



# KALAMAZOO COUNTY GOVERNMENT

In the Pursuit of Extraordinary Governance...

**To:** Jim Mallery

Village of Vicksburg

**From:** Chelsea Hayden, Environmental Health Specialist  
Environmental Health Unit

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**Date:** October 19, 2017

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**Regarding:** Weekly Bathing Beach Monitoring Results for Sunset Lake at Sunset Lake Park

Please find attached the most current bacteriological results for surface water on Sunset Lake at Sunset Lake Park. Environmental Health Unit staff collect water samples following departmental procedures and deliver the samples to the Kalamazoo County Health and Community Services Laboratory; the laboratory analyzes the samples for E. coli bacteria. This report is sent as soon as the Environmental Health Unit receives notification from the Kalamazoo County Health and Community Services Laboratory.

*All bathing beach results are posted on the Michigan Department of Environmental Quality beach monitoring web site at [www.deq.state.mi.us/beach](http://www.deq.state.mi.us/beach).*

**Daily Geometric Mean -- Average of all samples collected on given date.**

Date	Time	Result	Michigan Water Quality Standards
Monday, August 28, 2017	9:55 AM	3 colonies / 100 mL water	Meets Standard

- Based on the most recent sampling, the bathing beach is currently in compliance with Michigan Water Quality Standards for total body contact recreation standards.
- Based on the most recent sampling, the bathing beach is currently in violation with Michigan Water Quality Standards for total body contact recreation standards of 300 Escherichia coli (E. coli) colonies bacteria per 100 milliliters.
- Based on the most recent sampling, the bathing beach is currently in violation with Michigan Water Quality Standards for partial body contact recreation standards of 1000 Escherichia (E. Coli) colonies bacteria per 100 milliliters.

**30-Day Geometric Mean -- Average of all samples collected over the past 30 days.**

Samples Collected Between	Number of Samples	Result	Michigan Water Quality Standards
7/31/2017 to 8/28/2017	15	5 colonies / 100 mL water	Meets Standard

- Based on the past 30 days of sampling, the bathing beach is currently in compliance with Michigan Water Quality Standards for total body contact recreation standards.
- Based on the past 30 days of sampling, the bathing beach is currently in violation with Michigan Water Quality Standards for total body contact recreation standards of 130 Escherichia coli (E. coli) colonies bacteria per 100 milliliters.
- The Michigan Water Quality Standard has not officially been exceeded until 30 days of sampling have been completed. This beach is not considered in violation of the 30-Day Geometric Mean at this time.

**HEALTH AND COMMUNITY SERVICES DEPARTMENT**

Environmental Health Unit – Surface Water Monitoring Program

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Phone: 269-373-5349 | [www.kalcounty.com/eh/bathing-beach](http://www.kalcounty.com/eh/bathing-beach)

Kalamazoo County Health and Community Services  
Environmental Health Unit

Bathing Beach Monitoring Program  
Weekly Update

Report Date: October 19, 2017

Site Code: KB-11

Bathing beach and water quality monitoring results for Sunset Lake at Sunset Lake Park.

Date	Time	Weather	Wind	Wind Temp (F)	Wind Speed (mph)	Wind Direction	Water Temp. (F)	E. coli (MPN)	
								Daily GM	30-Day GM
5/22/2017	11:30 AM	Clear	Slight Breeze	68	2.5	SW	63.0	8.6	----
5/30/2017	10:30 AM	Clear	Slight Breeze	67.0	1.9	W	70.0	7.4	----
6/5/2017	9:00 AM	Clear	Slight Breeze	76	2.2	E	74.0	2.7	----
6/12/2017	9:00 AM	Clear	Moderate Breeze	79.8	3.9	S	79.0	2.0	----
6/19/2017	10:50 AM	Overcast	Moderate Breeze	74.3	2.2	W	78.0	4.3	4.3
6/26/2017	11:00 AM	Partly Cloudy	Moderate Breeze	68.5	3.7	W	75.0	4.6	3.8
7/5/2017	9:10 AM	Clear	Slight Breeze	74.4	1.4	E	80.0	1.0	2.5
7/10/2017	9:10 AM	Rainy	Slight Breeze				80.0	2.0	2.4
7/17/2017	10:40 AM	Overcast	Slight Breeze	67.0	3.4	S	76.0	2.3	2.5
7/24/2017	10:50 AM	Overcast	Moderate Breeze	66.5	7.0	N	80.0	6.3	2.7
7/31/2017	7:45 AM	Clear	Calm	70.3		NO WIND	79.0	2.4	2.4
8/7/2017	10:05 AM	Overcast	Slight Breeze	70.5	1.6	E	76.0	7.8	3.5
8/15/2017	9:45 AM	Partly Cloudy	Slight Breeze	73.5	3.2	SE	78.0	6.2	4.4
8/21/2017	9:10 AM	Clear	Slight Breeze	82.9	1.6	SE	80.0	4.9	5.2
8/28/2017	9:55 AM	Drizzle	Slight Breeze	63.1	1.4	SE	70.0	3.4	4.6

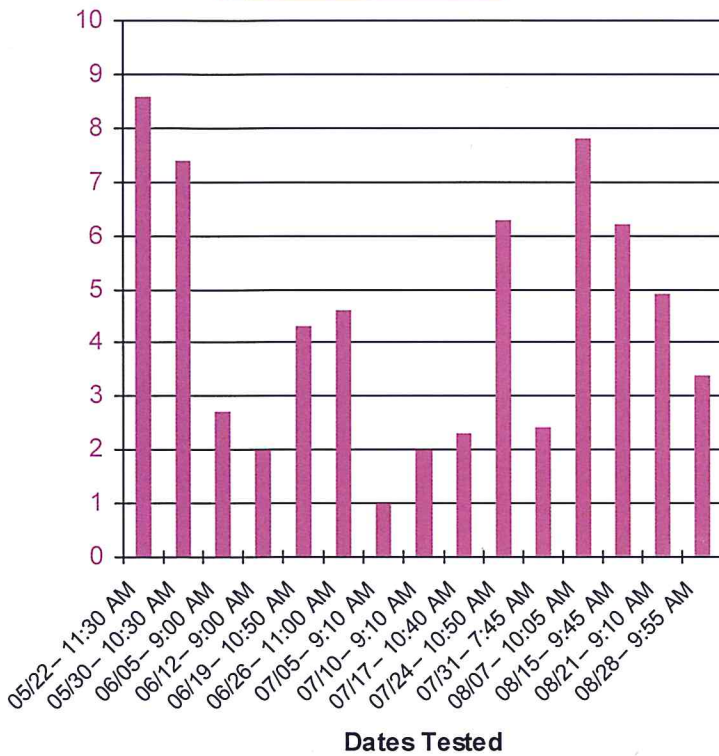
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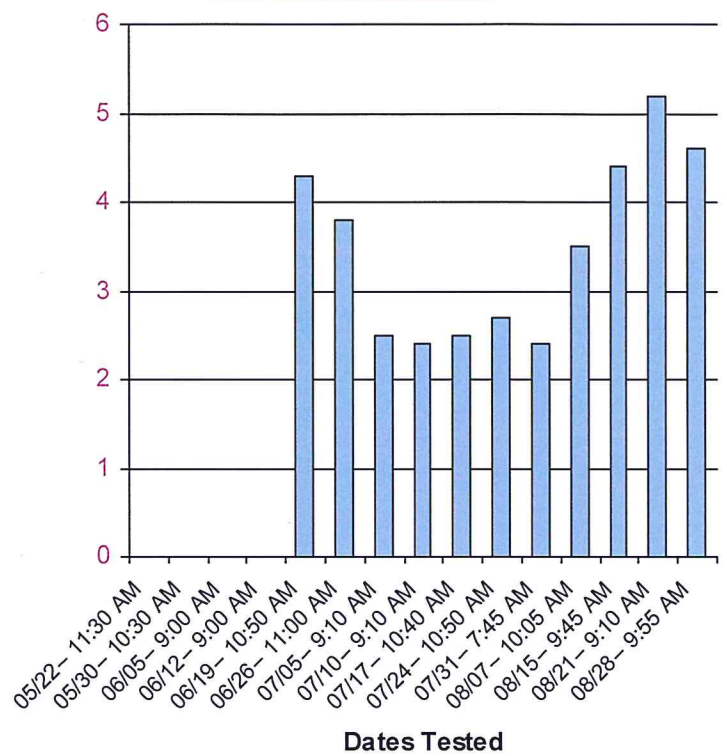
Bathing beach and water quality monitoring results for Sunset Lake at Sunset Lake Park.

**2017 Summary of Escherichia coli (E. coli) Bacteria  
Sunset Lake at Sunset Lake Park**

**Daily Geometric Mean**  
**Must be under 300**



**30-Day GM**  
**Must be under 130**



*E. coli* standards for surface water used for total body contact recreation are provided in the Michigan Public Health Code and Rule 323.1062(1) of the Part 4. Water Quality Standards (Promulgated pursuant to Part 31 of the Natural Resources and Environmental Protection Act, 1997 PA 451, as amended). The rule states the following:

R 323.1062 Microorganisms.  
Rule 62.

(1) All waters of the state protected for total body contact recreation shall not contain more than 130 *Escherichia coli* (*E. coli*) per 100 milliliters, as a 30-day geometric mean. Compliance shall be based on the geometric mean of all individual samples taken during 5 or more sampling events representatively spread over a 30-day period. Each sampling event shall consist of 3 or more samples taken at representative locations within a defined sampling area.

(2) 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 milliliters. Compliance shall be based on the geometric mean of 3 or more samples taken during the same sampling event at representative locations within a defined sampling area.

(3) All waters of the state protected for partial body contact recreation shall not contain more than a maximum of 1000 *E. coli* per 100 milliliters. Compliance shall be based on the geometric mean of 3 or more samples, taken during the same sampling event, at representative locations within a defined sampling area.