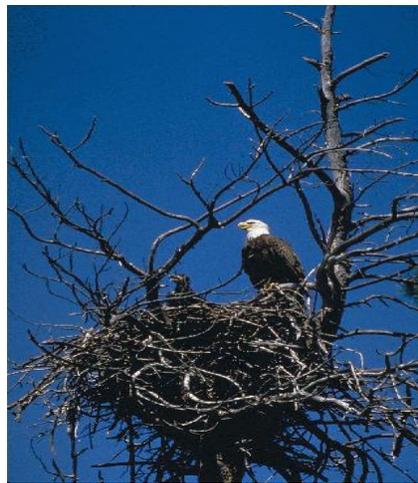


# Guidance for Delisting Michigan's Great Lakes Areas of Concern



Michigan Department of Environmental Quality  
Office of the Great Lakes  
P.O. Box 30273  
Lansing, Michigan 48909  
[www.michigan.gov/deqaocprogram](http://www.michigan.gov/deqaocprogram)  
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# Guidance for Delisting Michigan's Great Lakes Areas of Concern

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Compiled January, 2006 by:  
Shanna Draheim, Water Bureau  
Roger Eberhardt, Office of the Great Lakes

Updated August, 2008 by:  
Julie Sims, Water Bureau

Updated May, 2015 by:  
Roger Eberhardt, Office of the Great Lakes

Jon Allan, Director  
Office of the Great Lakes

Dan Wyant, Director, Michigan Department of Environmental Quality  
Rick Snyder, Governor, State of Michigan

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# Guidance for Delisting Michigan’s Great Lakes Areas of Concern

## Table of Contents

<b>INTRODUCTION</b> .....	<b>3</b>
BACKGROUND .....	3
FIGURE 1: MICHIGAN’S GREAT LAKES AREAS OF CONCERN .....	4
PURPOSE .....	4
HOW TO USE THIS DOCUMENT .....	5
DISCLAIMER .....	5
TABLE 1: ORIGINAL MICHIGAN AOC/BUI MATRIX-2006 .....	6
<b>TRACKING RESTORATION OF BENEFICIAL USE IMPAIRMENTS</b> .....	<b>7</b>
<b>REMOVAL OF BENEFICIAL USE IMPAIRMENTS</b> .....	<b>8</b>
<b>DELISTING AREAS OF CONCERN</b> .....	<b>9</b>
<b>SPECIAL CONSIDERATIONS</b> .....	<b>10</b>
<b>CRITERIA FOR RESTORATION OF BENEFICIAL USE IMPAIRMENTS</b> .....	<b>12</b>
RESTRICTIONS ON FISH AND WILDLIFE CONSUMPTION .....	13
TAINING OF FISH AND WILDLIFE FLAVOR .....	18
FISH TUMORS OR OTHER DEFORMITIES .....	20
BIRD OR ANIMAL DEFORMITIES OR REPRODUCTIVE PROBLEMS .....	22
DEGRADATION OF BENTHOS .....	27
RESTRICTIONS ON DREDGING ACTIVITIES .....	30
EUTROPHICATION OR UNDESIRABLE ALGAE .....	32
RESTRICTIONS ON DRINKING WATER CONSUMPTION OR TASTE AND ODOR PROBLEMS .....	35
BEACH CLOSINGS .....	37
DEGRADATION OF AESTHETICS .....	40
ADDED COST TO AGRICULTURE OR INDUSTRY .....	43
DEGRADATION OF PHYTOPLANKTON OR ZOOPLANKTON POPULATIONS .....	45
LOSS OF FISH AND WILDLIFE HABITAT .....	47
DEGRADATION OF FISH AND WILDLIFE POPULATIONS .....	47
<b>APPENDIX 1: FIVE YEAR BASIN CYCLE MONITORING</b> .....	<b>52</b>
<b>GLOSSARY/ACRONYMS</b> .....	<b>62</b>
<b>THE FUTURE</b> .....	<b>65</b>
<b>MDEQ AOC PROGRAM CONTACT</b> .....	<b>65</b>

## ***Introduction***

### ***Background***

In 1987, amendments to the Great Lakes Water Quality Agreement (GLWQA) were adopted by the federal governments of the U.S. and Canada. Annex 2 of the amendments listed fourteen different beneficial use impairments (BUIs) which are caused by a detrimental change in the chemical, physical, or biological integrity of the Great Lakes system. It directed the two countries to identify AOCs that did not meet the objectives of the GLWQA. Remedial Action Plans (RAPs) addressing the BUIs were to be prepared for all AOCs. The BUIs provided a tool for describing effects of the contamination, and a means for focusing remedial actions. The AOC program was re-affirmed in Annex 1 of the 2012 Protocol Amending the GLWQA.

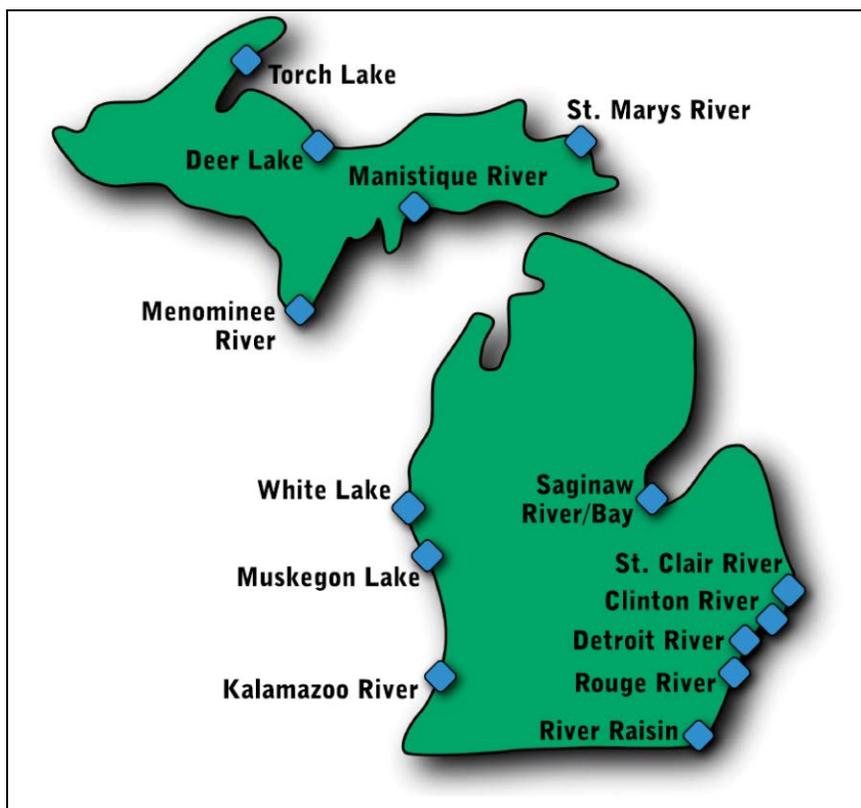
The scope of the AOC program is based on the concept that each area has had at least one BUI that is an extraordinary problem; one that sets the area apart from other sites with lesser contamination in the state that are not an AOC.

There are fourteen AOCs in Michigan, with an original total of 110 BUIs (see Table 1). Ten of the AOCs are completely within Michigan's borders (Kalamazoo River, Muskegon Lake, White Lake, Manistique River, Deer Lake, Torch Lake, Saginaw River/Bay, River Raisin, Rouge River, and Clinton River). Three (the Detroit, St. Clair and St. Marys rivers) are along the U.S. and Canadian border, and one AOC, Menominee River, is shared with Wisconsin. In the latter four AOCs, responsibility for restoring BUIs is shared among jurisdictions (see Figure 1). The current list of BUIs can be found at [www.michigan.gov/deqaocprogram](http://www.michigan.gov/deqaocprogram)

Public involvement is a key component of the AOC program in Michigan. Each AOC has had significant input from a PAC and the program has a Statewide Public Advisory Council consisting of members of individual councils. All are integral to the program.

There are major differences in geographic scope and contamination in Michigan's AOCs. For example, the Manistique River AOC consists of only the last 1.7 miles of river in Manistique (pop. 3,583) and the BUIs are primarily caused by one pollutant - PCBs. On the other end of the scale, the Detroit River AOC is a 32 mile long international connecting channel in Detroit (pop. 951,270), with 11 BUIs caused by numerous sources of industrial, municipal, and agricultural pollutants on both sides of the border.

**Figure 1: Michigan's Original Great Lakes Areas of Concern\***



\*White Lake and Deer Lake were delisted in 2014.

### **Purpose**

When AOCs were originally designated in the late 1980s, no specific, quantitative criteria for listing or delisting these areas were developed. The IJC issued general listing and delisting criteria in 1991 (IJC, 1991), and the U.S. Policy Committee (USPC) issued general guidance on the process for AOC delisting in 2001 (USPC, 2001). These efforts, however, were not specific enough for use in determining restoration of individual BUIs by either the state of Michigan or the U.S. federal government.

In order to direct restoration efforts and develop benchmarks for measuring their success, several AOCs in Michigan began to develop their own individual restoration targets. As they proceeded in developing restoration targets and plans for delisting, the MDEQ received many requests from PACs for information regarding what criteria would be applied, what approaches are acceptable, and how the delisting process will work when an AOC has restored all of its BUIs.

In response, the MDEQ developed this *Guidance for Delisting Michigan's Great Lakes Areas of Concern*. The purpose of this document is to: 1) provide guidance to AOC communities about the State's process for delisting AOCs; and 2) identify specific

quantitative or qualitative criteria which the State will use to determine when BUIs have been restored.

### ***How to Use this Document***

The first sections of the document outline the process the State will use to track restoration progress, remove BUIs, and ultimately delist AOCs. These sections identify the key steps and principles for evaluating the status of AOC impairment listings, the process for formally removing BUIs for each AOC, and the steps for working with PACs and the U.S. EPA to request and document that an AOC is ready for delisting.

The main part of the document is the statewide Criteria for Restoration of Beneficial Use Impairments for Michigan's Great Lakes Areas of Concern. The criteria offer Michigan's position on what constitutes restoration of the BUIs, and any BUI that meets these criteria will be considered restored by the State. Assessment of each BUI is integrated with the criteria.

### ***Disclaimer***

The GLWQA is a non-regulatory agreement between the U.S. and Canada, and criteria developed under its auspices are non-regulatory in nature. The criteria in this document may not be used separately in enforcement or regulatory actions under any state or federal law. The restoration criteria are consistent with state and federal regulatory authority, and regulatory actions may be used to achieve restoration in AOCs where specific authority exists in state or federal law. Standards and formal guidelines in state and federal law are referenced wherever applicable in the criteria. Further, the AOC BUI assessment criteria in this Guidance are not to be used to set state or federal regulatory standards.

**Table 1: Original Michigan AOC/BUI Matrix-2006**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
<b>Clinton River</b>	X				X	X	X		X	X			X	X	8
<b>Deer Lake</b>	X			X			X								3
<b>Detroit River</b>	X	X	X	X	X	X		X	X	X			X	X	11
<b>Kalamazoo River</b>	X			X	X	X			X	X			X	X	8
<b>Manistique River</b>	X				X	X			X					X	5
<b>Menominee River</b>	X				X	X			X				X	X	6
<b>Muskegon Lake</b>	X				X	X	X	X	X	X			X	X	9
<b>River Raisin</b>	X			X	X	X	X		X	X			X	X	9
<b>Rouge River</b>	X		X		X	X	X		X	X			X	X	9
<b>Saginaw Bay/River</b>	X	X		X	X	X	X	X	X	X		X	X	X	12
<b>St. Clair River</b>	X	X		X	X	X		X	X	X	X			X	10
<b>St. Marys River</b>	X		X	X	X	X	X		X	X			X	X	10
<b>Torch Lake</b>	X		X		X										3
<b>White Lake</b>	X				X	X	X	X		X			X	X	8

1 = Restrictions on fish and wildlife consumption 2 = Tainting of fish and wildlife flavor 3 = Fish tumors or other deformities 4 = Bird or animal deformities or reproductive problems 5 = Degradation of benthos 6 = Restrictions on dredging activities 7 = Eutrophication or undesirable algae 8 = Restrictions on drinking water consumption or taste and odor problems	9 = Beach closings 10= Degradation of aesthetics 11= Added costs to agriculture or industry 12= Degradation of phyto- or zooplankton populations 13= Degradation of fish and wildlife populations 14= Loss of fish and wildlife habitat
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Table 1 is the official list of BUIs in the RAPs and RAP updates for which remedial actions have been or will be developed. The current list of BUIs remaining in Michigan can be found of the Michigan DEQ AOC Program website at [www.michigan.gov/deqaocprogram](http://www.michigan.gov/deqaocprogram)

## ***Tracking Restoration of Beneficial Use Impairments***

This section describes actions and policy for applying restoration criteria to the BUIs in AOCs and documenting progress toward removal. The MDEQ is committed to a partnership with the PACs and the U.S. EPA in this effort.

- a) Restoration criteria are applied when BUIs identified for each AOC are ready for assessment. State AOC staff conduct periodic qualitative reviews of the status of each AOC's BUIs as reported in RAP updates to gauge readiness.
- b) The State's restoration criteria are applied to all BUIs except where locally developed criteria are approved. The PACs have the ability to establish restoration criteria that are functionally equivalent to the statewide criteria. Any locally developed criteria must be submitted to the Office of the Great Lakes for approval. The PACs are expected to demonstrate how any locally developed criteria are equivalent to the statewide criteria. Approval is based on meeting or exceeding the State's criteria.
- c) State assessments required for each BUI are integrated into the criteria.
- d) Local targets that require assessment beyond what is required for the statewide criteria (e.g., more frequent, different parameters, etc.) are the responsibility of the local PAC, including reporting results to the MDEQ. The MDEQ assists as resources allow.
- e) The MDEQ maintains the official delisting file for each AOC with all finalized BUI restoration/removal records, finalized memos/letters, RAPs, and finalized RAP updates. These files are maintained in the MDEQ Lansing offices and are available to the public.

## ***Removal of Beneficial Use Impairments***

This section describes the actions and policies for removing a BUI and documenting these activities in MDEQ's AOC files. The BUIs can be removed individually, in groups, or all at the same time. The MDEQ is committed to a partnership with the local PACs and U.S. EPA in this effort. In official correspondence, the Director of Michigan's Office of the Great Lakes may represent the MDEQ.

- a) When the MDEQ AOC coordinator, in consultation with the PAC, determines a BUI is ready for final review of restoration according to the applicable criteria, a team of relevant MDEQ, MDNR, MDCH, and federal agency staff (as applicable) is convened to review the documentation and determine whether to support removal of the BUI.
- b) If the technical team supports removal of the BUI, a public meeting is held in the AOC if requested. A formal public comment period is established and comments supporting or opposing the BUI removal are solicited. When the public review is completed, the MDEQ AOC Coordinator reviews the public comments and requests a letter of support from the PAC for the removal of the BUI, if appropriate.
- c) If supported by the technical and public review of the BUI removal recommendation, a letter is sent from the Director of the Office of the Great Lakes to the U.S. EPA to document removal of the BUI(s). The letter requests concurrence with the removal from the U.S. EPA. The letters from MDEQ-OGL, the PAC and U.S. EPA are part of the permanent AOC file.
- d) Once documented as removed, there is no further assessment of the BUI required in order to delist an AOC. While BUIs which have been removed are not re-assessed as part of the AOC program, waters of the state continue to be monitored as part of MDEQ's regular 5-year Basin Cycle Monitoring and other state monitoring programs.
- e) After removal of a BUI, if additional contamination is found in an AOC during routine or other program monitoring, it is addressed on a case-by-case basis by the MDEQ under existing programs. This is not a cause for delaying delisting unless the contamination is indicative that the source of the original BUI was not resolved.
- f) All local, state, and federal partners cooperate on publicizing the BUI restoration, as appropriate.

## ***Delisting Areas of Concern***

This section outlines actions normally used in Michigan to delist an AOC. These actions occur when all BUIs have been restored and removed, so they are informational in nature and provide an opportunity for all partners in the AOC program to highlight and celebrate the significant achievement of an AOC delisting. In all official correspondence, the Director of Michigan's Office of the Great Lakes may represent the MDEQ.

- a) When all BUIs in an AOC have been removed, a draft final RAP report is prepared by the MDEQ in consultation with the PAC, the U.S. EPA, and the IJC Great Lakes Regional Office.
- b) The MDEQ and the U.S. EPA, in consultation with the PAC, hold a public meeting to formally present the draft final RAP report to the public and stakeholders for review and comment. A public comment period is established for a minimum of 30 days and the public meeting is held within the comment period.
- c) Taking state agency, the U.S. EPA, the IJC Great Lakes Regional Office, PAC, and public comments into account, the MDEQ prepares and transmits to the U.S. EPA a final RAP report. A summary of public comments and agency responses is also produced.
- d) The U.S. EPA Regional Administrator sends the final RAP report and a letter recommending AOC delisting to the U.S. Department of State, with copies to the director of the MDEQ, appropriate Canadian federal agencies, and the IJC.
- e) The U.S. Secretary of State transmits concurrence with the AOC delisting to the U.S. EPA.
- f) U.S. EPA forwards the U.S. Secretary of State concurrence letter and confirms the AOC delisting to the MDEQ, with copy to the IJC.
- g) All local, state, and federal partners cooperate on publicizing and celebrating delisting of the AOC. This step may occur any time after Step d. above.

## ***Special Considerations***

This section addresses a few special cases related to shared jurisdictions, use of special designations, source control, and dispute resolution for the processes outlined above. In all official actions in this section, the Director of Michigan's Office of the Great Lakes may represent the MDEQ.

- a) The 4-Agency Letter of Commitment (see Glossary) processes for delisting and dispute resolution apply to the binational AOCs. Binational restoration targets for these AOCs must be at least functionally equivalent to Michigan's statewide restoration criteria.
- b) Michigan shares jurisdiction for the Menominee River AOC with Wisconsin. If the PAC chooses to develop common set of restoration targets for the AOC, the targets must be at least functionally equivalent to Michigan's statewide restoration criteria. Michigan's process for removal of BUIs and delisting AOCs applies to the Michigan portion of this AOC unless shared criteria are developed.
- c) The restoration and removal process for BUIs and the delisting process for AOCs are supported by the MDEQ only for an entire AOC and an entire BUI, not sub-watersheds or portions of BUIs. Progress is shown by removal of BUIs.
- d) In some circumstances, monitoring may indicate that full restoration of a BUI has not occurred (i.e., does not meet the criteria), even when all remedial actions to address the problem and control sources of pollutants in the AOC have been completed. This could be due to a number of factors, including : 1) sources of contaminants are external to the AOC watershed; or 2) the resources affected are still recovering from historical (pre-remediation) effects of contamination or habitat loss.

In the first instance, when assessment of a BUI indicates that it does not meet the statewide restoration criteria, and there is indication that it may be due to external pollutant sources, the MDEQ will undertake further investigation of potential contaminant sources to rule out the possibility of an ongoing source within the AOC watershed. If the existence of an impairment is determined to be due to contaminants originating only from sources outside the AOC watershed, it will not preclude removal of a BUI and delisting of an AOC.

In the second instance, the MDEQ will take into account the time of recovery for some resources when evaluating restoration success. For some BUIs, the affected resource may take many years to recover after remedial actions are complete. Full restoration of the impairment may not be required in all cases prior to delisting, if the MDEQ determines the resource is showing consistent

improvement after all necessary remedial actions have been completed. Annex 1 of the 2012 GLWQA Amendments provides for use of the AOC in Recovery designation as an option, if determined by the MDEQ to be appropriate for an AOC that requires extended recovery time after all management actions are complete.

- e) The MDEQ may consider removal of a BUI on a case by case basis for AOCs with special circumstances
- f) In some circumstances, especially those of a lakewide nature, a BUI may be found to be beyond the scope of the AOC program's ability to address it. In those circumstances, consideration may be given to addressing the BUI using the LAMP Partnerships under Annex 2 of the GLWQA.
- g) The AOC boundaries are those shown on the web sites of the AOC program at: <http://www.epa.gov/glnpo/aoc/index.html>. Any subsequent change to the boundaries must be documented and approved by letters from the MDEQ, in consultation with the PAC, to the U.S. EPA.
- h) Technical or procedural issues regarding either removal of a BUI or delisting of an AOC are resolved by technical staff of the MDEQ, U.S. EPA, and PAC. Unresolved technical issues may be elevated to a panel consisting of the Director of the MDEQ, the director of U.S. EPA's Great Lakes National Program Office, and the PAC chair or his/her designee.

## ***Criteria for Restoration of Beneficial Use Impairments***

The following pages contain the specific restoration criteria for each of the 14 BUIs identified in Annex 2 of the 1987 Amendments to the GLWQA. The criteria for each BUI include 4 main components:

1. *Significance in Michigan's Areas of Concern:* The number of AOCs affected by the impairment and other relevant considerations regarding scope.
2. *Restoration Criteria and Assessment:* The specific, measurable goals for guiding restoration, and the monitoring and assessment requirements for demonstrating restoration success.
3. *Rationale:* Relevant rationale for why the specific criteria were selected for Michigan's AOCs.
4. *State of Michigan Programs and Authorities for Evaluating Restoration:* A brief overview of the existing state programs and methodologies that will be used by the MDEQ to assess whether the restoration criteria have been met.

The criteria are Michigan's position on what constitutes restoration of the BUIs, and any AOC that meets these criteria will be considered restored by the State. Local PACs may offer alternate criteria that will be reviewed by the State and may be approved if functionally equivalent to, or more stringent than Michigan's criteria.

A fundamental assumption of the statewide restoration criteria is that sources of pollutants within the AOC watershed which cause any of the BUIs must be controlled before a BUI can be removed and an AOC delisted. Assessment of this step is determined by results from site-specific monitoring of remedial actions or other monitoring in the AOC. If a beneficial use is impaired only due to contaminants originating from sources outside the AOC watershed, it will not preclude removal of BUI and delisting of an AOC.