach	Lake Michigan
	Not Monitored	Tannery Park	Lake Charlevoix-Lake Michigan
	Not Monitored	Washington Street Beach	Lake Charlevoix-Lake Michigan
	Monitored	Whiting Park Beach	Lake Charlevoix-Lake Michigan
	Monitored	Young State Park Beach	Lake Charlevoix-Lake Michigan
Cheboyga		roung state rank Beach	Lake Charlevoix-Lake Michigan
~.· 5"	Monitored	Cheboygan City Park	
	Monitored		Lake Huron
	Monitored	Cheboygan State Park Dunken Bay Ditta Park	Lake Huron
	Not Monitored		Lake Huron
	Not Monitored	Huron Street Beach	Lake Huron
	Monitored	Mackinaw City Beach	Lake Michigan
	Monitored	Mackinaw City Lighthouse Park	Lake Huron
	Monitored	Mill Creek public access	Lake Huron
Chippewa		Wawatam City Park	Lake Huron
cmbhewa		D : 6	
	Monitored	Bayview Campground	Lake Superior
	Monitored	Big Pines Beach	Lake Superior
	Not Monitored	Big Shoal Cove Beach	Lake Huron

County	Monitoring Status	Beach Name	Waterbody Name
Chippewa-	continued		
	Monitored	Brimley State Park	Lake Superior
	Not Monitored	Detour Albany Beach	Lake Huron
	Not Monitored	Drummond Island Township Park	Lake Huron
	Monitored	Four Mile Beach	St. Marys River
	Monitored	Sherman Park	Lake Superior
	Monitored	Sugar Island Township Park	St. Marys River
Delta			
	Monitored	Escanaba Bathing Beach	Lake Michigan
	Monitored	Fayette State Park	Lake Michigan
	Monitored	Fuller Park	Lake Michigan
	Monitored	Gladstone Bathing Beach/Van Cleve Park	Lake Michigan
	Monitored	Twin Springs Campground and Bathing Beach	Lake Michigan
Emmet			-
Emiliec	Monitored	Bliss Twp. Beach	Lake Michigan
	Not Monitored	Church Beach	Lake Michigan
	Monitored	Cross Village Beach	Lake Michigan
	Monitored	Harbor Springs 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
	Monitored	Thome Swift Preserve	Lake Michigan
	Monitored	Wilderness State Park	Lake Michigan
	Monitored	Zoll Street Beach	Lake Michigan
<i>c</i>	Monttored	Zon Street Beach	Eake Wienigan
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	Presque Isle Beach	Lake Superior
Grand T	raverse		
	Not Monitored	Acme Roadside Park & Beach MDOT	Grand Traverse Bay-Lake Michigan
	Not Monitored	Acme Roadside Park (DNR)	Grand Traverse Bay-Lake Michigan
	Not Monitored	Bayside Acme Twp Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	Bowers Harbor Public Access	Grand Traverse Bay-Lake Michigan
	Monitored	Bryant Park Beach	Grand Traverse Bay-Lake Michigan
	Monitored	Clinch Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	Deep Water Point	Grand Traverse Bay-Lake Michigan
	Not Monitored	DNR Launch Beach Center Rd	Grand Traverse Bay-Lake Michigan
	Monitored	East Bay Beach at Traverse City State Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	East Bay Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	East Bay Township Four Mile Road	Grand Traverse Bay-Lake Michigan
	Not Monitored	Haserot Beach	Grand Traverse Bay-Lake Michigan
	Not Monitored	Kroupa Road Access	Grand Traverse Bay-Lake Michigan
	Not Monitored	Marion Island Bay Park	Grand Traverse Bay-Lake Michigan

County	Monitoring Status	Beach Name	Waterbody Name		
Grand Traverse-continued					
	Monitored	Milliken	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Mouth of Boardman	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Old Mission Lighthouse	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Old Mission Park	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Old Mission Rd	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Peninsula Vol. Fire Station Point#2	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Rose Street Access	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Sayler Park	Lake Michigan		
	Not Monitored	Senior Center	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Sunset Park	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Swaney Road	Grand Traverse Bay-Lake Michigan		
	Not Monitored	W. Grand Traverse Bay Access Site	Grand Traverse Bay-Lake Michigan		
	Monitored	West End Beach	Grand Traverse Bay-Lake Michigan		
	Not Monitored	Yuba Beach	Grand Traverse Bay-Lake Michigan		
Houghton	1				
	Monitored	Agate Beach	Lake Superior		
	Not Monitored	Calument Waterworks Beach	Lake Superior		
	Monitored	Chassell Beach	Pike Bay of Portage Canal-Lake Superior		
	Monitored	Dollar Bay Beach	Portage Canal-Lake Superior		
	Monitored	Hancock City Beach	Portage Canal-Lake Superior		
	Monitored	Houghton City Beach	Portage Canal-Lake Superior		
	Not Monitored	Hubbell Park	Torch Lake of Portage Canal-Lake Superior		
	Monitored	Lake Linden Campground Beach	Torch Lake of Portage Canal-Lake Superior		
	Monitored	McLain State Park Beach	Lake Superior		
	Not Monitored	Mink Farm	Lake Superior		
	Not Monitored	White City	Lake Superior		
Huron					
	Monitored	Bird Creek County Park	Lake Huron		
	Monitored	Caseville County Park	Lake Huron		
	Not Monitored	County Road End	Lake Huron		
	Not Monitored	Geiger Rd Public Acess	Lake Huron		
	Not Monitored	Grindstone Public Acess	Lake Huron		
	Monitored	Harbor Beach City Park	Lake Huron		
	Not Monitored	Harbor Beach Marina	Lake Huron		
	Not Monitored	Helena Rd End	Lake Huron		
	Monitored	Jenks County Park	Lake Huron		
	Not Monitored	Kinch Rd End	Lake Huron		
	Not Monitored	Larned Road End	Lake Huron		
	Monitored	Lighthouse County Park	Lake Huron		
	Monitored	McGraw County Park	Lake Huron		
	Not Monitored	Mud Creek Public Acess	Lake Huron		
	Monitored	Oak Beach County Park	Lake Huron		
	Monitored	Philip County Park	Lake Huron		
	Monitored	Port Crescent State Park - Camping Area	Lake Huron		
	Monitored	Port Crescent State Park - Day Use	Lake Huron		
	Monitored	Sleeper State Park	Lake Huron		
	Not Monitored	Stafford County Park	Lake Huron		

County	Monitoring Status	Beach Name	Waterbody Name
Huron-con	tinued		
	Monitored	Thompson Park	Lake Huron
	Not Monitored	Wagener County Park	Lake Huron
Iosco			
	Monitored	Alabaster Township	Lake Huron
	Monitored	AuSable Township Park	Lake Huron
	Not Monitored	County Road End.	Tawas Bay-Lake Huron
	Monitored	East Tawas City Park	Tawas Bay-Lake Huron
	Not Monitored	Gateway Park	Tawas Bay-Lake Huron
	Not Monitored	Lake To Lake Rd.	Lake Huron
	Monitored	MDOT Roadside Park	Lake Huron
	Monitored	Oscoda Township Beach	Lake Huron
	Monitored	Tawas City Park	Tawas Bay-Lake Huron
	Monitored	Tawas Point State Park - Day Use area	Lake Huron
	Monitored	Tawas Point State Park campground	Lake Huron
Keweenav	N.		
	Not Monitored	Bete de Gris Beach	Bete Gris Bay-Lake Superior
	Not Monitored	Brunette Park	Lake Superior
	Not Monitored	Cat Harbor Beach	Lake Superior
	Monitored	Eagle Harbor Beach	Lake Superior
	Not Monitored	Eagle River Beach	Lake Superior
	Not Monitored	Fort Wilkins State Park	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
Leelanau			
Бестана	Not Monitored	4th Street Beach Northport	Lake Michigan
	Not Monitored	5th Street Beach Northport	Grand Traverse Bay-Lake Michigan
	Not Monitored	7th Street Beach Northport	Grand Traverse Bay-Lake Michigan
	Not Monitored	Bay Front Park	Lake Michigan
	Not Monitored	Boughy Park & Beach	Grand Traverse Bay-Lake Michigan
	Not Monitored	Cathead Bay, Leelanau State Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	Cedar Street Beach	Lake Michigan
	Not Monitored	Christmas Cove	Grand Traverse Bay-Lake Michigan
	Not Monitored	County Road # 669	Lake Michigan
	Not Monitored	County Road 651	Lake Michigan
	Not Monitored	Elmwood Greilikville Park & Beach	Grand Traverse Bay-Lake Michigan
	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-Lake Michigan
	Not Monitored	Haserot Beach, Rose St	Lake Michigan
	Not Monitored	Lake St. 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-Lake Michigan
	Not Monitored	North St Beach	Lake Michigan

County	Monitoring Status	Beach Name	Waterbody Name
Leelanau-c	ontinued		
	Monitored	Northport Bay	Grand Traverse Bay-Lake Michigan
	Not Monitored	Omena Beach & Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	Peterson Park	Lake Michigan
	Not Monitored	Reynolds Street Beach	Lake Michigan
	Not Monitored	Roadside Park & Beach	Grand Traverse Bay-Lake Michigan
	Not Monitored	Smith St Beach Northport	Lake Michigan
	Not Monitored	South Shore Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	Suttons Bay Marina Park & Beach South	Grand Traverse Bay-Lake Michigan
	Monitored	Suttons Bay Park	Grand Traverse Bay-Lake Michigan
	Not Monitored	Suttons Bay Public Launch and Beach	Grand Traverse Bay-Lake Michigan
	Not Monitored	Thompson St. Beach	Lake Michigan
Luce			
	Not Monitored	Blind Sucker River No. 1	Lake Superior
	Not Monitored	Blind Sucker River No. 2	Lake Superior
	Not Monitored	Coast Guard Line Road	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	Unnamed Road End #1	Lake Superior
	Not Monitored	Unnamed Road End #2	Lake Superior
	Not Monitored	Unnamed Road End #3	Lake Superior
Mackinao	`		•
11404114	Not Monitored	American Legion Memorial Park	Lake Huron
	Not Monitored	Antoine Rd. End	Lake Huron
	Not Monitored	Coast Guard Pier Boat Launch and City Park	Lake Huron
	Not Monitored	Foley Creek Campground	Lake Huron
	Not Monitored	Harbour Light	Lake Huron
	Not Monitored	Hazelton Rd. End	Lake Huron
	Not Monitored	Hiawatha National Forest- Carp River Access	Lake Huron
	Not Monitored	Horseshoe Bay Wilderness	Lake Huron
	Not Monitored	Kiwanis Beach	Lake Huron
	Not Monitored	MDOT Overlook	Lake Michigan
	Not Monitored	Sand Point	Lake Michigan
	Not Monitored	Straits State Park	Lake Huron
	Not Monitored	US 2 Roadside East of Brevort	Lake Michigan
	Not Monitored	US 2 Roadside/Campground	Lake Michigan
M		OS 2 Roadside Campground	Ease wiengan
Macomb		WOWL W. F. B. LW.	
	Monitored	HCMA - Metropolitan Beach Metropark	Lake St. Clair
	Monitored	New Baltimore Park Beach	Lake St. Clair
	Monitored	St. Clair Shores Blossom Heath Beach	Lake St. Clair
_	Monitored	St. Clair Shores Memorial Park Beach	Lake St. Clair
Maniste	e		
	Monitored	Arcadia Park	Lake Michigan
	Monitored	Bar Lake Outle:	Lake Michigan
	Monitored	Fifth Avenue Beach	Lake Michigan
	Monitored	First Street Beach	Lake Michigan

County	Monitoring Status	Beach Name	Waterbody Name
Manistee-	-continued		accioody .vame
	Monitored	Magoon Creek	Lake Michigan
	Monitored	Onekama Township Beach	Lake Michigan
	Monitored	Orchard Beach State Park	Lake Michigan
	Monitored	Pierport Township Beach	Lake Michigan
	Monitored	Sundling Park	Lake Michigan
Marquett	e		Eake Wienigan
	Monitored	Marquette South Beach	Laka Comeria
	Monitored	McCartys Cove	Lake Superior
	Monitored	North Beach	Lake Superior
	Monitored	North of Picnic Rocks	Lake Superior
	Monitored	Picnic Rocks	Lake Superior
Mason		70010	Lake Superior
	Monitored	Bass Lake Outlet Beach	
	Monitored	Buttersville Park Beach	Lake Michigan
	Monitored	Ludington State Park	Lake Michigan
	Monitored	Manistee National Forest Beach	Lake Michigan
	Monitored	South Pier Beach	Lake Michigan
	Monitored	South Summit Beach	Lake Michigan
	Monitored	Sterns Park Beach	Lake Michigan
	Monitored		Lake Michigan
Menomin		Summit Township Beach	Lake Michigan
WICHOIIIII		_	
	Monitored	Fox Park	Lake Michigan
	Monitored	Henes Park	Lake Michigan
	Monitored	Klienke Park	Lake Michigan
	Monitored	Memorial Beach	Lake Michigan
	Monitored	Wells State Park	Lake Michigan
Monroe			
	Not Monitored	Luna Pier City Beach	Lake Erie
	Not Monitored	Sterling State Park	Lake Erie
Muskegor	n		
	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
	Monitored	Old Channel Beach	_
	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		Table Falls Table Beach Area	Lake Michigan
	Monitored	Claybanks Township Du-t	
	Monitored	Claybanks Township Park	Lake Michigan
	Monitored	Lighthouse Beach at Silver Lake State Park	Lake Michigan
		Mears State Park	Lake Michigan

County	Monitoring Status	Beach Name	Waterbody Name
Oceana-co	ontinued		
	Monitored	Silver Creek Channel	Silver Lake-Lake Michigan
	Monitored	Stony Lake Channel	Stony Lake-Lake Michigan
	Monitored	Whiskey Creek	Lake Michigan
Ontonago	n		
	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
	Monitored	Porcupine Mountains State Park	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
	Monitored	North Beach Park	Lake Michigan
	Monitored	Rosy Mound Recreation Area	Lake Michigan
	Monitored	Tunnel Park	Lake Michigan
	Monitored	Windsnest Park	Lake Michigan
Presque	Isle		C
Tresque	Not Monitored	40 Mile Pt Park	Lake Huron
	Not Monitored	Ball Diamond Park	Lake Huron
	Not Monitored	Bell Bay	Lake Huron
	Not Monitored	Grace Access Site	Lake Huron
	Not Monitored	Hammond Bay Access Site	Lake Huron
	Not Monitored	Hammond Bay Harbor	Lake Huron
	Monitored	Hoeft State Park	Lake Huron
	Not Monitored	Hoefi State Park	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	New Lighthouse Park	Lake Huron
	Monitored	Presque Ilse Harbor Beach	Lake Huron
	Not Monitored	Presque Isle Harbor	Lake Huron
	Not Monitored	Seagull Point Park	Lake Huron
	Not Monitored	Thompson's Harbor	Lake Huron
	Not Monitored	US 23 Hammond Bay	Lake Huron
	Not Monitored	US 23 Roger City	Lake Huron
Sanilac			
	Monitored	Birch Beach	Lake Huron
	Not Monitored	Birch Beach Middle #2	Lake Huron
	Not Monitored	Birch Beach North #3	Lake Huron
	Monitored	Delaware Park	Lake Huron
	Monitored	Forester County Park	Lake Huron
	Monitored	Forestville Beach	Lake Huron
	Monitored	Lexington Beach	Lake Huron
			Access of the Control

Appendix B. Michigan List of Beaches for Great Lakes - 2004

County	Monitoring Status	Beach Name	Waterbody Name
Sanilac-co	ntinued		
	Monitored	Lexington County Park	Lake Huron
	Monitored	Port Sanilac Park	Lake Huron
Schoolcraf	ft		
	Not Monitored	Doyle Township Park	Lake Michigan
	Not Monitored	Lakeview Park	Lake Michigan
	Not Monitored	Manistique Township Park	Lake Michigan
	Not Monitored	Roadside Park Beach	Lake Michigan
	Not 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
	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 Bur	en		
	Not Monitored	Covert Township Park Beach	Lake Michigan
	Not Monitored	South Haven North Beach	Lake Michigan
	Not Monitored	South Haven South Beach	Lake Michigan
	Not Monitored	Van Buren State Park Beach	Lake Michigan
Wayne			
	Not Monitored	Belle Isle Beach	Detroit River
	Monitored	Pier Park	Lake St Clair

Table 1. 2000 CMI-CWF Grants.

Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Berrien County Health Department	\$49,012.00	\$24,450.00	11
Central Michigan District Health	\$94,115.00	\$46,363.00	66
Department			
Chippewa County Health Department	\$15,882.00	\$15,882.00	8
City of Marquette	\$19,071.00	\$19,071.00	7
Grand Traverse Bay Watershed	\$34,768.00	\$34,768.00	17
Initiative	<u> </u>		
Huron County Health Department	\$18,407.00	\$18,407.00	11
Kent County Health Department	\$5,820.00	\$5,820.00	9
Macomb County Health Department	\$57,649.00	\$28,239.00	6
TOTAL	\$294,724.00	\$193,000.00	135

Table 2. 2001 CMI-CWF Grants.

Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
District Health Department #4	\$16,782.00	\$16,782.00	44
Kalamazoo County Human Services Department	\$35,000.00	\$35,000.00	21
Muskegon County Health Department	\$9,073.00	\$9,073.00	14
Northwest Michigan Community Health Agency	\$14,079.00	\$14,079.00	22
St. Clair County Health Department	\$25,000.00	\$25,000.00	26
TOTAL	\$99,934.00	\$99,934.00	127

Table 3. 2003 CMI-CWF Grants.

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	\$48,690.41	\$10,000.00	51
Community Health Agency			
Central Michigan District Health	\$48,546.00	\$18,375.00	45
Department			
Chippewa County Health Department	\$12,833.41	\$12,833.41	4
District Health Department #4	\$22,090.69	\$10,000.00	13
Genesee County Health Department	\$28,849.00	\$10,000.00	21
Macomb County Health Department	\$6,543.00	\$6,543.00	2
Muskegon County Health Department	\$25,023.00	\$10,000.00	15
Oakland County Health Division	\$17,462.68	\$14,725.49	76
Ottawa County Health Department	\$7,403.00	\$5,544.00	10
TOTAL	\$232,253.70	\$112,833.41	244

Appendix C. CMI-CWF Grants for Inland Lakes Beaches

Table 4. 2004 CMI-CWF Grants.

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
Muskegon County Health Department	\$1,369.00	\$1,369.00	3
Northwest Michigan Community Health Agency	\$8,440.00	\$8,440.00	13
The Watershed Center Grand Traverse Bay	\$7,736.34	\$7,736.34	5
Wayne County Health Department	\$15,235.50	\$15,235.50	8
Western Upper Penninsula District Health Department	\$9,114.56	\$9,114.56	6
Wexford County Drain Commision	\$4,428.00	\$4,428.00	5
TOTAL	\$117,848.63	\$100,000.00	120

Appendix D. BEACH Act Grants for Great Lakes Beaches.

Table 1. 2003 BEACH Act Grants.

Grantees	Requested Budget Amount	Granted Amount	Total Monitored Beaches
Bay County Health Department	\$16,410.00	\$12,000.00	6
Berrien County Health Department	\$17,732.00	\$16,368.00	13
Central Michigan District Health Department	\$10,152.00	\$12,152.00	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	\$16,000.00	8
District Health Department #4	\$35,656.46	\$23,000.00	13
District Health Department #10	\$41,721.00	\$24,928.11	20
Grand Traverse Bay Watershed	\$23,695.00	\$23,695.00	12
Huron County Health Department	\$41,061.00	\$23,000.00	13
Macomb County Health Department	\$23,525.00	\$10,000.00	4
Muskegon District Health Department	\$11,371.00	\$11,371.00	10
Northwest Michigan Community Health Agency	\$24,930.93	\$15,730.93	23
Sanilac County Health Department	\$15,817.00	\$13,817.00	7
St. Clair County Health Department	\$24,094.50	\$23,000.00	13
Western Upper Peninsula District Health Department	\$27,632.79	\$21,000.00	18
TOTAL	\$367,634.21	\$269,203.80	182

Table 2. 2004 BEACH Act Grants.

Grantees	Requested Budget Amount	Granted Budget	Total Monitored Beaches
Northwest Michigan Community Health Agency	\$15,649.65	\$15,649.65	26
District Health Department #10	\$24,999.50	\$24,999.50	23
Berrien County Health Department	\$36,212.00	\$23,104.00	19
St. Clair County Health Department	\$24,641.24	\$17,024.00	14
Public Health, Delta & Menominee Counties	\$12,937.18	\$12,937.18	13
District Health Department #4	\$21,293.29	\$15,808.00	13
The Watershed Center Grand Traverse Bay	\$22,035.00	\$15,808.00	13
Huron County Health Department	\$26,210.20	\$10,944.00	12
Muskegon County Health Department	\$15,000.00	\$15,000.00	12
Western Upper Peninsula District Health Department	\$21,634.92	\$13,376.00	11
Chippewa County Health Department	\$31,250.17	\$10,944.00	9
District Health Department #2	\$28,042.10	\$10,944.00	9
Ottawa County Health Department	\$10,246.33	\$10,246.33	9
Central Michigan District Health Department	\$13,899.00	\$13,899.00	8
Sanilac County Health Department	\$15,146.74	\$8,512.00	7
Bay County Health Department	\$11,082.38	\$11,082.38	6
City of Marquette	\$13,848.56	\$6,080.00	5
Macomb County Health Department	\$24,490.00	\$4,864.00	4
Wayne County Health Department	\$10,182.00	\$3,651.00	3
TOTAL	\$378,800.26	\$244,873.04	216

Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name Arenac	Waterbody Name	Location Name	Exceedance date	E. coli / 100 ml
Archae	Man made Pond	Big Bend Campground	6/9/2004	365.16
	Man made Pond	Outdoor Adventures	7/14/2004	478.13
	Saginaw Bay	Arenac County Park	8/4/2004	402.68
	Saginaw Bay	Bessinger Rd. Beach	9/8/2004	331.8
	Saginaw Bay	Dyer Rd. Beach	6/28/2004	816.9
	Saginaw Bay	Dyer Rd. Beach	7/6/2004	629.16
	Saginaw Bay	Dyer Rd. Beach	9/8/2004	617.6
	Saginaw Bay	Singing Bridge Beach	7/14/2004	456.23
	Saginaw Bay	Singing Bridge Beach	8/4/2004	893.22
	Saginaw Bay	Twining Rd. Beach	7/14/2004	429.66
	Saginaw Bay	Whites Beach	8/11/2004	1388.46
Bay				
J	Kawkawlin River	Boat Launch on Kawkawlin River	5/24/2004	1080
	Kawkawlin River	Boat Launch on Kawkawlin River	6/14/2004	497
	Saginaw Bay	Bay City State Recreation Area	8/23/2004	2419
	Saginaw Bay	Brissette Beach Township Park	8/23/2004	2419
	Saginaw Bay	Pinconning Park	8/30/2004	436
	Saginaw Bay	Wenona Beach	8/23/2004	2265
	Saginaw River	Vet's Park North Bay City	5/24/2004	1235
	Saginaw River	Vet's Park South River Rd.	5/24/2004	688
Benzie				
	Crystal Lake	Bellows	8/9/2004	1107.39
	Crystal Lake	Bellows	9/7/2004	1574.64
	Lake Michigan	Frankfort: Anchor Rd Beach	7/5/2004	1214.61
Berrien				
	Lake Michigan	Jean Klock Park	8/2/2004	433
Branch				
	Messenger Lake	Memorial Park	7/7/2004	404.8
	Messenger Lake	Memorial Park	7/9/2004	849.1
	Messenger Lake	Memorial Park	7/12/2004	333.2
	Messenger Lake	Memorial Park	8/2/2004	376.3

Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name	Waterbody Name	Location Name E	Exceedance date	E. coli / 100 ml
Clare	Arnold Lake	Arnold Lake Beach	8/9/2004	025 5
	Cranberry lake	Cranberry Lake South		925.5
	Crooked Lake	Crooked Lake Beach	8/25/2004	316.9
	Doc and Tom Lake	Lake of the Pines	6/15/2004	372.6
			6/22/2004	724.83
	Dodge Lake	Dodge Lake Beach	6/1/2004	579.4
	Grass Lake	Sandy Shores Beach	7/26/2004	336.01
	Grass Lake	Sandy Shores Beach	7/28/2004	2419.6
	Hayes Lake	Oak Hills Children's Camp	6/22/2004	1619.1
	Long Lake	Long Lake Beach	8/25/2004	579.4
Delta				
	Lake Michigan	Gladstone Bathing Beach/Van Cleve P	Park 8/3/2004	368.6
Eaton				
	Grand River	Lincoln Brick Park	5/24/2004	448.26
Emmet				
	Lake Michigan	Petoskey State Park	8/25/2004	329.26
Genesee				
	Crooked Lake	Crooked Lake	5/24/2004	1350
	Holloway Reservoir	Buttercup Beach	7/30/2004	359
	Lake Linda	Lake Linda	8/27/2004	773
	Mott Lake	Bluebell Beach	5/24/2004	1128
	Mott Lake	Bluebell Beach	7/30/2004	585
	Mott Lake	Bluebell Beach	8/6/2004	379
	Mott Lake	Bluebell Beach	8/13/2004	674
	Mott Lake	Bluebell Beach	8/20/2004	1134
	Mott Lake	Bluebell Beach	8/27/2004	2419
	Mott Lake	Bluebell Beach	9/10/2004	336
	Mott Lake	Bluegill Boat Ramp	5/24/2004	526
	Silver Lake	City Park Beach	8/20/2004	365
Gladwin				
	Cedar River	Cedar River Campground Beach	6/9/2004	305.2
	Cedar River	Cedar River Campground Beach	6/10/2004	326
	Cedar River	Cedar River Campground Beach	6/14/2004	328.86
		• •		

Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name Gladwin-continu	Waterbody Name	Location Name E	xceedance date	E. coli / 100 ml
	Cedar River	Cedar River Campground Beach	8/25/2004	365.4
	Cedar River	Cedar River Campground Beach	8./27./2004	1176.9
	Tittabawassee River	Pine Street Public Access	7/12/2004	635.1
	Trout Lake	Trout Lake SFCG	6/21/2004	469.76
	Wiggins Lake South	Wiggins Lake - at Clendening Rd.	6/14/2004	913
Grand Traverse	2			
	Grand Traverse Bay - East Arm	East Bay Beach at Traverse City State I	Park 5/24/2004	1379.39
	Grand Traverse Bay - East Arm	Milliken	5/24/2004	1636.46
	Grand Traverse Bay - West Arm	Bryant Park Beach	5/24/2004	700.33
	Grand Traverse Bay - West Arm	Bryant Park Beach	9/7/2004	460.3
	Grand Traverse Bay - West Arm	Clinch Park	8/23/2004	327
	Grand Traverse Bay - West Arm	West End Beach	5/24/2004	1418.58
	Grand Traverse Bay - West Arm	West End Beach	8/23/2004	1361.4
	Grand Traverse Bay - West Arm	West End Beach	9/7/2004	393.73
	Long Lake (Mickey Lake)	Taylor Park	7/5/2004	1130.79
	Long Lake (Mickey Lake)	Taylor Park	8/25/2004	418.55
Huron				
	Lake Huron	Port Crescent State Park - Camping Ar	rea 6/29/2004	382.3
Ingham				
	Valhalla Pond	Valhalla Park	5/23/2004	490.407
Kalamazoo				
	Long Lake	Ramona Park	7/28/2004	482.5
	Swimmers Lake	Markin Glen County Park	5/11/2004	903
	Swimmers Lake	Markin Glen County Park	6/1/2004	627
Leelanau				
	Grand Traverse Bay - West Arm	Suttons Bay Park	5/24/2004	427.24
	Grand Traverse Bay - West Arm	Suttons Bay Park	7/5/2004	770.4
	Grand Traverse Bay - West Arm	Suttons Bay Park	8/23/2004	1131.43
	Lake Michigan	Empire Municipal Beach	7/5/2004	625.11
	Lake Michigan	Empire Municipal Beach	8/9/2004	499.09
Livingston				
	Bentley Lake	Camp Innisfree	7/14/2004	570
	Church Lake	Wildwood Ranch	8/4/2004	583
Macomb				
	Lake St. Clair	HCMA - Metropolitan Beach Metrop	oark 5/24/2004	1418.27

Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name	·	Location Name E	xceedance date	E. coli / 100 ml
Macomb-continu		UCMA Marrow Error David Marrowall	7/21/2004	2/2.25
	Lake St. Clair	HCMA - Metropolitan Beach Metropark		362.25
	Lake St. Clair	HCMA - Metropolitan Beach Metropark		1036.68
	Lake St. Clair	HCMA - Metropolitan Beach Metropark		362.45
	Lake St. Clair	HCMA - Metropolitan Beach Metropark		1215.76
	Lake St. Clair	New Baltimore Park Beach	5/24/2004	784.17
	Lake St. Clair	New Baltimore Park Beach	7/12/2004	756.26
	Lake St. Clair	New Baltimore Park Beach	8/25/2004	970.76
	Lake St. Clair	New Baltimore Park Beach	9/13/2004	350.73
	Lake St. Clair	SCS Blossom Heath Beach	5/17/2004	522.13
	Lake St. Clair	SCS Blossom Heath Beach	5/19/2004	309.55
	Lake St. Clair	SCS Blossom Heath Beach	5/24/2004	507.62
	Lake St. Clair	SCS Blossom Heath Beach	6/23/2004	372.9
	Lake St. Clair	SCS Blossom Heath Beach	6/30/2004	358.16
	Lake St. Clair	SCS Blossom Heath Beach	7/21/2004	435.28
	Lake St. Clair	St. Clair Shores Memorial Park Beach	5/10/2004	624.82
	Lake St. Clair	St. Clair Shores Memorial Park Beach	5/17/2004	821.93
	Lake St. Clair	St. Clair Shores Memorial Park Beach	5/24/2004	6881.01
	Lake St. Clair	St. Clair Shores Memorial Park Beach	5/26/2004	981.85
	Lake St. Clair	St. Clair Shores Memorial Park Beach	6/16/2004	303.6
	Lake St. Clair	St. Clair Shores Memorial Park Beach	8/4/2004	1150.42
	Lake St. Clair	St. Clair Shores Memorial Park Beach	8/5/2004	315.34
	Lake St. Clair	St. Clair Shores Memorial Park Beach	9/29/2004	339.87
	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Baypoint Bea	ach 5/24/2004	1277.57
	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Eastwood Be	each 5/24/2004	411.95
	Stoney Creek Lake-Impoundment	Stoney Creek Metropark-Eastwood Bo	each 8/4/2004	661.13
Manistee				
	Lake Michigan	First Street Beach	8/25/2004	321
	Lake Michigan	Magoon Creek	7/14/2004	505
	Lake Michigan	Magoon Creek	8/25/2004	497
	Lake Michigan	Magoon Creek	8/26/2004	613
	Lake Michigan	Sundling Park	7/14/2004	309
	Lake Michigan	Sundling Park	8/25/2004	403
	Lake Michigan	Sundling Park	8.'26.'2004	1015
Mason	-	-		
	Lake Michigan	Bass Lake Outlet Beach	8/10/2004	373
	Lake Michigan	Manistee National Forest Beach	7/14/2004	302
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Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name Mason-continued	Waterbody Name	Location Name	Exceedance date	E. coli / 100 ml
mason commue.	Lake Michigan	Manistee National Forest Beach	8/25/2004	435
	Lake Michigan	Summit Township Beach	8/17/2004	395
Muskegon				
Ç	Lake Michigan	Bronson/Kruse Park	7/14/2004	388
	Lake Michigan	Lake Harbor Park	8/17/2004	372
	Lake Michigan	Medbury Park Beach	8/10/2004	603
	Muskegon Lake	Harbour Towne Beach	8/5/2004	660
Oakland				
	Adams Lake	Addison Oaks Co. Park	6/8/2004	392
	Adams Lake	Addison Oaks Co. Park	6./9/2004	380
	Avon Lake	Thelma Spencer Park	8/3/2004	325
	Avon Lake	Thelma Spencer Park	8/4/2004	373
	Crooked Lake	Independence Oaks Co. Park	7/26/2004	549
	Fish Lake	Camp Ohiyesa - North	7/14/2004	336
	Fish Lake	Camp Ohiyesa - North	7/15/2004	794
	Green Lake	Bay Court Park	7/7/2004	326
	Heather Lake	Heather Lake Estates	7/12/2004	662
	Kent Lake	Kensington - Maple Beach	7/27/2004	2164
	Kent Lake	Kensington - Maple Beach	8/4/2004	800
	Kent Lake	Kensington - Martindale Beach	7/27/2004	605
	Orion	Greens Park Village Beach	6/21/2004	513
	Phillips	Camp Dearborn - Lake #1	7/27/2004	601
	Phillips	Camp Dearborn - Lake #1	7/28/2004	637
	Phillips	Camp Dearborn - Lake #1	8/4/2004	464
	Phillips	Camp Dearborn - Lake #5	6/15/2004	470
	Phillips	Camp Dearborn - Lake #5	7/27/2004	481
	Phillips	Camp Dearborn - Lake #5	7/28/2004	1537
Osceola				
	Big Lake	Crittenton Park	7/26/2004	772.02
	Muskegon River	Crawford Park	7/19/2004	507.18
	Muskegon River	Hersey Rd. Access	8/25/2004	568.4
	Muskegon River	Hersey Rd. Access	8.27.2004	1894
	Rose Lake	Rose Lake County Park	9/15/2004	648.8
	Rose Lake	Rose Lake Youth Camp	8/25/2004	380.1
	Rose Lake	Rose Lake Youth Camp	9/15/2004	488.4

Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name	Waterbody Name	Location Name	Exceedance date	E. coli / 100 ml
Ottawa				
	Crockery Lake	Grose Park	6/1/2004	397.34
	Lake Macatawa	Dunton Park	6/2/2004	785.74
	Lake Macatawa	Dunton Park	8 '3. '2004	466.31
	Lake Macatawa	Dunton Park	8/4/2004	1232.45
	Lake Macatawa	Dunton Park	8/5/2004	462.72
	Lake Macatawa	Dunton Park	8/17/2004	484.88
	Lake Michigan	Grand Haven City Beach	8/9/2004	372.5
	Lake Michigan	North Beach Park	7/12/2004	836.17
	Lake Michigan	North Beach Park	7/14/2004	325.73
	Lake Michigan	Tunnel Park	7/20/2004	317.15
	Lake Michigan	Windsnest Park	6/8/2004	446.14
	Maplewood Lake	Maplewood Lake Park	7/27/2004	307.95
	Maplewood Lake	Maplewood Lake Park	8/24/2004	602.99
Roscommon				
	Higgins Lake	S. Higgins Lake State Park	7/14/2004	322.13
	Houghton Lake	Denton Twp. Public Beach	7/14/2004	1203.3
	Houghton Lake	Denton Twp. Public Beach	8/4/2004	402.68
	Houghton Lake	H.L. DNR Boat Launch and Park	6/9/2004	838.36
	Houghton Lake	H.L. DNR Boat Launch and Park	7/14/2004	1901.83
	Houghton Lake	Houghton Lake Heights	6/9/2004	540.6
	Houghton Lake	Houghton Lake Heights	7/7/2004	343.86
	Houghton Lake	Houghton Lake Public Fishing Site	6/14/2004	539.56
	Lake St. Helen	Richfield Twp. Public Fishing Site	8/4/2004	327.85
Sanilac				
	Lake Huron	Delaware Park	7/8/2004	2087
	Lake Huron	Forester County Park	6/15/2004	2419
	Lake Huron	Forester County Park	6/17/2004	1270
	Lake Huron	Forester County Park	7/8/2004	2419
	Lake Huron	Forester County Park	7/13/2004	441
	Lake Huron	Forester County Park	7/15/2004	2419
	Lake Huron	Forester County Park	7/29/2004	2419
	Lake Huron	Lexington Beach	6/15/2004	602
	Lake Huron	Lexington County Park	6/15/2004	854
	Lake Huron	Lexington County Park	7/8/2004	2265
	Lake Huron	Port Sanilac Park	6/15/2004	380
	Lake Huron	Port Sanilac Park	7/8/2004	590

Appendix E. Exceedances of WQS (300 E. coli per 100 ml daily geometric mean) for Inland and Great Lakes Beaches during 2004

County Name St. Clair	Waterbody Name	Location Name	Exceedance date	E. coli / 100 ml
	Kimball Pond	Kimball Township Pond	8/4/2004	323
	Lake Huron	Conger-Lighthouse Beach	5 26 2004	729
	Lake Huron	Holland Road Beach	5/26/2004	948
	Lake Huron	Keewadhin Road Beach	5/26/2004	395
	Lake Huron	Krafft Road Beach	5/26/2004	687
	Lake Huron	Krafft Road Beach	8/23/2004	649
	Lake Huron	Lakeport State Park	5/26/2004	487
	Lake Huron	Lakeside Beach	5/26/2004	981
	Lake Huron	Washington Street Park	5/26/2004	516
	Lake Huron	Washington Street Park	6/14/2004	444
	St. Clair River	Chrysler Park Beach	5/26/2004	517
	St. Clair River	Marine City Beach	5/26/2004	314
St. Joseph				
	Cade Lake	Cade Lake Beach	7/12/2004	360
Washtenaw				
	Half Moon Lake	Pinckney Recreation Area	7/22/2004	775
	Half Moon Lake	Pinckney Recreation Area	8/2/2004	675
Wayne				
-	Lake St Clair	Pier Park	7/13/2004	918
	Rouge River	Wilcox Lake	7/22/2004	349
Wexford				
	Lake Cadillac	City Park	8/30/2004	564.4