

Lower Menominee River AOC Beneficial Use Impairment Restoration Targets

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Introduction

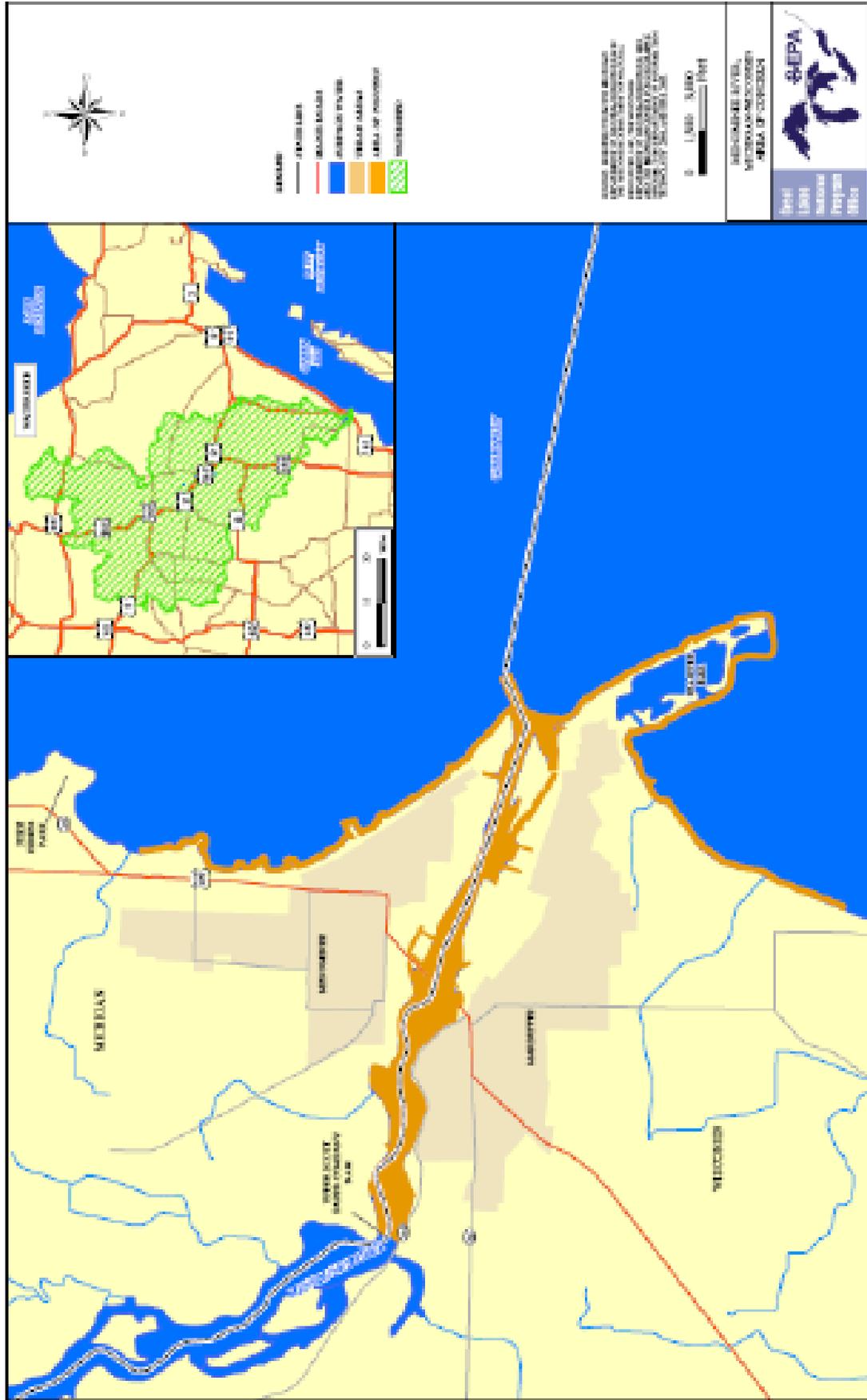
Areas of Concern (AOCs) were identified in the mid 1980's through work completed by the federal governments of the United States and Canada, in cooperation with state and provincial governments under the Great Lakes Water Quality Agreement (GLWQA). The 1987 amendments to the GLWQA further defined the Beneficial Use Impairments (BUIs). The BUIs in the Lower Menominee River AOC are primarily the result of historic industrial and municipal waste discharges leading to contaminated sediments and degradation to water quality. Some known ongoing contamination exists and these areas are currently in negotiations related to remedial actions. The primary industrial contaminants identified in the 1990 Lower Menominee River Remedial Action Plan (RAP) included paint sludge with associated heavy metals, PCBs, arsenic, and coal tars.

Data collected for the Wisconsin Department of Natural Resources (WDNR) and the Michigan Department of Natural Resources (MDNR) Fish Contaminant Monitoring Programs from 1976 through 1988 detected high levels of PCBs in carp and walleye resulting in fish consumption advisories beginning in 1986. These advisories resulted in the 1987 AOC designation. The BUIs identified for the Lower Menominee River AOC in the 1990 RAP are restrictions on fish consumption, degradation of benthos, restrictions on dredging activities, beach closings, degradation of fish populations, and loss of fish and wildlife habitat. Neither state has identified wildlife consumption advisories as a concern.

Purpose

The Great Lakes Regional Collaboration set a priority for having targets for delisting set for all BUIs by the end of 2008. Agency AOC program staff working with the Lower Menominee River AOC from the WDNR, Michigan Department of Environmental Quality (MDEQ), and United States Environmental Protection Agency (USEPA)-Great Lakes National Program Office (GLNPO) have cooperatively developed the following criteria for these BUIs based on the *Guidance for Delisting Michigan's Great Lakes Areas of Concern* and existing rules and criteria from Wisconsin. These targets are intended to guide local citizens, as well as state and federal agency staff, as they plan and work within the AOC. The states intend to jointly delist individual BUIs and the AOC. The AOC process for both states includes local citizen involvement.

Figure 1: Great Lakes National Program Office (GLNPO) website map of the Lower Menominee River AOC.



Restrictions on Fish and Wildlife Consumption

Restoration Target for Restrictions on Fish Consumption for Michigan and Wisconsin

This BUI will be considered restored when:

- Sources of PCBs, mercury, and dioxins within the AOC have been controlled or eliminated; and
- Waters within the Lower Menominee River AOC are no longer listed as impaired due to PCB or dioxin fish consumption advisories in the most recent Impaired Waters (303(d)) list for either state; or
- Fish tissue contaminants causing advisories in the AOC are the same or lower than those in the associated Great Lake or appropriate control site.

Degradation of Fish Populations and Loss of Fish and Wildlife Habitat

Restoration Target for Degradation of Fish Populations & Loss of Fish and Wildlife Habitat Beneficial Use Impairments

The Degradation of Fish Populations BUI and Loss of Fish and Wildlife Habitat BUI are interrelated; consequently, the delisting of these two BUIs will be addressed together.

These two BUIs will be considered restored when: A local fish and wildlife habitat management and restoration plan has been developed and implemented for the Lower Menominee River AOC that:

- Defines the causes of fish and wildlife population and habitat impairments within the AOC
- Establishes site specific habitat and population objectives for fish and wildlife species within the AOC
- Identifies fish and wildlife population restoration programs and activities within the AOC and establishes a mechanism to assure coordination among states and programs for assessment monitoring, implementation activities and associated monitoring
- The programs and actions necessary to accomplish the recommendations are identified in the fish and wildlife management and restoration plan are implemented
- Monitoring conducted according to the Fish and Wildlife Plan shows consistent improvement in the quality and quantity of habitat or populations identified in the plan

Removal of this BUI will be based on achievement of implementation of actions in the steps above, including monitoring conducted according to site plans and showing consistent improvement in quantity or quality of habitat or populations addressed in the criteria. Habitat values and populations need not be fully restored prior to delisting, as some may take many years to recover after actions are complete. Actions already implemented in AOCs may be reported and evaluated as long as the reports contain all the elements above.

The habitat or population restoration plan will determine the type and extent of the restoration necessary to address habitat loss or population degradation issues identified in the RAP or other key documents. Sources of water quality contamination contributing to specific habitat or population degradation must be controlled before habitat or population restoration efforts in that area are conducted. In some circumstances, habitat degradation is actually contributing to water quality problems, rather than vice versa. In those instances, the workplan should discuss this issue and the remedial actions should be targeted accordingly.

Beach Closings / Recreational Restrictions

Restoration Target for Beach Closings and Recreational Use Restrictions:

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 either states: Section 303(d) and 305(b) Integrated Report (Integrated Report), which are 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 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:
 - o All known sources of bacterial contamination to the AOC originating in the AOC and tributary watersheds have been controlled or treated to reduce exposures; and
 - o No unpermitted sanitary sewer overflows have occurred within the AOC during the previous five year period as a result of a less than 25-year precipitation event or snow/ice melt conditions; and
 - o Marinette, WI and Menominee, MI have adopted and are implementing storm water reduction programs including an illicit discharge elimination program

Degradation of Benthos

Restoration Target for Degradation of Benthos Beneficial Use Impairment

This BUI will be considered restored when:

All remediation actions for known contaminated sediment sources are completed and monitored according to the approved plan and have met their remedial action goal.

Restrictions on Dredging Activities

Restoration Target for Restrictions on Dredging Use Impairment

This BUI will be considered restored when:

- All remediation actions for known contaminated sediment sources are completed and monitored according to the approved remediation plans and the remedial action goals have been achieved; and
- An AOC dredge management plan is developed by the communities and agencies that includes an evaluation of:
 - Restrictions that must remain in place to protect human health and the environment
 - Restrictions that must remain in place due to RCRA requirements that are based upon state and federal law
 - Priority areas for navigational use
 - Priority areas for utility dredging, e.g. utility crossings
 - Identify costs and funding options for removing dredging restrictions in priority areas

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