



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 24 2013

Ms. Lynelle Marolf
Deputy Director, Office of the Great Lakes
Michigan Department of Environmental Quality
Constitution Hall, 6th Floor South
525 West Allegan
P.O. Box 30473
Lansing, Michigan 48909-7973

REPLY TO THE ATTENTION OF:

Dear Lynelle:

Thank you for your September 19, 2013 request to remove the "Beach Closings" Beneficial Use Impairment (BUI) from the River Raisin Area of Concern (AOC) in Michigan. As you know, we share your desire to restore all of the Great Lakes AOCs and to formally delist them.

Based upon a review of your submittal and the supporting data, the U.S. Environmental Protection Agency hereby approves your BUI removal request for the River Raisin AOC. In addition, EPA will notify the International Joint Commission of this significant positive environmental change at this AOC.

We congratulate you and your staff, as well as the many federal, state, and local partners who have worked so hard and been instrumental in achieving this important environmental improvement. Removal of this BUI will benefit not only the people who live and work in the River Raisin AOC, but all the residents of Michigan and the Great Lakes basin as well.

We look forward to the continuation of this important and productive relationship with your agency and the local coordinating committee as we work together to fully restore all of Michigan's AOCs. If you have any further questions, please contact me at (312) 353-4891, or your staff may contact John Perrecone, at (312) 353-1149.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Korleski".

Chris Korleski, Director
Great Lakes National Program Office

cc: Dan Wyant, Director, MDEQ
Jon W. Allan, MDEQ, Office of Great Lakes
Rick Hobrta, MDEQ, Office of Great Lakes
Melanie Foose, MDEQ, Office of Great Lakes
Stephen Locke, IJC
Daniel Stefanski, River Raisin Public Advisory Council
Wendy Carney, EPA, GLNPO
John Perrecone, EPA, GLNPO



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
OFFICE OF THE GREAT LAKES
LANSING



JON W. ALLAN
DIRECTOR

September 19, 2013

Mr. Chris Korleski, Director
Great Lakes National Program Office
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard (G-17J)
Chicago, Illinois 60604-3507

Dear Mr. Korleski:

The purpose of this letter is to request the United States Environmental Protection Agency (USEPA), Great Lakes National Program Office's (GLNPO) concurrence with the removal of the Beach Closings Beneficial Use Impairment (BUI) from the River Raisin Area of Concern (AOC). The Michigan Office of the Great Lakes (OGL), Michigan Department of Environmental Quality (MDEQ) has assessed the status of this BUI in accordance with the state's *Guidance for Delisting Michigan's Great Lakes Areas of Concern*, and recommends that the BUI be removed from the list of impairments in the River Raisin AOC.

Enclosed please find documentation to support this recommendation, including the BUI removal Briefing Paper prepared by the OGL's technical staff. The River Raisin Public Advisory Council provided a letter supporting this recommendation, dated August 16, 2013. A copy is enclosed.

Also note that a public comment period was held between August 26, 2013 and September 9, 2013. No comments, either written or verbal, were received during the comment period.

We value our continuing partnership in the AOC Program and look forward to working with the GLNPO, in the removal of BUIs and the delisting of AOCs. If you need further information concerning this request, please contact Ms. Melanie Foose, OGL, at 586-753-3866, or you may contact me.

Sincerely,

Lynelle Marolf, Deputy Director
Office of the Great Lakes
517-284-5035

Enclosures

cc/enc: Mr. Dave Cowgill, USEPA
Mr. John Perrecone, USEPA
Mr. Scott Cieniawski, USEPA
Mr. Jon W. Allan, MDEQ
Mr. Rick Hobrla, MDEQ
Ms. Melanie Foose, MDEQ

Removal Recommendation Beach Closings Beneficial Use Impairment River Raisin Area of Concern

Issue

The Michigan Department of Environmental Quality (MDEQ), Office of the Great Lakes, Areas of Concern (AOC) program staff recommend the removal of the Beach Closings Beneficial Use Impairment (BUI) for the River Raisin AOC based on the review of relevant documentation pursuant to the process and criteria set forth in the *Guidance for Delisting Michigan's Great Lakes Areas of Concern (Guidance)* (MDEQ, 2008). This recommendation is made with the support of staff from the United States Environmental Protection Agency (USEPA) Great Lakes National Program Office, the MDEQ, and the River Raisin Public Advisory Council (PAC).

Background

The boundary of the River Raisin AOC is defined as the lower 2.6 miles of the river, downstream of Dam No. 6 at the Winchester Bridge in the City of Monroe. It extends one-half mile into Lake Erie following the Federal Navigation Channel and along the nearshore zone of Lake Erie, both north and south, for one mile. The River Raisin was listed as an AOC primarily due to sediments contaminated with polychlorinated biphenyls. According to the Stage 2 Remedial Action Plan, *E. coli* contamination at Sterling State Park and concerns related to pathogens from the upper watershed resulted in the Beach Closings BUI for the AOC (MDEQ, 2012).

There is only one beach located within the boundary of the AOC, in Sterling State Park and on the shores of Lake Erie (Figure 1). The Sterling State Park public beach has been monitored by the Monroe County Health Department since 2005, and there has been only one contamination advisory since that time, occurring from July 7, 2010 to July 9, 2010, due to an unknown source (Michigan BeachGuard System, 2013).

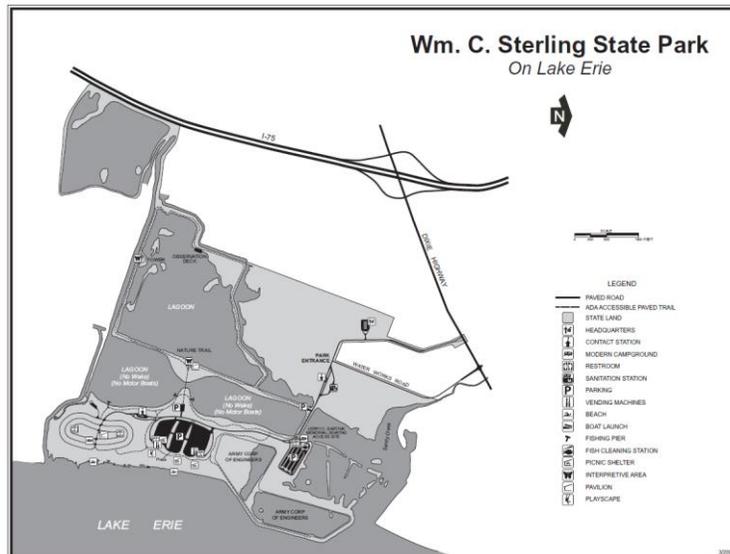


Figure 1: The only beach located within the vicinity of the AOC is located in the southwestern corner of Sterling State Park, east of the modern campground, and just north of where the Mason Run discharges to Lake Erie.

Seven BUIs will remain in the River Raisin AOC: Restrictions on Fish and Wildlife Consumption, Degradation of Fish and Wildlife Populations, Bird or Animal Deformities or Reproduction Problems, Degradation of Benthos, Restrictions on Dredging Activities, Eutrophication or Undesirable Algae, and Loss of Fish and Wildlife Habitat.

Removal Criteria

The *Guidance* has three tiers as removal criteria for the Beach Closings BUI, the second of which applies to the River Raisin AOC. The criteria are:

This BUI shall be considered restored when:

1. No waterbodies within the AOC are included on the list of non-attaining waters due to contamination with pathogens in the most recent Clean Water Act, *Water Quality and Pollution Control in Michigan: Section 303(d) and 305(b) Integrated Report (Integrated Report)*, which is submitted to the USEPA every two years.
2. OR, in cases where the waterbodies within the AOC are on the list of non-attaining waters due to the presence of combined sewer overflows (CSOs) or are impacted by upstream CSOs, this BUI will be considered restored when:
 - Updated information reveals that the CSOs have been eliminated or are being treated.
3. OR, in cases where the CSOs still exist and significant progress has been made toward their elimination or treatment, this BUI will be considered restored when:

Monitoring in the AOC during the recreation period, using the sampling protocol outlined in Rule 62 of the Michigan Water Quality Standards (WQS), meets the following criteria:

- The sampling plan and Quality Assurance Project Plan are approved by the MDEQ;
- *E. coli* concentrations are below a 30-day geometric mean of 130 counts per 100 milliliters (ml);
- At least 90% of the sample results are below the daily geometric mean limits of 300 counts *E. coli* per 100 ml;
- No more than 1 of the sample results exceed the partial-body contact water quality standard of 1,000 counts *E. coli* per 100 ml, based on a daily geometric mean; and
- The MDEQ-approved plans in a National Pollutant Discharge Elimination System (NPDES) permit are in place for addressing any remaining CSOs that are causing BUIs, and the implementation plan is on schedule.

Sampling under approach 3 is done systematically throughout the recreation season and does not specifically monitor wet weather discharges from CSOs. Meeting the above criteria does not negate regulatory requirements for separating CSOs in order to meet the WQS.

The attached excerpt from the *Guidance* (pages 37-40) includes the rationale for the delisting criteria (Attachment A).

Analysis

Tier 1 of the *Guidance* requires that no waterbodies within the AOC be included on the list of non-attaining waters due to contamination with pathogens in the most recent *Integrated Report*. In the *Integrated Report*, dated March 2012, the River Raisin is included due to contamination by pathogens (MDEQ, 2012). In the case of the AOC, the area was listed for contamination by pathogens due to the presence of CSOs (Swart, 2013). As the AOC is on the list of non-attaining waterbodies, the Tier 1 criterion has not been met; therefore, we must assess the second tier of the *Guidance*.

Tier 2 allows for restoration of the BUI “in cases where the waterbodies within the AOC are on the list of non-attaining waters due to the presence of CSOs or are impacted by upstream CSOs,” when those CSOs responsible for conditions that resulted in beach closings have been eliminated or are being treated (MDEQ, 2008). In the River Raisin, the CSOs discharging to the AOC are part of the Blissfield and Adrian Wastewater Treatment Plants (WWTP). The Blissfield CSOs were separated in 2002, and the Adrian CSOs are controlled through retention treatment basins which are under a NPDES permit, and required to be monitored and reported to the MDEQ’s Water Resources Division (WRD).

The Monroe WWTP has had documented sanitary sewer overflows (SSOs). The SSOs are typically the result of wet weather events and treatment plants without enough capacity to handle the event, or are a result of excess sanitary flow which needs to be removed. In the Stage 2 Remedial Action Plan for the River Raisin AOC, SSOs are listed as one of the sources of pathogens to the river (MDEQ, 2012). This type of overflow is illegal and is typically corrected via enforcement actions by the MDEQ’s WRD. Although SSOs affect the AOC, they are regulated outside the scope of the AOC program. In the City of Monroe, the Monroe WWTP historically discharged to the River Raisin; however, in 1987 the outfall was relocated and now the WWTP outlets to Lake Erie via Plum Creek outside of the boundary of the AOC. The NPDES permit for the Monroe WWTP requires SSOs to be eliminated by November 2015, and the City of Monroe’s existing NPDES Phase 2 Illicit Discharge Elimination Program will result in additional improvements.

A total maximum daily load (TMDL) for *E. coli* is scheduled to be developed in 2019 for the Willow Run subwatershed within the River Raisin watershed (MDEQ, 2012). This TMDL is coordinated through the MDEQ’s WRD. A TMDL will establish loading requirements for *E. coli* within the River Raisin AOC and will provide a regulatory mechanism outside of the AOC program to control pathogen levels.

As a result of the actions taken by the Blissfield and Adrian WWTPs to eliminate or treat CSOs, as well as the scheduled TMDL for *E. coli*, the River Raisin AOC meets the restoration criteria outlined in Tier 2 of the *Guidance*.

The removal recommendation was discussed with the River Raisin PAC at their regular meeting on July 11, 2013. The River Raisin PAC submitted a formal letter of support for removal of the BUI on August 16, 2013, (Attachment C). This proposed action was published in the MDEQ Calendar for public notice. Supporting documents were posted on the MDEQ's AOC program web page for public review and comment from August 26, 2013 through September 9, 2013. No comments were received during the public comment period.

Recommendation

Based on the review of all pertinent data, the MDEQ AOC Program staff request approval of the recommendation to remove the Beach Closings BUI from the River Raisin AOC.

Prepared by: Melanie Foose, River Raisin AOC Coordinator
 Great Lakes Management Unit
 Office of the Great Lakes
 Michigan Department of Environmental Quality
 August 22, 2013

Attachments

- A – Beach Closings, pages 37-40 of the *Guidance*
- B – River Raisin PAC Meeting Minutes, July 11, 2013
- C – River Raisin PAC, Letter of Support for the Removal of the Beach Closings BUI, August 16, 2013

References

- Michigan BeachGuard System - Lake Erie - Sterling State Park. *Michigan BeachGuard System - Lake Erie - Sterling State Park*. Michigan Department of Environmental Quality, n.d. Web. 05 July 2013. <https://www.eagle.state.mi.us/beach/>.
- Michigan Department of Environmental Quality. 2008. *Guidance for Delisting Michigan's Great Lakes Areas of Concern*, revised. MI/DEQ/WB-06-001.
- Michigan Department of Environmental Quality. 2012. Water Quality and Pollution Control in Michigan 2010 Sections 303(d), 305(b), and 314 Integrated Report. Water Resources Division, Michigan Department of Environmental Quality, Lansing, Michigan.
- Michigan Department of Environmental Quality, Water Resources Division. Combined Sewer and Sanitary Sewer Overflow Information System.
- Michigan Department of Environmental Quality. 2012. Stage 2 Remedial Action Plan for the River Raisin Area of Concern. Office of the Great Lakes, Michigan Department of Environmental Quality, Lansing, Michigan.

Swart, S. 2013. Michigan Department of Environmental Quality, Office of the Great Lakes, Great Lakes Management Unit, 2013 Statewide Beach Closings Assessment Report. Office of the Great Lakes, Michigan Department of Environmental Quality, Lansing, Michigan.

Swart, S. 2012. Michigan Department of Environmental Quality, Office of the Great Lakes, Great Lakes Management Unit, 2012 Statewide Beach Closings Assessment Report. Office of the Great Lakes, Michigan Department of Environmental Quality, Lansing, Michigan.

Attachment A

2008 Guidance for Delisting Michigan's Great Lakes Areas of Concern

Beach Closings

Significance in Michigan's Areas of Concern

Eleven of Michigan's AOCs are listed as impaired due to beach closings from bacterial contaminants, including: Raisin River, Detroit River, Rouge River, Clinton River, St. Clair River, Saginaw River/Bay, St. Marys River, Kalamazoo River, Menominee River, Muskegon Lake, and Manistique River.

Michigan Restoration Criteria and Assessment

This BUI will be considered restored when:

1. No waterbodies within the AOC are included on the list of non-attaining waters due to contamination with pathogens in the most recent Clean Water Act, *Water Quality and Pollution Control in Michigan: Section 303(d) and 305(b) Integrated Report* (Integrated Report), which is submitted to U.S. EPA every two years.
2. OR, in cases where the waterbodies within the AOC are on the list of non-attaining waters due to the presence of Combined Sewer Overflows (CSOs) or are impacted by upstream CSOs, this BUI will be considered restored when:

- Updated information reveals that the CSOs have been eliminated or are being treated.

3. OR, in cases where CSOs still exist and significant progress has been made towards their elimination or treatment, this BUI will be considered restored when:

Monitoring in the AOC during the recreation period, using the sampling protocol outlined in Rule 62 of the Michigan WQS, meets the following criteria:

- The sampling plan and Quality Assurance Project Plan are approved by the MDEQ;
- *E. coli* concentrations are below a 30-day geometric mean of 130 counts per 100 milliliters (ml);
- At least 90% of sample results are below the daily geometric mean limits of 300 counts *E. coli* per 100 ml;
- No more than 1 of the sample results exceed the partial-body contact water quality standard of 1,000 counts *E. coli* per 100 ml based on a daily geometric mean; and

- DEQ-approved plans in a National Pollutant Discharge Elimination System (NPDES) permit are in place for addressing any remaining CSOs that are causing BUIs and the implementation plan is on schedule.

Sampling under approach 3 is done systematically throughout the recreation season and does not specifically monitor wet weather discharges from CSOs. Meeting the above criteria does not negate regulatory requirements for separating CSOs in order to meet water quality standards.

Rationale

Practical Application in Michigan

These restoration criteria are based on Michigan's WQS for bacterial contamination. Rule 323.1062 of Michigan's WQS sets the maximum concentrations of *E. coli* that are acceptable for waters of the state to meet total and partial-body contact recreation uses. The AOCs with a Beach Closing BUI have historically found persistent elevation of bacteria levels in their recreation waters, often due to the existence of sanitary sewer overflows and CSOs.

In accordance with Public Health Code (Act 368 of 1978), county health departments have the authority to monitor and evaluate public beaches to determine if the water is safe for bathing, swimming, or partial body contact recreation. While beach monitoring is a voluntary program, those county health departments that participate must monitor in accordance with Michigan's WQS.

County health departments which monitor public beaches must submit their sampling data to the MDEQ which tracks monitoring results and uses the data to determine whether waterbodies are identified as impaired in the *Water Quality and Pollution Control in Michigan: Section 303(d) and 305(b) Integrated Report* (Integrated Report) to the U.S. EPA on Clean Water Act compliance.

Many waterbodies are placed on the non-attaining lists in the Integrated Report due to the presence of CSOs, rather than monitoring data that indicate waters were contaminated with pathogens. Although it is understood that the presence of a CSO and the chance of overflow is a serious issue and needs to be addressed, the criteria provides for BUI removal based on monitoring data, not just listing in the Report. The proposed monitoring is done systematically throughout the recreation season to determine whether or not there is normally a localized bacterial contamination issue. It does not specifically monitor wet weather discharges from CSOs. Meeting the proposed monitoring criteria does not negate regulatory requirements for separating CSOs in order to meet water quality standards, but does allow for removal of the BUI if the site meets the criteria.

1991 IJC General Delisting Guideline

When waters, commonly used for total-body contact or partial body-contact recreation, do not exceed standards, objectives, or guidelines for such use.

The IJC general delisting guideline for the BUI is presented here for reference. The Practical Application in Michigan subsection above describes application of specific criteria for restoration based on existing Michigan programs and authorities.

State of Michigan Programs/Authorities for Evaluating Restoration

Michigan assesses waterbodies throughout the state on a 5-year basin rotation cycle according to the MDEQ's "Strategic Environmental Quality Monitoring Program for Michigan's Surface Waters" (MDEQ, 1997) and "Michigan Water Quality Strategy Update" (MDEQ, 2005). Each year, a set of targeted watersheds are sampled at selected sites for conventional and toxic pollutants and biological and physical habitat/morphology indicators. The set of watersheds sampled rotates each year, with each major watershed in the state revisited every 5 years (see Appendix 1 for maps of the basin rotations). One element of the strategy is improved support for public beach monitoring.

The specific objectives of the beach monitoring element are to:

1. Support county health departments in determining whether waters of the state are safe for total body contact recreation.
2. Evaluate the effectiveness of MDEQ programs in protecting waters of the state from bacteria/*E. coli* contamination.
3. Develop and maintain a database into which counties can enter their beach monitoring data, and which the public can access for the latest information.

The beach monitoring element consists of two components that, in combination, provide data necessary to achieve these objectives. These include annual grants awarded to local governments/county health departments each year to monitor public beaches through a grant application package, and development and maintenance of a statewide beach database, which is available on the MDEQ Web site (www.michigan.gov/deq - click on "Water," then "Water Quality Monitoring," and then "Beach Monitoring"). Counties enter data directly into the database.

Some local AOC communities also have programs for monitoring water quality and related parameters which may be applicable to this BUI. If an AOC chooses to use local monitoring data for the assessment of BUI restoration, the data can be submitted to the MDEQ for review. If the MDEQ determines that the data appropriately address the restoration criteria and meets quality assurance and control requirements, they may be used to demonstrate restoration success.

Attachment B

River Raisin AOC Public Advisory Council Meeting Minutes

1111 The City of Monroe
Commission on the Environment and Water Quality
MINUTES
July 11, 2013 7:00 pm

The following minutes are not taken verbatim and only reflect an overall representation of the meeting.

CALL TO ORDER: Chairperson Pfund called the meeting to order at 7:00 pm

MEMBERS PRESENT: A roll call of members was taken and a quorum was present.

Maurcen Pfund
Barry LaRoy
Richard Micka- arrived 8:15pm
Jerry McKart
Ike Owens
Dan Stefanski via phone
Brian Egen
Bonnie Finzel – Doster
Hal Weakly

Special Guest – Melanie Foose – MDLQ
Jeanie Micka – Citizen

Update on projects:

Fish Passage Phase 1 Finalizing Post monitoring work being completed.

Fish Passage Phase 2 – Out for bid, awarded to Lee and Ryan (remediation efforts specialty) – Waterloo Dam Channel no work on permit until Aug. 1, 2013, dams 4 and 5 are a go, Grape dam is a go.

Sterling Island Finalized.

Solid Waste Grant to pay for additional questions for Resilient Monroe Project.

Discussion on Living Working Watershed, Motion to name it “ Living Watershed” made by Ike Owens, 2nd by Bonnie Finzel-Doster, motion passed. A special Thanks to Mr. Micka for all the work he has put into this project.

Reviewed Web site- all agreed it looks good. Maintain for at least one year.

Beach Closing BUI Discussed, and reviewed, send any comments to Melanie. Motion to accept BUI with changes by Dan Stefanski, 2nd by Barry LaRoy, motion passed.

Barry – Reviewed water level report.

Melanie – BUI review at next meeting. Site visit with OGL Director Jon Allen July 31, 2013

Dick Micka – Resilient Monroe Citizen Action meeting need participation

Brian – MDNR recognized COTE efforts.

Jeanie Micka – Lotus Bed tour July 27, 2013.

Meeting Adjourned – 8:40 pm Motion by Brian Egen 2nd by Hal Weakly.

Attachment C

**River Raisin Public Advisory Council
Letter of Support for the Removal of the Beach Closings BUI**



**The River Raisin Remedial Action Plan
Public Advisory Council
And
The City of Monroe
Commission on the Environment and Water Quality**

August 16, 2013

Mr. Rick Hobrla
Michigan Department of Environmental Quality
Office of the Great Lakes
535 West Allegan Street
P.O. Box 30473
Lansing, MI 48909-7973

Dear Mr. Hobrla,

The River Raisin Public Advisory Council (PAC), operating through the City of Monroe's Commission on the Environment (COTE) has reviewed and discussed the Removal Recommendation for the Beach Closings Beneficial Use Impairment (BUI). The River Raisin PAC members voted unanimously in support of the removal of the Beach Closings BUI at the COTE meeting held on July 11, 2013.

Although the River Raisin Area of Concern is on the list of non-attaining waters, the PAC agrees that Tier 2 of the restoration criterion has been met with the improvements made at the Blissfield, Adrian and Monroe Wastewater Treatment Plants as well as the scheduled Total Maximum Daily Load (TMDL) for *E. coli*.

The River Raisin PAC is pleased to partner with the Michigan Department of Environmental Quality in the removal of the Beach Closings BUI as we continue to work towards the delisting of the River Raisin as an Area of Concern.

Sincerely,

A handwritten signature in blue ink, reading "Daniel W. Stefanski", is located below the word "Sincerely,".

Daniel W. Stefanski
Chairman, River Raisin Public Advisory Council