



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
GREAT LAKES NATIONAL PROGRAM OFFICE
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY 05 2010

Mail Code: R-19J

Mr. William Creal
Chief, Water Bureau
Michigan Department of Natural Resources and Environment
Constitution Hall
525 W. Allegan St.
P.O. Box 30273
Lansing, Michigan 48909-7773

Dear Mr. Creal:

This letter is the U.S. Environmental Protection Agency's official response to your letter of March 23, 2010, requesting the delisting of the Beach Closings Beneficial Use Impairment (BUI) in the Manistique River Area of Concern (AOC). As your request points out and the supplied data supports, the following restoration criteria for the Beach Closings in the Manistique River AOC have been met:

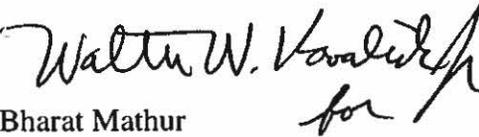
- The sampling plan and Quality Assurance Project Plan (QAPP) were approved by the Michigan Department of Natural Resources and Environment (DNRE);
- *E. coli* concentrations are below a 30-day geometric mean of 130 counts per 100 milliliters (ml);
- At least 90 percent of sample results are below the daily geometric mean limits of 300 counts *E. coli* per 100 ml;
- Not 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 DNRE-approved plans in a National Pollutant Discharge Elimination System (NPDES) permit are in place for addressing any remaining Combined Sewer Overflows (CSOs) that are causing BUIs and the implementation plan is on schedule.

Based upon EPA's review of your request and the supporting data, and upon our shared desire to show progress as we move all of the Great Lakes AOCs toward restoration of all BUIs and formal delisting, EPA approves your request for the delisting of the Beach Closings BUI in the Manistique River AOC. EPA will notify the International Joint Commission (IJC) of this significant positive change in the environmental health of the Manistique AOC.

We congratulate all of the parties involved in this Federal/State/local partnership. This has been instrumental in achieving this important environmental improvement which will benefit the citizens of the Manistique AOC, the State of Michigan, and of the Great Lakes Basin. We look forward to the continuation of this important and productive relationship with the Michigan Department of Natural Resources and Environment and the local coordinating committees as we work together to fully restore all of Michigan's AOCs.

If I or my staff can be of further service to you, please do not hesitate to contact us.

Sincerely,

A handwritten signature in black ink that reads "Walter W. Kovalich" with a large flourish at the end. Below the signature, the word "for" is written in a smaller, cursive script.

Bharat Mathur
Acting Great Lakes National Program Manager

cc:

James K. Cleland, DNRE
Ken DeBeaussaert, Office of the Great Lakes
Richard Hobrla, DNRE
Diana Klemens, DNRE
Julie Sims, DNRE
Corey Barr, Chair of Manistique Public Advisory Council
Dr. Saad Jasim, Director, Great Lakes Regional Office, IJC
Gary Gulezian, Director, Great Lakes National Program Office
Amy P. Mucha, AOC Liaison, EPA-GLNPO
John Perrecone, RAP Coordinator, EPA-GLNPO
Pete Christich, EPA-OIA

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

RECEIVED DEQ - ANC - HRSU

INTEROFFICE COMMUNICATION

MAR 23 2010

TO: William Creal, Chief, Water Bureau

FROM: Rick Hobrla, Chief, Aquatic Nuisance Control & Remedial Action Unit

DATE: March 19, 2010 RMH

SUBJECT: Removal of the Beach Closings Beneficial Use Impairment (BUI) for the Manistique River Area of Concern (AOC)

The purpose of this memo, the attached supporting documentation, and the following Briefing Paper titled, *Removal of the Beach Closings Beneficial Use Impairment (BUI) for the Manistique River Area of Concern (AOC)*, is to document restoration and support removal of the Beach Closings BUI in the Manistique River AOC, per the process outlined in the *Guidance for Delisting Michigan's Great Lakes Areas of Concern*.

Ms. Julie Sims, DNRE liaison for the Manistique River AOC, has consulted with other DNRE technical staff, the Manistique River Public Advisory Council (PAC), and convened a Technical Committee to assess the status of this BUI. A public meeting was also held on August 10, 2009, to discuss this recommendation with the citizens in the AOC. The DNRE technical staff, the PAC, and the community expressed their support for recommending the removal of this BUI.

Therefore, the DNRE AOC staff recommends that you sign and submit the attached letter requesting concurrence from the U.S. Environmental Protection Agency, Great Lakes National Program Office, to remove the Beach Closings BUI from the Manistique River AOC.

cc: Diana Klemans, Water Bureau



STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENT
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

REBECCA A. HUMPHRIES
DIRECTOR

March 23, 2010

Mr. Gary Gulezian, 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. Gulezian:

The purpose of this letter is to request the U.S. Environmental Protection Agency – Great Lakes National Program Office's (U.S. EPA-GLNPO) concurrence with the removal of the Beach Closings Beneficial Use Impairment (BUI) in the Manistique River Area of Concern (AOC). The Michigan Department of Natural Resources and Environment (DNRE) has evaluated the restoration of this BUI based on the process in the state's *Guidance for Delisting Michigan's Great Lakes Areas of Concern*, which is consistent with the U.S. Policy Committee's *Delisting Principles and Guidelines* document. The DNRE has determined that the Manistique River AOC has met the statewide restoration criteria for the Beach Closings BUI and that the BUI should be removed from the list of impairments in the Manistique River AOC.

Enclosed please find supporting documentation for the removal of the Beach Closings BUI in the Manistique River AOC, including the BUI removal Briefing Paper prepared by the DNRE's technical staff, and the letter from the Manistique River Public Advisory Council, dated August 20, 2009, supporting removal of the BUI.

We look forward to our continuing partnership in the AOC program, and working closely with the U.S. EPA-GLNPO in removing BUIs and the delisting of AOCs. If you need further information concerning this request, please contact Ms. Julie Sims, Aquatic Nuisance Control and Remedial Action Unit, Surface Water Assessment Section, Water Bureau, at 517-373-2732, or you may contact me.

Sincerely,

William Creal, Chief
Water Bureau
517-335-4176

Enclosures

cc: Mr. John Perrecone, U.S. EPA
Ms. Amy Mucha, U.S. EPA
Ms. Vicki Thomas, U.S. EPA
Mr. James K. Cleland, DNRE
Ms. Diana Klemans, DNRE
Mr. Richard Hobrla, DNRE
Ms. Julie Sims, DNRE

Enclosures

Briefing Paper: Removal of the Beach Closings Beneficial Use Impairment for the Manistique River Area of Concern, March 22, 2010.

July 20, 2009 and August 3, 2009, DEQ Calendar Public Notice

Manistique River AOC Public Meeting Minutes

Manistique River AOC Public Sign-In Sheet

August 20, 2009, Letter From Corey Barr, City of Manistique, to William Creal, Chief, Water Bureau, Department of Natural Resources and Environment

BRIEFING PAPER
REMOVAL OF THE BEACH CLOSINGS BENEFICIAL USE IMPAIRMENT FOR THE
MANISTIQUE RIVER AREA OF CONCERN

Issue or Request

Based upon the review of Remedial Action Plan documentation and consultation with agency staff, we would like to request removal of the Beach Closings Beneficial Use Impairment (BUI) in the Manistique River Area of Concern (AOC), per the process outlined in the *Guidance for Delisting Michigan's Great Lakes Areas of Concern* (Guidance) (Michigan Department of Environmental Quality [MDEQ], 2008).

Background/Facts

The Manistique River flows southwest through Schoolcraft County in Michigan's central Upper Peninsula, discharging into Lake Michigan at the city of Manistique. The AOC is the last 1.7 miles of the river, from the dam in Manistique to the mouth of the harbor at Lake Michigan (Michigan Department of Natural Resources [MDNR], 1987). The AOC currently has three BUIs determined under Annex 2 of the Great Lakes Water Quality Agreement, including Restrictions on Dredging, Restrictions on Fish and Wildlife Consumption, and Beach Closings. The Degradation of Benthos and the Loss of Fish and Wildlife Habitat BUIs were removed in November 2006 and September 2008, respectively. This document only addresses the Beach Closings BUI.

Removal Criteria

According to the Guidance, the restoration criteria for the Beach Closings BUI in the Manistique River AOC requires that:

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 (QAPP) are approved by the Michigan Department of Natural Resources and Environment (DNRE).
- *E. coli* concentrations are below a 30-day geometric mean of 130 counts per 100 milliliters (ml).
- At least 90 percent 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 the DNRE-approved plans in a National Pollutant Discharge Elimination System (NPDES) permit are in place for addressing any remaining Combined Sewer Overflows (CSOs) that are causing BUIs and the implementation plan is on schedule.

These restoration criteria are based on Michigan's WQS for bacterial contamination. Rule 62 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 Manistique River, like any water body that receives untreated CSOs, is listed as impaired on the 2008 Section 303(d) list. Although it is understood that the presence of an untreated 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. Therefore, sampling under this approach is done systematically throughout the recreation season and does not specifically occur following wet weather discharges from CSOs. Meeting the above criteria does not negate regulatory requirements for implementing the CSO control plan.

Remedial Actions

1977

The Manistique Wastewater Treatment Plant (WWTP) was upgraded to secondary (biological) treatment. Manistique Papers, Inc. upgraded its wastewater treatment facilities to provide secondary treatment of process wastewater from its paper making operations. Manistique Papers, Inc. dredged and filled the deinking wastewater settling lagoon (MDNR, 1987).

1989

Under an NPDES permit and a written agreement/implementation plan with the state of Michigan, the city of Manistique was allowed 40 years to separate their three CSOs, which involves storm water and sanitary sewer construction activities under several roads within the city of Manistique (City). It was estimated that the city would spend approximately \$110,000 per year to complete the separation work. In 1989, the city completed work at the US-2 lift station.

1990

The City designed and completed the first CSO separation project under the 40-year implementation plan at Garden Avenue.

1991

The City began design work on the second phase of the CSO separation project.

1992

Separation work began at the intersections of Cedar Street and Oak Street, and on Maple Avenue north of Elm Street.

1993

The City improved the interceptor behind the Hardee's Restaurant and built a large diameter storm sewer along Maple Street north.

1994

Work was completed on the Maple Street CSO sewer separation project. Additionally, due to massive damage caused by the previous winter's deep freeze, the Federal Emergency Management Administration assisted with the repair of the Manistique Avenue's water infrastructure. This effort was combined with Rebuild Michigan monies to complete the sewer and street repairs in this area.

In addition to the City's effort, the Manistique's Downtown Development Authority (DDA) authorized additional funding to continue CSO sewer separation work at Cedar Street. The City also worked on the sewer under Manistique Avenue to eliminate more infiltration.

1995

An evaluation of the City's WWTP was completed and recommended that the plant be converted to activated sludge due to failures of several of the rotating biological contactor (RBC) trains.

1997

The DDA began design of the River Street improvements and began an investigation of the needs and design of utilities at the mouth of the Manistique River.

1998

The City began a review of utilities extensions for development at Chippewa Street and US-2. Additionally, the RBCs at the WWTP failed, placing the City in jeopardy of violating its NPDES permit. A team was put together on an emergency basis to implement the plant's activated sludge modifications.

2000

The WWTP construction was completed including elimination of the RBCs and addition of activated sludge treatment along with increase plant pump capacity and more efficient secondary treatment.

2001

The Main Street storm sewer was installed from Maple Street to 300 feet past Gero Avenue. Replacement of all utilities (sewer and storm) at Oak Street, from Maple Street to Lake Avenue, was completed.

2003

Sewer separation work was completed at Delta, Center, Alger, and Bear Streets.

2004

Sewer separation work was completed at New Delta and Deer Streets (M-94).

2005-06

Street rehabilitation, including all sanitary sewer separation, new separate storm sewers, and a new outlet, was completed at North Cedar, Main, and Arbutus Streets.

2007-08

Street rehabilitation, including all sanitary sewer separation, new separate storm sewers, and a new outlet, was completed on Range Street from US-2 to Arbutus Street.

2009

The implementation plan to address the remaining CSO is on schedule.

Analysis

E. coli sampling was conducted at three stations located within the Manistique River AOC (see Figure 1). Samples were collected from upstream of the remaining CSO (site 1), downstream of the CSO (site 2), and in the Manistique Harbor where the Manistique River meets Lake Michigan (site 3). A QAPP was developed for the project and approved by the MDEQ. The QAPP includes information on project organization, responsibilities, sampling procedures, quality control checks, data management, and reporting.

Figure 1. Sampling Locations



Weekly *E. coli* sampling took place from May 1, 2007, to September 30, 2007. Sampling was conducted in accordance with Rule 62 of the Michigan WQS, and consisted of three distinct grab samples at each site. A geometric mean of the three individual samples was calculated for each station and compared to WQS (Table 1). All samples were collected and delivered to the Manistique Water Treatment Plant by City personnel. Samples were analyzed within six hours of collection using the U.S. Environmental Protection Agency (U.S. EPA) approved Method 9223B. *E. coli* results were reported on the MDEQ's Beach Monitoring Web site each week and are summarized in Table 1.

E. coli was detected in 100.0 percent of the 160 samples collected. The *E. coli* concentrations were all below a 30-day geometric mean of 130 counts per 100 ml. Ninety-six percent of sample results are below the daily geometric mean standard for total body contact of 300 counts *E. coli* per 100 ml. The maximum daily geometric mean detected on the Manistique River through the first 15 weeks was 156 counts *E. coli* per 100 ml on August 24, 2007, at Site 2. During this sample event it was noted that the Manistique River conditions were like glass with lots of ducks and geese on the water. Due to technical difficulties and staff error, the week 16 samples were read at 46 hours instead of 24 hours and possibly resulted in higher than actual concentrations reported; yet, these results did not exceed the removal criteria requiring that 90 percent of sample results be below the daily geometric mean of 300 counts *E. coli* per 100 ml. Additionally, no sample results exceeded the partial-body contact water quality standard of 1,000 counts *E. coli* per 100 ml based on a daily geometric mean.

Table 1. Summary of *E. coli* data collected in the Manistique River Area of Concern.

DATE	Site 1			Site 2			Site 3		
	SAMPLE RESULTS	DAILY G. MEAN	30-day G. MEAN	SAMPLE RESULTS	DAILY G. MEAN	30-day G. MEAN	SAMPLE RESULTS	DAILY G. MEAN	30-day G. MEAN
5/23/2007	26	19	---	38	37	---	47	44	---
	17			47			44		
	15			29			42		
5/30/2007	44	38	---	25	27	---	40	34	---
	31			30			28		
	41			26			36		
6/6/2007	26	27	---	45	40	---	47	48	---
	26			35			44		
	29			42			54		
6/13/2007	15	23	---	37	44	---	33	45	---
	22			43			44		
	40			54			63		
6/20/2007	32	34	27	58	56	40	48	51	44
	47			47			57		
	26			64			50		
6/27/2007	56	51	34	70	62	44	72	74	49
	72			69			83		
	34			49			68		
7/5/2007	47	41	34	36	43	48	66	46	52
	39			48			37		
	36			47			40		
7/13/2007	38	38	36	34	57	52	49	41	50
	28			66			46		
	52			84			31		
7/19/2007	48	46	42	37	51	53	54	46	51
	48			51			29		
	43			70			62		
7/25/2007	23	35	42	79	59	54	50	47	50
	28			44			41		
	67			57			51		
8/1/2007	50	40	40	89	86	58	61	63	48
	35			93			68		
	37			78			61		
8/8/2007	31	31	38	46	62	62	76	63	51
	32			50			63		
	31			101			52		
8/16/2007	39	31	36	20	27	53	35	30	48
	23			23			28		
	33			41			28		
8/24/2007	172	114	44	166	156	66	153	109	57
	51			131			150		
	167			173			56		
8/31/2007	35	41	45	52	58	66	64	50	58
	30			58			43		
	68			66			47		
9/7/2007 *	370	311	68	238	209	79	756	570	90
	457			260			407		
	179			147			602		

* SAMPLES ON 9/7/2007 WERE READ AT 46 HOURS.

Therefore, monitoring conducted by the City indicates that the Beach Closings BUI criteria for water quality have been met. Additionally, there is a DNRE approved implementation plan and an NPDES permit in place for addressing the remaining untreated CSO and the implementation plan is on schedule.

Recommendations

Julie Sims, DNRE liaison for the Manistique River AOC, has consulted with other DNRE technical staff, the Manistique River Public Advisory Council, U.S. EPA, and technical staff from the City on the assessment, status, and removal recommendation of this BUI (see attachments: July 20, 2009, and August 3, 2009, MDEQ Calendar public notice; Manistique River AOC Public Meeting Minutes; Manistique River AOC Public Sign-In Sheet; and August 20, 2009, letter from Corey Barr to William Creal). A public meeting was held on August 10, 2009, to discuss this recommendation with stakeholders. The DNRE technical staff, the Manistique River Public Advisory Council, the Technical Committee, and the community expressed their support for recommending the removal of this BUI.

Therefore, the DNRE AOC program staff recommends that the chief of the DNRE, Water Bureau, approve the recommendation to remove the Beach Closings BUI. Consistent with the Guidance, we also recommend submittal of a letter to the U.S. EPA, Great Lakes National Program Office, requesting removal of the BUI in the Manistique River AOC.

Prepared by: Julie Sims, Environmental Quality Analyst
Aquatic Nuisance Control and Remedial Action Unit
Surface Water Assessment Section
Water Bureau
Michigan Department Natural Resources and Environment
March 22, 2010

References

- MDEQ. 2008. Guidance for Delisting Michigan's Great Lakes Areas of Concern. Report No. MI/DEQ/WB-06/001.
- MDEQ. 2009. The Michigan Department of Environmental Quality Biennial Remedial Action Plan Update for the Manistique River Area of Concern.
- MDNR. 1987. Remedial Action Plan for the Manistique River Area of Concern. Michigan Department of Natural Resources, Surface Water Quality Division. Lansing, MI.

August 10, 2009

PUBLIC MEETING REGARDING THE POTENTIAL REMOVAL OF THE BENEFICIAL USE IMPAIRMENT (BUI), BEACH CLOSINGS, IN THE MANISTIQUE RIVER AREA OF CONCERN (AOC), SCHOOLCRAFT COUNTY. The Manistique River is a Great Lakes AOC and in order to be 'delisted' as an AOC, all BUIs must be restored. The purpose of the public meeting is to discuss the status of the Beach Closings BUI, which relates to bacterial contamination causing restrictions on partial or full body contact in the Manistique River, and to obtain comments on removal of the Beach Closings BUI for the Manistique River AOC. The public meeting will be held August 10, 2009, at 6:00 p.m. at the City Hall, 300 North Maple Street, Manistique, Michigan. Comments on the removal recommendation may also be submitted to Julie Sims, Department of Environmental Quality, Water Bureau, P.O. Box 30273, Lansing, Michigan 48909-7773, by August 20, 2009. Information regarding the status assessment of the BUI may be obtained by contacting the WB. Information Contact: **Julie Sims**, Water Bureau, at 517-373-2372, or E-mail: simsj@michigan.gov.

**Manistique River Area of Concern
Public Meeting Minutes
City Hall
300 North Maple Street
Manistique, MI 49854
Monday, August 10, 2009
6pm-7pm**

Purpose: Removal Recommendation for the Beach Closings Beneficial Use Impairment in the Manistique River Area of Concern

Attendees:

Julie Sims, Michigan Department of Environmental Quality (MDEQ)
Tony Kizlauskas, US Environmental Protection Agency (USEPA) - Great Lakes National Program Office (GLNPO)
Owen Thompson, USEPA – Superfund
Corey Barr, Water/ Wastewater Superintendent, Public Advisory Council (PAC) Chair
Deborah A. Dougovito, City of Manistique
Paul Olsen, Pioneer – Tribune
Mark McCune, LMAS District Health Department
Peter Markham, Citizen

Welcome and Introductions, Julie Sims

Removal Recommendation of the Beach Closings Beneficial Use Impairment for the Manistique River Area of Concern, Julie Sims

- I. Background and history of impairments in the Manistique River
- II. Significant remedial actions
- III. Removal criteria
- IV. Sampling conducting in 2007
- V. Assessment of results
- VI. Recommendation

The Beach Closings Beneficial Use Impairment (BUI) in the Manistique River Area of Concern is recommended for removal.

Local Public Advisory Council, Corey Barr, Public Advisory Council Chair

Corey provided an update on the status and progress of the sewer separation and maintenance program. Routine maintenance helps make sure full hydraulic capacity is maintained.

Public Questions/Comments

There were no comments or questions regarding the removal of the Beach Closings BUI.

Public comments and questions were raised regarding the status of the other remaining impairments, Restrictions on Dredging and Restrictions on Fish and Wildlife Consumption. The status of the Restrictions on Fish and Wildlife Consumption BUI is

currently impaired and MDEQ is in the process of analyzing data that was collected summer of 2008. The status of the Restrictions on Dredging BUI is impaired and MDEQ is currently working with the USEPA Great Lakes National Program Office on conducting a site characterization of residual contamination.

Next Steps, Julie Sims

Once a letter of acceptance for the removal recommendation is received from the Public Advisory Council and the public comment period closes on August 20, 2009, the Water Bureau will send a letter to the GLNPO requesting concurrence. Once the GLNPO has concurred, the Beach Closings BUI will be formally removed.

Meeting adjourned at 6:45 PM

Contact:

Julie Sims, AOC Liaison
Michigan Department of Environmental Quality
Constitution Hall
525 West Allegan St.
P.O. BOX 30273
Lansing, MI 48909-7773

Phone: (517) 373-2732
Fax: (517) 335-4381
simsj@michigan.gov

August 20, 2009

Mr. William Creal, Chief
Water Bureau
Michigan Department of Environmental Quality
P.O. Box 30273
Lansing, Michigan 48909

Dear Mr. Creal,

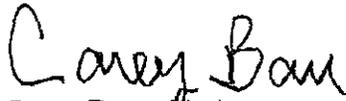
The Public Advisory Council (PAC) for the Manistique River Area of Concern concurs with the recommendation to remove Beach Closings Beneficial Use Impairment (BUI). On February 15, 2006, the Council accepted the Michigan Department of Environmental Quality's (MDEQ) criteria for assessing and removing the impairments in the Area of Concern when each is restored.

Members of the PAC have reviewed the criteria and concur that they have been met. A public meeting on the removal recommendation of that BUI was held in Manistique on August 10, 2009. Ms. Julie Sims, of MDEQ's Water Bureau, presented supporting information on the removal recommendation. The PAC supports the MDEQ's recommendations and supports moving forward with the removal of the Beach Closings BUI in the Manistique River Area of Concern.

It is encouraging to the PAC to continue to see positive action being taken on removal of restored use impairments in the Area of Concern. The PAC strongly encourages the agencies to continue with assessment of the remaining two use impairments in the Area of Concern, with a goal of delisting the site as soon as feasibly possible.

Thank you for your time on this issue that is so important to the citizens of Manistique. If you have any questions, please feel free to contact me.

Sincerely,



Corey Barr, Chair
Manistique Public Advisory Council
City of Manistique

Cc: Julie Sims, Michigan Department of Environmental Quality