



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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

APR - 3 2012

Ms. Patricia Birkholz
Director, Office of Great Lakes
Michigan Department of Natural Resources
525 West Allegan
Lansing, Michigan 48909

REPLY TO THE ATTENTION OF:

Dear Patty:

Thank you for your March 15, 2012 request to remove the "Degradations of Aesthetics" Beneficial Use Impairment (BUI) at the Kalamazoo River and River Raisin Areas of Concern (AOCs) 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 at these two AOCs. In addition, EPA will notify the International Joint Commission of this significant positive change in the environmental health of the Kalamazoo River and River Raisin AOCs.

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 at these two AOCs. These improvements will benefit not only the people who work and live near the Kalamazoo River and River Raisin AOCs, 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 local coordinating committees as we work together to fully restore all of Michigan's AOCs.

If you have further questions, please contact me at (312) 353-4891, or your staff may contact John Perrecone, Great Lakes National Program Office, 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: Frank Ruswick, MDEQ, Office of Great Lakes
John Riley, MDEQ, Office of Great Lakes
Dr. Saad Jasmin, IJC
Wendy Carney, EPA, GLNPO
John Perrecone, EPA, GLNPO
John Haugland, EPA, GLNPO
Scott Cieniawski, EPA, GLNPO



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
OFFICE OF THE GREAT LAKES
LANSING



PATRICIA BIRKHOLZ
DIRECTOR

March 15, 2012

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:

I am writing to request the United States Environmental Protection Agency (U.S. EPA), Great Lakes National Program Office's (GLNPO), concurrence with the removal of the Degradation of Aesthetics Beneficial Use Impairment (BUI) from both the Kalamazoo River and River Raisin Areas of Concern (AOCs). The Michigan Department of Environmental Quality (MDEQ), Office of the Great Lakes (OGL) has assessed the status of the BUI in these AOCs in accordance with the *Statewide Aesthetics Assessment Workplan and Monitoring Protocol* and 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 Kalamazoo River and River Raisin AOCs.

Enclosed please find documentation to support this recommendation, including the BUI Removal Recommendation document prepared by MDEQ staff. Both the Kalamazoo River Public Advisory Council and River Raisin Public Advisory Council have submitted letters supporting this recommendation, which are included with this package. The proposed BUI removals were public noticed via the Mich-RAP listserv, the MDEQ Calendar, the MDEQ AOC program web site, and via local AOC e-mail lists. No input was received in response to the public comment period, which ran from February 13, 2012 to March 13, 2012.

We value our continuing partnership in the AOC Program and look forward to working with GLNPO in the removal of additional BUIs in the near future. If you need further information concerning this request, please contact Mr. John Riley, OGL, at 517-335-4122, or you may contact me.

Sincerely,

Patricia Birkholz
Director
517-335-4056

Mr. Chris Korleski

Page 2

March 15, 2012

Enclosures

cc: Mr. Steve Hamilton, Kalamazoo River Watershed Council
Mr. Dan Stefanski, River Raisin Remedial Action Plan Public Advisory Council
Mr. John Perrecone, U.S. EPA
Mr. Dan Wyant, MDEQ
Mr. Frank Ruswick, OGL
Mr. Richard Hobrla, OGL
Ms. Michelle Selzer, OGL
✓ Mr. John Riley, OGL

Removal Recommendation Degradation of Aesthetics Beneficial Use Impairment Kalamazoo River and River Raisin Areas of Concern

Issue

Based on two cycles of monitoring data collected by Michigan Department of Environmental Quality (MDEQ) staff, the Office of the Great Lakes (OGL), Areas of Concern (AOC) program requests concurrence with its recommendation to remove the Degradation of Aesthetics Beneficial Use Impairment (BUI) in: 1) the Kalamazoo River AOC, and 2) the River Raisin AOC. This request is made with the support of the Kalamazoo River Watershed Council (KRWC) (which serves as the local Public Advisory Council [PAC]), and the River Raisin PAC. This request is made in accordance with the process and criteria set forth in the *Guidance for Delisting Michigan's Great Lakes Areas of Concern* (Guidance) (MDEQ, 2008).

Background

The following descriptions are paraphrased from historic documents, such as original Remedial Action Plans (RAPs) or subsequent RAP updates, which detailed specific aesthetic problems at the time:

Kalamazoo River

Degradation of Aesthetics was originally identified as an impaired use due to occasional spills or runoff events that caused odor or visual aesthetics problems (Kalamazoo River PAC, 1998).

River Raisin

According to the 1987 River Raisin RAP, the Ford Motor Company was a potential source of excessive levels of oil and grease to the AOC by way of direct discharge from its manufacturing operations. Studies conducted in the River Raisin during the 1960s through the 1980s documented poor water quality due in part to high turbidity, high suspended solids (especially from the Monroe WWTP and upstream areas), and total phosphorus loadings (MDNR, 1987).

2011 Aesthetics Monitoring

In general, each of the monitoring sites was assessed as follows. The date, time, GPS coordinates, weather conditions and water temperature were recorded. Three water samples were collected in glass jars from below the water surface to assess water color, clarity and turbidity. All three sample jars were photographed together against a white backdrop. Any odors from the sample jars, visible debris, and obvious pollution in the waterbody were recorded. Digital photographs were taken along the shoreline to the left, to the right, straight across, and directly into the water, along with any other condition, debris, etc. worthy of recording. Evidence of recreational activity, such as empty bait containers or people swimming was noted, along with any other observable conditions that may influence the decision as to the presence of an impairment or a designated use being employed. Based on the total of those observations, each site was assessed as to whether it met the criteria for removing the Degradation of Aesthetics BUI.

An initial cycle of aesthetics assessments was conducted in the ten Michigan AOCs that have the Degradation of Aesthetics BUI, between July 6 and September 8, 2011. A second cycle of assessments took place between October 18 and November 30, 2011, during which seven of the ten AOCs were assessed. The assessments were conducted in accordance with the MDEQ 2011 Statewide Aesthetics Assessment Workplan and Monitoring Protocol.

At most monitoring locations, a minimum of five photographs were taken and are available upon request, as are the individual monitoring data sheets completed at each site. Unless otherwise indicated, aerial photos in this document are oriented with north to the top. Specific monitoring locations were chosen based on: historical RAP documents, input received from local Public Advisory Councils, best professional judgment and personal knowledge of MDEQ AOC coordinators, and physical access to the waterbody.

Overall, it appears that aesthetic conditions in most of the AOCs have improved considerably, when compared with historic reports of those conditions from years ago. Many of the aesthetic conditions described in early RAPs and other related documents simply no longer exist. In part, this may be due to the successful implementation of National Pollutant Discharge Elimination System (NPDES) program permitting, an increasing sense of resource stewardship by local resource users, improved environmental practices implemented by commercial and industrial operations around the state, and increased advocacy and educational outreach by organizations that seek to enhance and protect their local water resources.

Removal Criteria

According to the *Guidance*, this BUI will be considered restored when monitoring data for two successive monitoring cycles indicates that water bodies in the AOC do not have any of the following physical properties in unnatural quantities which interfere with any designated use:

- turbidity
- foams
- color
- settleable solids
- oil films
- suspended solids
- floating solids
- deposits

For the purposes of this criterion, these eight properties impair aesthetic values if they are unnatural – meaning those that are manmade (e.g., garbage, sewage), or natural properties which are exacerbated by human-induced activities (e.g., excessive algae growth from high nutrient loading). Persistent, high levels are those defined as long enough in duration, or elevated to the point of being injurious, to any designated use listed under Rule 323.1100 of the Michigan WQS. Natural physical features which occur in normal ecological cycles (e.g., logjams/woody debris, rooted aquatic plants) are not considered impairments, and in fact serve a valuable ecological role in providing fish and wildlife habitat.

2011 Aesthetics Monitoring Results and Analysis

Kalamazoo River

Nine sites on the Kalamazoo River were assessed on August 12 and again on October 25, 2011. A total of approximately 93 photos were taken, and 54 water samples were assessed through both monitoring cycles. Assessment locations included sites from Portage Creek in the City of Kalamazoo through the main stem of the river to the Douglas/Saugatuck area (see Figure 1). Invasive purple loosestrife was noted along the shoreline in many of the assessment areas, as was phragmites, another invasive plant species. Submerged and emergent vegetation were both common in the assessment sites, as was evidence of people using the resource for fishing and other recreational activities. Kayakers were observed during assessment of the westernmost monitoring location during the first cycle. Some of the assessment areas were located at sites where the dams are in deteriorating condition. Fish were commonly observed throughout.

Broken concrete, rip rap, and steel sheet piling was observed in limited shoreline areas, along with downed trees and other naturally occurring debris. Small amounts of floating trash were

observed in the water and along the shoreline in places. Occasionally, a faint chloramine odor was detected in water samples, as a result of upstream wastewater treatment methods. However, none of these conditions are unique to AOCs, and none of them were severe or persistent enough to impair a designated use. Water samples collected throughout the AOC were clear of color and not turbid, even though there was a minor rain event the morning of the second assessment. Overall, no evidence of potential aesthetic impairments was observed at any of the nine monitoring locations in either assessment cycle.



Figure 1. Kalamazoo River Aesthetics Monitoring Locations.

River Raisin

The River Raisin was assessed on July 6 and October 18, 2011, see Figure 2 for locations. The River Raisin AOC is largely an industrial area, with hardened shorelines, including large chunks of broken concrete that function as industrial-sized rip rap, and steel sheet piling. People were observed fishing and pleasure boating. There was plenty of evidence (empty bait containers) of people using the river for fishing along the shoreline. Small fish were observed, as was waste from geese along the shoreline. People were also observed playing waist deep in the water at Site 1. Small amounts of floating algae were found at Site 2. Submerged aquatic vegetation was observed at Site 3. A large group of children was observed swimming in Lake Erie at Site 6 in July. A total of approximately 73 photos were taken, and 36 water samples were assessed through both monitoring cycles.

Water samples were consistently clear and colorless, with no detectable turbidity at any of the sites in both monitoring cycles. During the October assessment, water samples at five of the six monitoring locations had a faint chloramine or other chemical odor. Odors were not detected during the initial monitoring cycle. Trash and other debris were minimal throughout the AOC. Overall, MDEQ staff found no evidence to support a continued aesthetic impairment in the River Raisin AOC.



Figure 2. River Raisin Aesthetics Monitoring Locations.

Recommendations

Based on observations, data and photographs collected during two successive monitoring cycles, carried out by MDEQ AOC staff and Water Resources Division Aquatic Biologists, and with the support of the respective PACs, MDEQ program staff recommend removal of the Degradation of Aesthetics BUI from the Kalamazoo River AOC and the River Raisin AOC, and request that the Director of the Office of the Great Lakes submit a letter requesting concurrence from the USEPA to remove this BUI from both.

This proposed action was public noticed for 30 days, from February 13 until March 13, 2012, via posting to the Mich-RAP listserv, listing in the MDEQ Calendar, posting to the MDEQ AOC program web page, and announcements to the Kalamazoo River PAC and River Raisin PACs. Supporting documents were also available on the MDEQ's AOC program web page. One set of written comments was received during the public notice period. That person expressed support for removing the Aesthetics BUI from the River Raisin.

References

Kalamazoo River Watershed Public Advisory Council, 1998. Kalamazoo River: Beauty and the Beast, Remedial and Preventive Action Plan for the Kalamazoo River Watershed Area of Concern.

Michigan Department of Environmental Quality. 2008. Guidance for Delisting Michigan's Great Lakes Areas of Concern. MI/DEQ/WB-06/001.

Michigan Department of Environmental Quality, 2011. Statewide Aesthetics Assessment Workplan and Monitoring Protocol.

Michigan Department of Natural Resources, 1987. Remedial Action Plan for River Raisin Area of Concern.

Prepared by: John Riley, AOC Coordinator
Great Lakes Management Unit
Office of the Great Lakes
Michigan Department of Environmental Quality
March 14, 2012



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



January 16, 2012

**Mr. John Riley
Environmental Quality Analyst
Michigan Dept. of Natural Resources and the Environment
rileyj@michigan.gov**

Dear Mr. Riley,

As the Chairman of the River Raisin Remedial Action Plan Public Advisory Council (PAC), and on behalf of the City of Monroe Commission on the Environment (COTE), I thank you for your excellent presentation on the aesthetics beneficial use impairment classification of the River Raisin. At our COTE/PAC meeting held on January 12, 2012, you reported that after two field trips to the River Raisin Area of Concern, investigators were unable to document any significant persistent degradation of aesthetics in our Area of Concern. Your PowerPoint presentation documented many pictures depicting the quality of our water, and the shoreline in the Area of Concern. Some floating algae and pilings typical of a working harbor were identified, but did not show an ongoing aesthetics problem.

After discussion, a motion was passed unanimously by the Commissioners to accept your report and send a letter to the State of Michigan in support of removal of the Degradation of Aesthetics BUI from the River Raisin Remedial Action Plan. It is indeed my honor to draft such a letter of support. I believe that by working together we can mitigate the beneficial use impairments that have plagued our River for so very long, and finally delist the River Raisin as a designated Area of Concern.

Sincerely Submitted,

**Daniel W. Stefanski
Chairman, River Raisin PAP-PAC**



Board of Directors

Stephen Hamilton

Don Brown

James Coury

Sue Founé

Robert Whitesides

Dave Heinicke

Pat Crowley

Coordinator

Jeff Spoelstra

The Kalamazoo River Watershed Council is a public, non-profit 501(c)3 organization whose purpose is to work collaboratively with the community, government agencies, local officials and businesses to improve and protect the health of the Kalamazoo River, its tributaries, and its watershed.

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Kalamazoo Michigan
49007

269-978-4606

krwc@kalamazooriver.org
www.kalamazooriver.org

December 26, 2011

John Riley
Michigan Department of Natural Resources and Environment
Office of the Great Lakes

Dear John,

We are pleased to assist in the review and submittal of a formal request for removal of the Aesthetics Beneficial Use Impairment for the Kalamazoo River Area of Concern.

Removing this listed Beneficial Use Impairment (BUI) of the Kalamazoo River Area of Concern (AOC) does not mean that the Council is no longer concerned with possible accidental spills, trash dumping, stormwater floatable trash, or excess nutrients. We will always be concerned with the potential for agricultural wastes, degraded wastewater infrastructure, impervious surface runoff, and failing septic systems to contribute to aesthetic problems.

Despite these concerns, we feel it is justifiable and desirable to remove this listed impairment of Kalamazoo River AOC. We feel confident that existing non-regulatory and regulatory watershed programs and groups of subwatershed stakeholders will detect, define, and correct resource impairments in the future by working collaboratively with management agencies and other diverse partners.

Finally, we feel that the state and federal AOC programs must rely on existing watershed programs (e.g., Clean Water Act nonpoint source and Total Maximum Daily Load and National Pollutant Discharge Elimination System) for tackling threats to aesthetics and for getting ahead of these problems with more effective land use planning and public education.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey Spoelstra". The signature is fluid and cursive.

Jeffrey Spoelstra
Coordinator