



MICHIGAN

27th in Beachwater Quality

15% of samples exceeded national standards in 2010

Polluted urban and suburban runoff is a major threat to water quality at the nation's coastal beaches. Runoff from storms and irrigation carries pollution from parking lots, yards, and streets directly to waterways. In some parts of the country, stormwater routinely causes overflows from sewage systems. Innovative solutions known as green infrastructure enable communities to naturally absorb or use runoff before it causes problems. The U.S. Environmental Protection Agency is modernizing its national rules for sources of runoff pollution and should develop strong, green infrastructure-based requirements.

Michigan has more than 600 public beaches stretching along more than 600 miles of Great Lakes coastline. The Michigan Department of Natural Resources and Environment (DNRE) administers the state's BEACH Act grant.

Monitoring Results

In 2010, Michigan reported 632 coastal beaches (including 35 National Park Service beaches), 11 (2%) of which were monitored more than once a week, 199 (31%) once a week, 400 (63%) were not monitored, and there was no monitoring frequency information for 22 (3%) beaches. For this section of the report, NRDC looked at the percent of individual monitoring samples that exceeded the state's daily bacterial standard unless individual samples were not reported (all reported samples were used to calculate the 2010 percent exceedance rates, including duplicate samples and samples taken outside the official beach season, if any). As discussed below, Michigan does not have a single-sample maximum standard, they apply their daily standard after calculating

the geometric mean of at least three simultaneous samples. In 2010, 7% of all reported beach monitoring samples exceeded the state's daily maximum bacterial standard. The beaches with the highest percent exceedance rates in 2010 were Brimley State Park in Chippewa County (49%), St. Clair Shores Blossom Heath Beach in Macomb County (40%), Warren Dunes Beach in Berrien County (30%), Sherman Park in Chippewa County (29%), Singing Bridge Beach in Arenac County (27%), Pier Park in Wayne County (26%), Meinert County Park in Muskegon County (24%), East Tawas City Park in Iosco County (22%), and St. Clair Shores Memorial Park Beach in Macomb County (20%).

Chippewa County had the highest exceedance rate (47%) in 2010, followed by Marquette (44%), Macomb (19%), Wayne (18%), Van Buren (9%), Berrien (8%), St. Clair (8%), Iosco (8%), Arenac (8%), Alpena (7%), Muskegon (7%), Schoolcraft (7%), Grand Traverse (5%), Ottawa (5%), Alcona (5%), Monroe (4%), Allegan (4%), Menominee (4%), Huron (3%), Cheboygan (2%), Bay (2%), Benzie (2%), Oceana (2%), Sanilac (2%), Leelanau (2%), and Charlevoix (1%) counties. There were no exceedances in 2010 in Antrim, Baraga, Delta, Emmet, Houghton, Keweenaw, Mackinac, Manistee, Mason, Ontonagon, and Presque Isle counties. Beaches in Alger, Gogebic, Luce, and Montmorency counties are not monitored.

Sampling Practices: The monitoring season runs from April to October.

Sampling practices, locations, standards, and notification protocols and practices are uniform throughout the state.¹ Samples are taken 1 foot below the surface in water that is 3 to 6 feet deep. Beaches are selected for monitoring based on location and frequency of use, history of bacterial contamination, and proximity to a known bacterial contamination source.²

KEY FINDINGS IN MICHIGAN

Beachwater Contamination

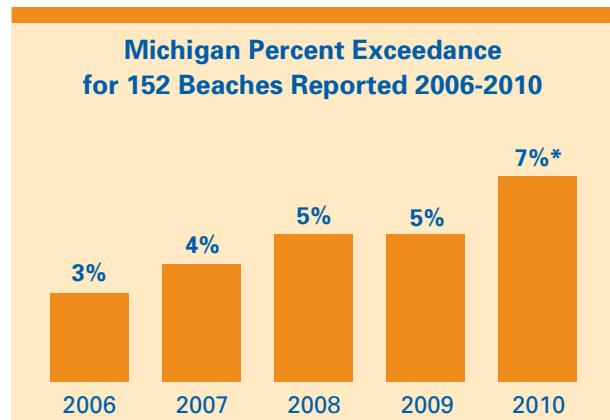
(% of samples exceeding state standards in 2010)

- Brimley State Park in Chippewa County (49%)
- St. Clair Shores Blossom Heath Beach in Macomb County (40%)
- Warren Dunes Beach in Berrien County (30%)

Reported Sources of Beachwater Contamination Statewide (number of closing/advisory days)

- 315 (87%) unknown sources of contamination
- 27 (7%) stormwater runoff
- 14 (4%) other sources of contamination
- 4 (1%) sewage spills/leaks
- 3 (1%) wildlife

Depending on the local health department, the monitoring frequency of a beach that has been closed or placed under advisory can be increased. In most cases, resampling is conducted the day a beach is closed or placed under advisory. States that monitor more frequently after an advisory is issued will tend to have higher percent exceedance rates and lower total closing/advisory days than they would if their sampling frequency did not change after an advisory or closing was issued.



Closings and Advisories

Total closing/advisory days for 102 events lasting six consecutive weeks or less increased 6% to 363 days in 2010, from 342 days in 2009. For previous years, there were 265 days in 2008, 198 days in 2007, 124 days in 2006, and 234 days in 2005. In addition, there were 3 extended events (188 days total) and 1 permanent event (110 days) in 2010. Extended events are those in effect more than six weeks but not more than 13 consecutive weeks; permanent events are in effect for more than 13 consecutive weeks.

For the 102 events lasting six consecutive weeks or less, 81% (295) of closing/advisory days in 2010 were due to monitoring that revealed elevated bacteria levels, 8% (28) were preemptive (i.e., ordered without waiting for monitoring results) due to heavy rainfall, and 11% (40) were preemptive due to unspecified reasons.

Standards and Procedures: Both advisories and closings are issued. The standards in use in Michigan are a 30-day geometric mean of *E. coli* of 130 cfu/100 ml for at least five representatively spaced sampling events over 30 days and a daily maximum for one sampling event of 300 cfu/100 ml.² At each sampling event, three or more samples are taken and the geometric mean of the sampling results is used when comparing to the daily standard.² Resamples to confirm an exceedance are sometimes conducted at Michigan's Great Lakes beaches before an advisory or closing is issued.

Some health departments issue preemptive rainfall advisories, with standards based on rainfall amount.¹ Beach advisories and closures may be issued for riptides, spills, harmful algal blooms, and other potential threats to public health.²

* Why don't the 2010 percent exceedance values in this summary match? The value in the heading of this section (15%) reflects the proportion of samples exceeding the national single-sample maximum standard for designated beach areas. The value in the "Monitoring Results" section (7%) reflects the proportion of samples exceeding the state standard, which in Michigan's case is less stringent than the national standard. Some samples exceeded the national standard but not the state standard.

Michigan 2010 Monitoring Results and Closing or Advisory Days					
Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Alcona County					
Harrisville State Park	1	1/wk	21	5%	0
Beaches in Alcona County that were not monitored and that had no closing or advisory days in 2010:					
Black River Public Access	Greenbush Township	Negwegon State Park	Trask Lake Road Beach		
	Harrisville Public Access	Sturgeon Point State Park			
Alger County					
Beaches in Alger County that were not monitored and that had no closing or advisory days in 2010:					
Au Train Beach	Christmas Beach	Grand Marais Township	Grand Portal Point-Public Shoreline		
Bay Furnace Recreation Area Beach	Grand Marais Harbor Beach	Beach			

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Alger County					
Beaches in Alger County that were not monitored and that had no closing or advisory days in 2010:					
Munising Beach	Pictured Rocks National Lakeshore-Chapel Beach	Pictured Rocks National Lakeshore-Minners Beach	Beach	Public Shoreline Beach-Grand Sable Dunes	
Pictured Rocks National Lakeshore-Chapel Beach	Pictured Rocks National Lakeshore-Mosquito Beach	Pictured Rocks National Lakeshore-Hurricane Campground Beach	Public Shoreline Beach-Au Train Bay	Rathfoot Park Beach	
Pictured Rocks National Lakeshore-Hurricane Campground Beach	Pictured Rocks National Lakeshore-Sand Point	Pictured Rocks National Lakeshore-Twelve Mile	Public Shoreline Beach-Au Train to Five Mile Pts	Roadside Park	
	Pictured Rocks National Lakeshore-Twelve Mile		Public Shoreline Beach-East County Border area	Sand Point to Miners Castle Point-Public Shoreline	
				Sullivans Landing	
Allegan County					
Douglas Beach	1	1/wk	45	4%	0
Oval Beach	1	1/wk	45	0%	0
Pier Cove Beach	1	1/wk	45	4%	6
West Side County Park Beach	1	1/wk	45	7%	5
Beaches in Allegan County that were not monitored and that had no closing or advisory days in 2010:					
Castle Park	Saugatuck Dunes State Park Shoreline Beach				
Alpena County					
Blair Street Park	1	1/wk	16	19%	3
Michekewis Beach	1	1/wk	12	0%	0
Ossineke Beach	1	1/wk	12	0%	0
Starlite Beach	1	1/wk	15	13%	2
Thompson Park	1	1/wk	12	0%	0
Beaches in Alpena County that were not monitored and that had no closing or advisory days in 2010:					
Bay View Park	Negwegon State Park-Ossineke South Point	Ossineke State Park	Rock Port Beach		
Elcajon Bay	Ossineke Campground	Partridge Point	Whitefish Bay		
Issineke Hardwood Point					
Antrim County					
Antrim County Day Park South	1	1/wk	10	0%	0
Banks Township. Park	1	1/wk	11	0%	0
Barnes Park	1	1/wk	9	0%	0
Elk Rapids	1	1/wk	10	0%	0
Veterans Memorial Park	1	1/wk	10	0%	0
Beaches in Antrim County that were not monitored and that had no closing or advisory days in 2010:					
Antrim County Day Park North	Erickson Road	Nature Preserve	Petobego Pond Area		
Antrim Creek Natural Area	Lore Road End Beach	North Bay Shore (Conservancy)	Road Crossing near Winters Road		
Elk Rapids Park	Michigan Trail	O'Dell Road			
Arenac County					
Arenac County Park	1	1/wk	96	0%	0
Bessinger Road Beach	1	1/wk	33	0%	0
Dyer Road Beach	1	1/wk	33	9%	8
Foster Road Beach	1	1/wk	33	0%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Arenac County					
Hammel Beach Road Access	1	1/wk	33	0%	0
Singing Bridge Beach	1	1/wk	90	27%	33
Twining Road Beach	1	1/wk	33	0%	0
Whites Beach	1	1/wk	42	7%	2
Beaches in Arenac County that were not monitored and that had no closing or advisory days in 2010:					
Au Sable State Forest– Greens Point	Augres Township Park Beach	City of Augres Public Access	Pump Station Terrace Road		
	Booth Road Beach	Gordon Road Beach			
Baraga County					
L'Anse Waterfront Park	1	1/wk	2	0%	0
Beaches in Baraga County that were not monitored and that had no closing or advisory days in 2010:					
Arvon Township Park	L'Anse Township Park	Public Shoreline Beach– Northwest Abbaye Peninsula	Public Shoreline Beach– Sand Point		
Baraga State Park	Mouth of the Huron River				
First Sand Beach	Public Shoreline Beach– Cooper Country Huron Bay	Public Shoreline Beach– Point Abbaye	Public Shoreline Beach–SE End of Huron Bay		
Keweenaw Bay Village Public Roadside Park			Second Sands Beach		
Bay County					
Bay City State Recreation Area	1	1/wk	189	2%	1
Brissette Beach Township Park	1	1/wk	42	0%	0
Pinconning Park	1	1/wk	42	2%	0
South Linwood Beach Township Park	1	1/wk	45	9%	2
Wenona Beach	1	1/wk	42	0%	0
Beaches in Bay County that were not monitored and that had no closing or advisory days in 2010:					
Nayanquing Point Wildlife Area	North Linwood Beach	North Pinconning Beach	South Pinconning Beach		
Benzie County					
Frankfort: Anchor Road Beach	1	1/wk	45	2%	0
Beaches in Benzie County that were not monitored and that had no closing or advisory days in 2010:					
Alberta Village Beach & Bluffs	County Road # 669 Esch Road/Otter Creek	Platte River Point Point Betsie Lighthouse Beach	Zettenberg Preserve		
Berrien County					
Cherry Beach	1	1/wk	48	15%	3
Grand Beach	1	1/wk	52	10%	3
Hagar Township Park	1	1/wk	42	0%	0
Jean Klock Park	1	1/wk	42	5%	2
Lincoln Township Park	1	1/wk	39	0%	0
Lions Park	1	1/wk	36	0%	0
Michiana Village	1	1/wk	45	7%	2
New Buffalo City	1	1/wk	57	12%	2
Rocky Gap	1	1/wk	39	0%	0
Silver Beach	1	1/wk	39	3%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Berrien County					
Tiscornia Park	1	1/wk	42	2%	0
Warren Dunes Beach	1	1/wk	57	30%	6
Weko Beach	1	1/wk	48	13%	2
Beaches in Berrien County that were not monitored and that had no closing or advisory days in 2010:					
Bethany Beach area	Grand Mere State Park-	Grand Mere State Park-	Mizpah Park		
Galien River Park	Rosemary Beach	Waverland Beach	Warren Dunes State		
Gordon Beach	Grand Mere State Park-	Harbert Beach	Park North		
	Shoreline Beach				
Charlevoix County					
Depot Beach	1	1/wk	10	0%	0
East Jordan Tourist Park	1	1/wk	10	0%	0
Elm Point Beach	1	1/wk	10	0%	0
Ferry Beach	1	1/wk	10	0%	0
Fisherman's Island State Park	1	1/wk	10	0%	0
Glenwood Beach	3	None	10	0%	0
Hayes Township Park	1	None	9	0%	0
Lake Michigan Beach	1	None	11	0%	0
Norwood Park	1	none	10	10%	0
Peninsula Beach	1	1/wk	10	0%	0
Tannery Park	1	1/wk	10	0%	0
Washington Street Beach	3	None	10	0%	0
Whiting Park Beach	1	1/wk	10	0%	0
Young State Park Beach	1	1/wk	10	0%	0
Beaches in Charlevoix County that were not monitored and that had no closing or advisory days in 2010:					
Beaver Island Public Beach	Bill Wagner Memorial	Donegal Bay	Iron Ore Bay Beach		
	Campground Beach	Harbor Beach	Mt. McSauba Beach		
Cheboygan County					
Cheboygan City Park	1	1/wk	11	9%	0
Cheboygan State Park Duncan Bay	1	1/wk	11	0%	40
Mackinaw City Lighthouse Park	1	1/wk	11	0%	0
Wawatam City Park	1	1/wk	11	0%	0
Beaches in Cheboygan County that were not monitored and that had no closing or advisory days in 2010:					
Alexander Henry Park	Ditta Park	Mill Creek Public Access	Roadside Park MDOT,		
Cheboygan State Park-	Huron Street Beach	Pinewood Circle Road	US-23		
Lighthouse Point	Mackinaw City Beach	End Beach	Stoney Point Road		
			End Beach		
Chippewa County					
Brimley State Park	1	1/wk	53	49%	26
Four Mile Beach	1	1/wk	0	NA	5
Sherman Park	1	1/wk	7	29%	16
Sugar Island Township Park	1	1/wk	0	NA	18 (60)*

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Chippewa County					
Beaches in Chippewa County that were not monitored and that had no closing or advisory days in 2010:					
Bass Cove Beach– Drummond Island		Hiawatha National Forest– North of Big Pine Picnic	Hiawatha National Forest– Government Island	Public Shoreline Beach– Raber Bay stretch	
Bayview Campground		Hiawatha National Forest– North Pond	Lake Superior State Forest– Munuscong Lake	Public Shoreline Beach– Weatherhog Lake East Area	
Betsey Seaman Memorial Park–Drummond Island		Hiawatha National Forest– Pendills Bay	Public Shoreline Beach– Browns Creek Area	Public Shoreline Beach– Weatherhog Lake West	
Big Pines Beach		Hiawatha National Forest– Pendills Lake	Public Shoreline Beach– Brush Point	Public Shoreline Beach– West of Whitefish Point	
Big Shoal Cove Beach		Hiawatha National Forest– Point Iroquois Light	Public Shoreline Beach– Marsh Lake Area	Sand Bay Beach– Drummond Island	
De Tour State Park Shoreline Beach		Hiawatha National Forest– Tahquamenon Bay	Public Shoreline Beach– Northwest of Two Mile Lake	Tahquamenon Falls State Park–River Mouth Unit	
Detour Albany Beach		Hiawatha National Forest– Waiska Bay	Public Shoreline Beach– Point Aux Frenes	Whitefish Point Wilderness Beach	
Drummond Island Township Park		Hiawatha National Forest– West of Salt Point			
Dunbar Park					
Hiawatha National Forest– Nodoway Point Area					
Delta County					
Escanaba Bathing Beach	1	none	3	0%	0
Gladstone Bathing Beach/Van Cleve Park	1	none	3	0%	0
Beaches in Delta County that were not monitored and that had no closing or advisory days in 2010:					
Big Bay De Noc/ Fishdam River Public Access		Public Shoreline Beach– East Wilsey Bay	Public Shoreline Beach– Nahma	Public Shoreline Beach– Portage Peninsula	
Camp Harstad		Public Shoreline Beach– Fishdam River	Public Shoreline Beach– North End of Kregg Bay	Public Shoreline Beach– St. Vital's Island	
Fayette State Park		Public Shoreline Beach– Gilnet Haven	Public Shoreline Beach– North of Stonington	Public Shoreline Beach– USFS West Wilsey Bay	
Fuller Park		Public Shoreline Beach– Indian Point	Public Shoreline Beach– Ogontz Bay	Public Shoreline Beach– West Side of Kregg Bay	
Little Bay De Noc Public Beach Access		Public Shoreline Beach– Indian Town Lake USFS	Public Shoreline Beach– Peninsula Point	Sac Bay County Park MI354139	
Portage Bay Forest Campground		Public Shoreline Beach– Jacks Bluff	Public Shoreline Beach– Point Detour	Sac Bay County Park MI405957	
Public Shoreline Beach– Charboneau Point		Public Shoreline Beach– Martin Bay	Public Shoreline Beach– Portage Bay	Twin Springs Campground and Bathing Beach	
Public Shoreline Beach– County Road 481					
Emmet County					
Cross Village Beach	1	1/wk	10	0%	0
Mackinaw City Beach #1	1	1/wk	10	0%	0
Mackinaw City Beach #2	1	1/wk	10	0%	0
Magnus Park	1	1/wk	10	0%	0
Middle Village Park	1	1/wk	10	0%	0
Petoskey State Park	1	1/wk	10	0%	0
Readmond Township Beach	1	1/wk	10	0%	0
Sturgeon Bay Township Beach	1	1/wk	10	0%	0
Wilderness State Park	1	1/wk	10	0%	0
Zoll Street Beach	1	1/wk	10	0%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Emmet County					
Zorn Park–Harbor Springs	1	1/wk	10	0%	0
Beaches in Emmet County that were not monitored and that had no closing or advisory days in 2010:					
Bliss Township Beach Church Beach	Colonial Michilimamackinac State Park Forest Beach Petoskey Harbor	The Headlands County Park Thorne Swift Preserve Wilderness State Park–East of the Beach	Wilderness State Park–Sturgeon Bay Wilderness State Park–West of Beach		
Gogebic County					
Beaches in Gogebic County that were not monitored and that had no closing or advisory days in 2010:					
Black River Harbor Beach Little Girls Point Park Mouth of the Montreal	River Porcupine Mountain State Park–North	Presque Isle Beach Presque Isle State Campground	Public Shoreline Beach–West of Black River		
Grand Traverse County					
Bryant Park Beach	1	1/wk	63	11%	1
Clinch Park	1	1/wk	45	0%	0
East Bay Park (Milliken Park)	1	1/wk	48	8%	1
Traverse City State Park	1	1/wk	45	0%	0
West End Beach	1	1/wk	45	4%	0
Beaches in Grand Traverse County that were not monitored and that had no closing or advisory days in 2010:					
Acme Roadside Park (DNR) Acme Roadside Park & Beach MDOT Archie Park Bayside Acme Township Park Bowers Harbor Public Access Deep Water Point DNR Launch/Beach Center Road	East Bay Township Four Mile Road Haserot Beach Kroupa Road Access M-22 South of Crain Hill Road Leffingwell Point Beach Mouth of Boardman Old Mission–Center Road Natural Area Old Mission–MDOT Right of Way–South of M-37	Old Mission–Old Mission Point State Park Old Mission Lighthouse Old Mission Peninsula Twp Park–East of Light House Old Mission Peninsula Twp Park–West of Light House Old Mission Road Peninsula Volunteer Fire Station Point #2 Power Island Bay Park	Rose Street Access at Peninsula Drive Saylor Park Senior Center Sunset Park Swaney Road Yuba Beach		
Houghton County					
Agate Beach	1	1/wk	6	0%	0
Chassell Beach	1	1/wk	9	0%	0
Hancock City Beach	1	1/wk	9	0%	0
Houghton City Beach	1	1/wk	9	0%	0
Lake Linden Campground Beach	1	1/wk	9	0%	0
McLain State Park Beach	1	1/wk	9	0%	0
Sandy Bottom Beach/Dollar Bay	1	1/wk	9	0%	0
Beaches in Houghton County that were not monitored and that had no closing or advisory days in 2010:					
Calument Waterworks Beach Hubbell Park	Mink Farm Public Shoreline Beach–Le Chance Creek	Public Shoreline Beach–Mc Lain State Park Public Shoreline Beach–S. of Portage Entry	Public Shoreline Beach–Southwest County Border White City		

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Huron County					
Bird Creek County Park	1	1/wk	45	4%	2
Caseville County Park	1	1/wk	48	0%	0
Harbor Beach City Park	1	1/wk	42	0%	0
Jenks County Park	1	1/wk	42	0%	0
Lighthouse County Park	1	1/wk	51	14%	5
McGraw County Park	1	1/wk	45	7%	1
Oak Beach County Park	1	1/wk	42	0%	0
Philp County Park	1	1/wk	42	0%	0
Port Crescent State Park–Camping Area	1	1/wk	48	0%	0
Port Crescent State Park–Day Use	1	1/wk	51	10%	2
Sleeper State Park	1	1/wk	43	0%	0
Thompson Park	1	1/wk	12	0%	0
Veterans Park	1	1/wk	45	4%	1
Beaches in Huron County that were not monitored and that had no closing or advisory days in 2010:					
County Road End	Harbor Beach Marina	Larned Road End	Mud Creek Public Access		
Geiger Road Public Access	Helena Road End	Lighthouse County Park–South	Stafford County Park		
Grindstone Public Access	Kinch Road End		Wagener County Park		
Iosco County					
Alabaster Township	1	1/wk	21	0%	0
Au Sable Township Park	1	1/wk	24	13%	0 (58)*
East Tawas City Park	1	1/wk	27	22%	3
MDOT Roadside Park	1	1/wk	21	0%	0
Oscoda Township Beach	1	1/wk	21	0%	0
Tawas City Park	1	1/wk	27	19%	2
Tawas Point State Park Campground	1	1/wk	21	0%	0
Tawas Point State Park–Day Use area	1	1/wk	21	0%	0
Beaches in Iosco County that were not monitored and that had no closing or advisory days in 2010:					
Au Sable Point Beach	North–Public Shoreline Beach	Lake To Lake Road	Tawas Point State Park–Central		
County Road End.	Huron National Forest	Alabaster Township	Tawas Point State Park–North		
Gateway Park	South–Public Shoreline Beach	Douglas Drive Beach Use Area			
Huron National Forest					
Keweenaw County					
Eagle Harbor Beach	1	1/wk	9	0%	0
Beaches in Keweenaw County that were not monitored and that had no closing or advisory days in 2010:					
Bete de Gris Beach	Eagle River Beach	Fort Wilkins State Park–West	Point Isabelle Beach		
Brunette Park	Fort Wilkins State Park	Great Sands Bay Beach	Public Shoreline Beach–Big Traverse Bay		
Cat Harbor Beach	Fort Wilkins State Park–East	Mouth of the Gratiot River Beach	Public Shoreline Beach–Gay Park		
Cooper Harbor Lighthouse Complex					

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Leelanau County					
Empire Municipal Beach	1	1/wk	46	0%	0
Northport Bay Marina	1	1/wk	45	9%	0
Sleeping Bear Dunes– CR 651 Good Harbor Bay	3	1/wk	51	0%	0
Sleeping Bear Dunes– CR 669 Good Harbor Bay	3	1/wk	51	0%	0
Sleeping Bear Dunes– DH Day Campground	3	1/wk	51	2%	0
Sleeping Bear Dunes–Esch Road Beach	no data	no data	54	0%	0
Sleeping Bear Dunes–Glen Haven Beach	3	1/wk	51	2%	0
Sleeping Bear Dunes– North Bar Lake MI Beach	no data	no data	54	2%	0
Sleeping Bear Dunes– Peterson Road Beach	no data	no data	54	0%	0
Sleeping Bear Dunes–Platte Point Bay	3	1/wk	54	4%	0
Suttons Bay Park	1	1/wk	45	0%	0
Beaches in Leelanau County that were not monitored and that had no closing or advisory days in 2010:					
Bay Front Park	Graham Green Park	MDOT Roadside Park & Beach M-22 N of Cherry Bend D	Reynolds Street Beach		
Boughy Park & Beach	Hendryx County Roadside Park	North Bar	Smith Street Beach Northport		
Cathead Bay, Leelanau State Park	Lake Street Beach, Glen Arbor	North Street Beach	Stoney Point County Roadside Park		
Cedar Street Beach	Leelanau State Park, Lighthouse	Northport 4th Street Beach	Suttons Bay Marina Park & Beach South		
Christmas Cove	Leland Harbor	Northport 5th Street Beach	Suttons Bay Public Launch and Beach		
Elmwood/Greilickville Park & Beach	M-22 at M-72 Public Access	Northport 7th Street Beach	Suttons Bay South Shore Park		
G. Marsten Dame Marina	MDOT Roadside Park & Beach	Northport Haserot Beach, Rose Street	Thompson Stree Beach		
Gils Pier		Omena Beach & Park			
Glen Arbor/Manitou Boulevard Beach		Peterson Park			
Luce County					
Beaches in Luce County that were not monitored and that had no closing or advisory days in 2010:					
Blind Sucker River # 1	Muskallonge Lake State Park Beach	Public Shoreline Beach– County Rd 412 and Crisp Pt	Public Shoreline Beach– West County Border Beach		
Blind Sucker River # 2	Public Shoreline Beach– Blind Sucker Flooding Area	Public Shoreline Beach– Little Sucker/Two Hearted R	Unnamed Road End #1		
Crisp Point Light House	Public Shoreline Beach– Coast Guard Line Road	Public Shoreline Beach– Three Mile Creek Area	Unnamed Road End #2		
Lake Superior Campground Beach	Public Shoreline Beach– County Rd 407		Unnamed Road End #3		
Mouth of the Two Hearted River Campground					
Mackinac County					
Kiwanis Beach	1	1/wk	15	0%	0
US 2 Roadside East of Brevort	1	1/wk	15	0%	0
Beaches in Mackinac County that were not monitored and that had no closing or advisory days in 2010:					
American Legion Memorial Park	Antoine Road End Best Western Lakefront	Big Knob State Forest Campground	Black River State Forest Campground		

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Mackinac County					
Beaches in Mackinac County that were not monitored and that had no closing or advisory days in 2010:					
Boot Island		MDOT Overlook	Public Shoreline Beach #5– Little Hog Island area	Public Shoreline Beach– Pointe Aux Chenes Bay	
Coast Guard Pier Boat Launch and City Park		MDOT Roadside Park on US 2	Public Shoreline Beach– Epoufette Bay	Public Shoreline Beach– Seiners Point	
Epoufette Bay Campground		Miller’s Hog Island Subdivision Beach	Public Shoreline Beach– Fox Point Area	Public Shoreline Beach– South of Brevort River	
Foley Creek Campground		Mouth of Cut River Roadside Beach	Public Shoreline Beach– Little Hog Island area	Public Shoreline Beach– State Forest Matrix Point	
Harbour Light		Naubinway Bay Access	Public Shoreline Beach– Manitou Paymen Highbanks	Sand Point	
Hazelton Road End		Public Shoreline Beach #2– Little Hog Island area	Public Shoreline Beach– MDNR Matrix Point Area	State Roadside Park Beach	
Hiawatha National Forest– Carp River Access		Public Shoreline Beach #2– Manitou Paymen Highbanks	Public Shoreline Beach– Morean Township, Section 25	State Street Road End	
Hog Island Campground		Public Shoreline Beach #3– Little Hog Island area	Public Shoreline Beach– Naubinway Area	Straits State Park	
Horseshoe Bay		Public Shoreline Beach #4– Little Hog Island area		US 2 Roadside/ Campground	
Wilderness–North				Wetland Shoreline– St. Martin Point	
Horseshoe Bay					
Wilderness–South					
K Royale					
Kewadin Inn					
Macomb County					
H.C.M.A.–Metropolitan Beach Metropark	1	2/wk	295	13%	7
New Baltimore Park Beach	1	2/wk	132	8%	18
St. Clair Shores Blossom Heath Beach	1	2/wk	129	40%	2 (110)*
St. Clair Shores Memorial Park Beach	1	2/wk	129	20%	0 (70)*
Beaches in Mackinac County that were not monitored and that had no closing or advisory days in 2010:					
H.C.M.A.–Huron Point					
Manistee County					
Arcadia Park	1	1/wk	30	0%	0
Bar Lake Outlet	1	1/wk	30	0%	0
Fifth Avenue Beach	1	1/wk	30	0%	0
First Street Beach	1	1/wk	30	0%	0
Magoon Creek	1	1/wk	30	0%	0
Onekama Township Beach	1	1/wk	30	0%	0
Orchard Beach State Park	1	1/wk	30	0%	0
Pierport Township Beach	1	1/wk	30	0%	0
Sundling Park	1	1/wk	30	0%	0
Beaches in Manistee County that were not monitored and that had no closing or advisory days in 2010:					
Portage Park					
Marquette County					
Marquette South Beach	1	3/wk	33	21%	0
North Beach	1	3/wk	1	0%	0
North of Picnic Rocks	1	3/wk	1	0%	0
Picnic Rocks	1	3/wk	2	50%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Marquette County					
Beaches in Marquette County that were not monitored and that had no closing or advisory days in 2010:					
McCarty's Cove		Public Shoreline Beach– Big Huron River		Public Shoreline Beach– Little Presque Isle	
Mason County					
Bass Lake Outlet Beach	1	1/wk	30	0%	0
Buttersville Park Beach	1	1/wk	30	0%	0
Ludington State Park Campground Beach	1	1/wk	30	0%	0
South Pier Beach	1	1/wk	30	0%	0
South Summit Beach– Sunset Boulevard Beach	1	1/wk	30	0%	0
Sterns Park Beach	1	1/wk	27	0%	0
Summit Township Beach	1	1/wk	30	0%	0
Beaches in Mason County that were not monitored and that had no closing or advisory days in 2010:					
Ludington State Park Public Shoreline Beach North		Ludington State Park Public Shoreline Beach South		Manistee National Forest– Public Shoreline Beach N	Pere Marquette Harbor
		Manistee National Forest Campground Beach		Manistee National Forest– Public Shoreline Beach S	
Menominee County					
Henes Park	1	1/wk	57	5%	0
Memorial Beach	1	1/wk	54	2%	0
Beaches in Menominee County that were not monitored and that had no closing or advisory days in 2010:					
Airport Park Fox Park		Klienke Park Public Shoreline Beach– Cedar River		Public Shoreline Beach– Fox village	Wells State Park
Monroe County					
Estral Beach	1	1/wk	48	2%	0
Luna Pier City Beach	1	1/wk	58	9%	25
Sterling State Park	1	1/wk	50	4%	2
Woodland Beach	2	1/wk	48	0%	0
Beaches in Monroe County that were not monitored and that had no closing or advisory days in 2010:					
Avalon Beach Bolles Harbor		Detroit Beach LaSalle Township– Toledo Beach		Lost Peninsula North Cape Yacht Club	Point Aux Peaux Stoney Point
Montmorency County					
Beaches in Montmorency County that were not monitored and that had no closing or advisory days in 2010:					
East Twin Beach/Albert Township Park					
Muskegon County					
Bronson/Kruse Park	1	1/wk	15	7%	0
Duck Lake Channel Beach	1	1/wk	15	7%	0
Lake Harbor Park	1	1/wk	15	0%	0
Lighthouse/Sylvan Beach	1	1/wk	18	17%	1
Medbury Park Beach	1	1/wk	15	0%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Muskegon County					
Meinert County Park	1	1/wk	21	24%	7
Muskegon State Park	1	1/wk	18	11%	1
Old Channel Beach	1	1/wk	15	0%	0
P.J. Hoffmaster State Park–Campground	1	1/wk	15	0%	0
P.J. Hoffmaster State Park–Public Beach Area	1	1/wk	15	0%	0
Pere Marquette Park	1	1/wk	15	13%	0
Pioneer County Park	1	1/wk	15	0%	0
Beaches in Muskegon County that were not monitored and that had no closing or advisory days in 2010:					
Muskegon State Park-Shoreline Beach North					
Oceana County					
Claybanks Township Park	1	1/wk	30	0%	0
Lighthouse Beach at Silver Lake State Park	1	1/wk	30	3%	0
Mears State Park	1	1/wk	30	0%	0
Stony Lake Channel	1	1/wk	30	0%	0
Whiskey Creek	1	1/wk	33	6%	2
Beaches in Oceana County that were not monitored and that had no closing or advisory days in 2010:					
Cedar Point County Park Silver Creek Channel Silver Lake State Park					
Ontonagon County					
Ontonagon Township Park and Campground	1	1/wk	4	0%	0
Porcupine Mountains State Park–Union Bay	1	1/wk	4	0%	0
Beaches in Ontonagon County that were not monitored and that had no closing or advisory days in 2010:					
Green Park	Porcupine Mountain State Park	Public Shoreline Beach–Misery Bay	Public Shoreline Beach–Wolf Point		
Gull Point Beach	Porcupine Mountains Wilderness State Park–West	Public Shoreline Beach–Sleeping Bay	Union Bay Beach		
Mouth of the Big Iron River Beach					
Ottawa County					
Grand Haven City Beach	1	1/wk	33	3%	0
Grand Haven State Park	1	1/wk	33	0%	0
Holland State Park-Lake Michigan Beach	1	1/wk	78	4%	0
Kirk Park	1	1/wk	39	5%	0
Kouw Park	1	1/wk	40	3%	0
North Beach Park	1	1/wk	30	0%	0
Rosy Mound Recreation Area	1	1/wk	39	3%	0
Tunnel Park	1	1/wk	33	15%	0
Windsnest Park	1	1/wk	39	8%	0
Beaches in Ottawa County that were not monitored and that had no closing or advisory days in 2010:					
Mountain Beach P.J. Hoffmaster State Park–Shoreline Beach					

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
Presque Isle County					
Hoeft State Park-North	1	1/wk	24	0%	0
Lakeside Park in Rogers City	1	1/wk	24	0%	0
Presque Isle Harbor Beach	1	1/wk	26	0%	0
Beaches in Presque Isle County that were not monitored and that had no closing or advisory days in 2010:					
40 Mile Point Park	Grace Access Site	Lakeview Park Beach	Seagull Point Park		
Ball Diamond Park	Hammond Bay Access Site	Manitou Beach	Thompson's Harbor State Park		
Bell Bay	Hammond Bay Harbor	New Lighthouse Park	US 23 Hammond Bay		
Evergreen Beach	Hoeft State Park-South	Presque Isle Harbor	US 23 Roger City		
Golden Beach	Lakeside Park Beach	Public Shoreline Beach-False Presque Isle Harbor			
Sanilac County					
Forester County Park	1	1/wk	51	6%	3
Forestville Beach	1	1/wk	48	0%	0
Lexington Beach	1	1/wk	24	0%	0
Lexington County Park	1	1/wk	24	0%	0
Port Sanilac Park	1	1/wk	24	0%	0
Beaches in Sanilac County that were not monitored and that had no closing or advisory days in 2010:					
Birch Beach	Birch Beach North #3	Great Lakes Beach	Sanilac County Roadside Park #1		
Birch Beach Middle #2	Delaware Park	Sanilac County Park #4			
Schoolcraft County					
Roadside Park Beach	1	1/wk	14	7%	6
Rogers Beach	1	1/wk	14	7%	6
Beaches in Schoolcraft County that were not monitored and that had no closing or advisory days in 2010:					
Doyle Township Park	Manistique Township Park	Public Shoreline Beach-S. of McDonald Lake	Public Shoreline Beach-Thompson Village		
Lakeview Park	Public Shoreline Beach-Goudreou's Harbor	Public Shoreline Beach-Thompson			
St Clair County					
Burtchville Township Park	1	1/wk	51	8%	1
Chrysler Park Beach	1	1/wk	54	17%	6
Conger-Lighthouse Beach	1	1/wk	54	11%	2
Fort Gratiot County Park	1	1/wk	54	9%	3
Holland Road Beach	1	1/wk	54	9%	2
Jeddo Road Beach	1	1/wk	51	6%	1
Keewadhin Road Beach	1	1/wk	51	6%	1
Krafft Road Beach	1	1/wk	48	13%	1
Lakeport State Campground	1	1/wk	51	8%	2
Lakeport State Park	1	1/wk	54	9%	3
Lakeside Beach	1	1/wk	90	8%	4
Marine City Beach	1	1/wk	48	2%	0
Marine City Diving Area	1	1/wk	48	0%	0

Beach	Tier	Assigned Monitoring Frequency	Total Samples	% of Samples Exceeding State Standards	Closing or Advisory Days
St Clair County					
Metcalf Road Beach	1	1/wk	51	8%	2
Washington Street Park	1	1/wk	51	6%	2
Van Buren County					
Covert Township Park Beach	1	1/wk	30	0%	0
South Haven North Beach	1	1/wk	30	3%	0
South Haven South Beach	1	1/wk	36	19%	12
Van Buren State Park Beach	1	1/wk	33	9%	3
Wayne County					
Belle Isle Beach	1	2/wk	99	7%	0
Pier Park	1	2/wk	146	26%	35
Beaches in Wayne County that were not monitored and that had no closing or advisory days in 2010:					
Crescent Sail Yacht Club	Elizabeth Park	Southern Wayne County Border			

*Reported closing or advisory days are for events lasting six consecutive weeks or less. Number of days in parentheses are for events lasting more than six consecutive weeks.

NOTES

- 1 Shannon Briggs, Michigan Department of Natural Resources and Environment,. Personal communication. May 2011.
- 2 Michigan Department of Environmental Quality. Michigan Beach Monitoring Year 2010 Annual Report. February 2011.

Testing the Waters 2011 reflects data as of June 27, 2011.