



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

6 MAY 2014

REPLY TO THE ATTENTION OF:

Mr. Roger Eberhardt  
Acting Deputy Director, Office of the Great Lakes  
Michigan Department of Environmental Quality  
525 West Allegan  
P.O. Box 30473  
Lansing, Michigan 48909-7773

Dear Roger:

Thank you for your February 6, 2014, request to remove the "Loss of Fish and Wildlife Habitat" Beneficial Use Impairment (BUI) from the Saginaw River/Bay 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 Saginaw River/Bay AOC. 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 Saginaw River/Bay 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 black 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 Hobrla, MDEQ, Office of Great Lakes  
Bretton Joldersma, MDEQ, Office of Great Lakes  
Stephen Locke, IJC  
Wendy Carney, EPA, GLNPO  
John Perrecone, EPA, GLNPO  
Diana Mally, EPA, GLNPO



RICK SNYDER  
GOVERNOR

STATE OF MICHIGAN  
OFFICE OF THE GREAT LAKES  
LANSING



JON W. ALLAN  
DIRECTOR

February 6, 2014

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 (USEPA), Great Lakes National Program Office's (GLNPO) concurrence with the removal of the Loss of Fish and Wildlife Habitat Beneficial Use Impairment (BUI) from the Saginaw River/Bay Area of Concern (AOC). The Michigan Department of Environmental Quality (MDEQ), Office of the Great Lakes (OGL), 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 Saginaw River/Bay AOC.

Enclosed please find documentation to support this recommendation, including the BUI removal recommendation document prepared by OGL staff. The Saginaw River/Bay Public Advisory Council, known as the Partnership for the Saginaw Bay Watershed, submitted a letter supporting this recommendation which is included with this package. The proposed BUI removal was public noticed via a listing in the MDEQ Calendar, and supporting documents were posted on the MDEQ's AOC program web page. The removal recommendation was public noticed from September 11, 2013, through October 14, 2013. Further, the OGL hosted a public meeting on October 8, 2013, to discuss and solicit comments on the potential recommendation to remove this BUI from the Saginaw River/Bay AOC. Information about the public notice period is included in the removal recommendation document.

We value our continuing partnership in the AOC Program and look forward to working with the GLNPO in the removal of additional BUIs in the near future. If you need further information concerning this request, please contact Mr. Bretton Joldersma, Office of the Great Lakes, at 517-284-5048, or you may contact me.

Sincerely,

Roger Eberhardt  
Acting Deputy Director  
517-284-5035

Enclosures

cc: Ms. Diana Mally, USEPA  
Mr. John Perrecone, USEPA  
Mr. Jon Allan, MDEQ  
Mr. Richard Hobrla, MDEQ  
Mr. Bretton Joldersma, MDEQ

# Removal Recommendation Loss of Fish and Wildlife Habitat Beneficial Use Impairment Saginaw River/Bay Area of Concern

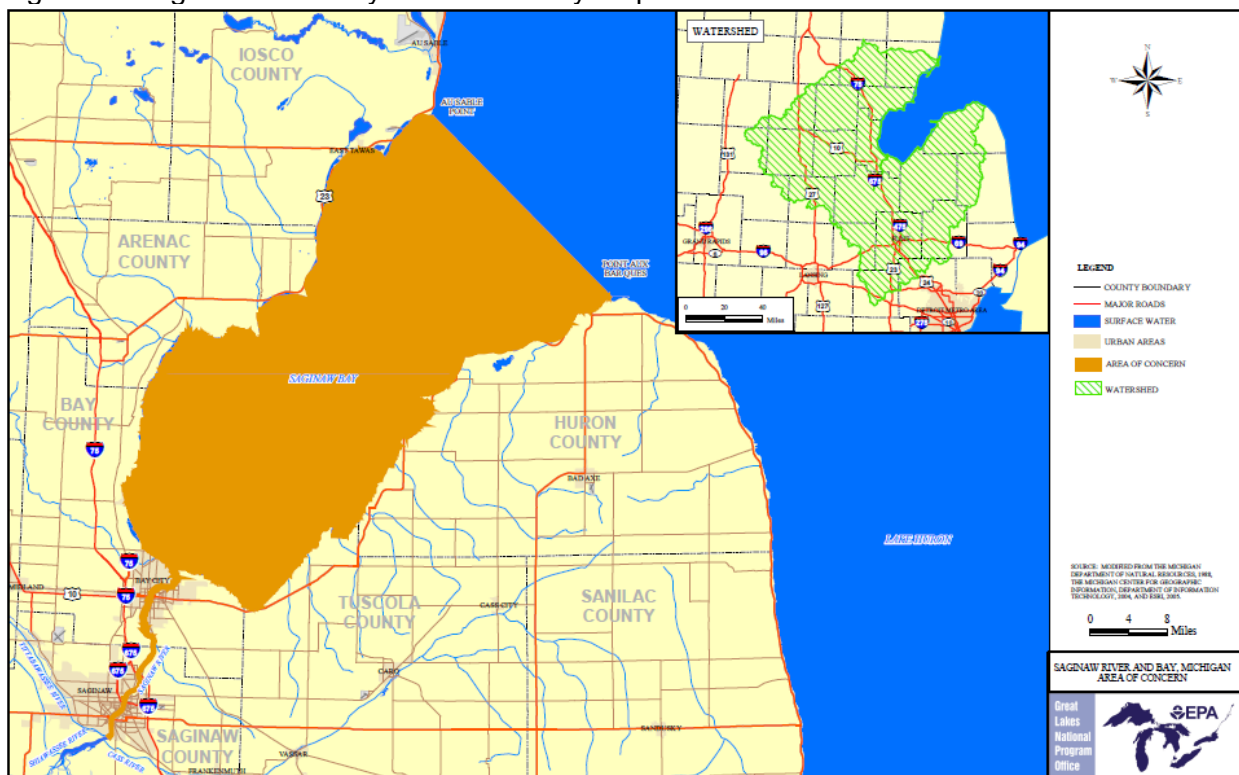
## Issue

The Michigan Department of Environmental Quality (MDEQ), Office of the Great Lakes, Areas of Concern (AOCs) program requests concurrence with the removal of the Loss of Fish and Wildlife Habitat Beneficial Use Impairment (BUI) for the Saginaw River/Bay AOC. The recommendation is made with the support of the Partnership for the Saginaw Bay Watershed (the Partnership), United States Fish and Wildlife Service, Michigan Department of Natural Resources (MDNR) Fisheries, and Ducks Unlimited. 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 Saginaw River/Bay AOC is located in the east central portion of Michigan's Lower Peninsula. The geographic extent of the AOC is defined by the area extending from the head of the Saginaw River, at the confluence of the Shiawassee and Tittabawassee Rivers upstream of the city of Saginaw, to its mouth, including all of Saginaw Bay out to its interface with Lake Huron, at an imaginary line drawn between Au Sable Point and Point Aux Barques (Figure 1). The Saginaw River and Bay was listed as an AOC primarily due to contaminated sediments, fish consumption advisories, high levels of bacteria, nutrient enrichment (i.e., phosphorus), sedimentation, degraded fisheries, and loss of significant recreational values (MDEQ, 2012).

Figure 1: Saginaw River/Bay AOC Boundary Map



Ten BUIs remain in the Saginaw River/Bay AOC: Restrictions on Fish and Wildlife Consumption, Bird or Animal Deformities or Reproductive Problems, Degradation of Benthos, Restrictions on Dredging Activities, Eutrophication or Undesirable Algae, Beach Closings, Degradation of Aesthetics, Degradation of Phytoplankton or Zooplankton Populations, Degradation of Fish and Wildlife Populations, and Loss of Fish and Wildlife Habitat. This removal recommendation only pertains to the Loss of Fish and Wildlife Habitat BUI. Removal of the BUI will not affect or change the fish consumption advisory for the Saginaw River or Bay.

On May 31, 2006, the Partnership adopted the state's restoration criteria outlined in the *Guidance*. For the Degradation of Fish and Wildlife Populations (Populations) and the Loss of Fish and Wildlife Habitat (Habitat) BUIs the state determined that it was not practical to set statewide restoration criteria because of the local nature of the impairments. As such, the *Guidance* outlines a process that local Public Advisory Councils (PACs) can use to set locally-derived restoration targets (Attachment A).

In 2008, the Partnership developed a restoration plan for the AOC's Populations and Habitat BUIs in accordance with the state's guidance. The plan was reviewed and updated in 2010 and 2012 with input from a technical committee, comprised of representatives from the MDEQ, MDNR, Saginaw Bay Land Conservancy, The Conservation Fund, Ducks Unlimited (DU), and facilitated by Public Sector Consultants (PSC). Additional input on the plan was provided by the United States Fish and Wildlife Service.

As detailed in 2012 *Saginaw River/Bay Area of Concern Restoration Plan for the Habitat and Populations BUIs*, a tiered BUI restoration approach was adopted for the Habitat, Populations, and Bird or Animal Deformities or Reproductive Problems (Deformities/Reproductive) BUIs. Under the tiered approach the Habitat and the Deformities/Reproductive BUIs must be removed before the Populations BUI can be removed. However, the Habitat and Deformities/Reproductive BUIs do not need to be removed in any particular order (PSC, 2012). This approach acknowledges that Populations, Habitat, and Deformities/Reproductive BUIs are closely linked and is consistent with the reasons why the Habitat and Population BUIs were originally listed.

According to previous Remedial Action Plans (RAPs) (MDNR, 1988; MDNR, 1994), the Habitat and Populations BUIs were listed as impaired for the following reasons:

1. The decline/impairment of fish and wildlife populations – particularly fish-eating birds, from high levels of toxic contaminants in the water and sediments within the AOC.
2. The decline in populations of key recreational and commercial fisheries due to low dissolved oxygen caused by nutrient enrichment within Saginaw River and Bay.
3. The loss/degradation of fish spawning areas in the bay and tributaries as a result of sedimentation and dams.
4. The loss/degradation of coastal wetlands from land use change (MDEQ, 2012).

Under the tiered BUI restoration approach, fish and wildlife impairments related to toxic contaminants are being addressed under the Deformities/Reproductive BUI. A recent assessment of the Deformities/Reproductive BUI concluded that this BUI was still impaired. In addition it was recommended that monitoring of productivity, contaminant levels, and contaminant concentrations continue (Bush and Bohr, 2012). Furthermore, any change to status of this BUI will be conducted in consultation with a technical committee and the Trustees for the Tittabawassee Natural Resources Damage Assessment.

As identified above, populations of key recreational and commercial fisheries had declined due to low dissolved oxygen levels. According to the 1995 RAP, dissolved oxygen levels throughout Saginaw Bay were generally near saturation levels (MDNR, 1994). Additionally, the 2002 RAP update states that “dissolved oxygen measurements in the Saginaw River indicated that levels are now consistently higher than the minimum state water quality standard for the protection of warm-water fish of 5.0 mg/l” (PSC, 2002). In 2009, the MDEQ monitored several locations throughout the Saginaw Bay Watershed (including the Saginaw, Cass, and Tittabawassee Rivers) and determined that dissolved oxygen levels were in attainment with state’s warm-water dissolved oxygen standard of 5.0 mg/l (Sunday, 2010). Further, dissolved oxygen levels in Saginaw Bay are sufficient to provide adequate oxygen for aquatic organisms (MDEQ, 2005). Therefore, low dissolved oxygen can no longer be considered a problem contributing to the Populations BUI.

Impairments related to the loss/degradation of fish spawning areas are currently being addressed under the Populations BUI. The restoration of the Populations BUI is linked to the construction of fish passage structures (i.e., rock ramps) at the Frankenmuth and Chesaning Dams. These rock ramps, once demonstrated to successfully allow for fish passage, will provide access to historical spawning areas and will help to support self-sustaining fish populations (PSC, 2012).

Lastly, the impairments related to the loss/degradation of coastal wetlands are linked to the Habitat BUI and are the focus of this removal recommendation. The specific restoration criteria identified in the 2012 Saginaw River/Bay Restoration Plan for the Habitat BUI are detailed in the Removal Criteria section of this document.

### **Removal Criteria**

In accordance with the MDEQ’s *Guidance* and as stated in the 2012 *Saginaw River/Bay Area of Concern Restoration Plan for the Habitat and Populations BUIs*, the Loss of Fish and Wildlife Habitat BUI will be considered restored when:

- at least 60 percent of the coastal marsh areas (below the 585-foot contour) and adequate upland buffers representing essential fish and wildlife habitat are preserved through public ownership, covered under conservation easements, or otherwise protected under agreements with landowners; and
- the most vulnerable portions of the remaining 40 percent of the essential coastal marsh areas have been clearly identified so that governmental agencies, local conservation/ environmental organizations, and concerned citizens can monitor their status, enhance enforcement of existing laws, and conduct public educational programs to better protect these areas.

It should be noted that this restoration criteria has been a long term target for the Saginaw River/Bay AOC. In 1998, the Michigan Natural Features Inventory conducted a watershed-level biodiversity assessment of the Saginaw Bay Watershed and concluded that the highest conservation priority was to conserve “lakeplain prairies and Great Lakes marshes lakeward and riverward from the 585 contour” (Nelson, 2000). This conservation priority is reflected in the AOCs criteria and has remained unchanged since it was cited in the 2000 *Measures of Success: Addressing Environmental Impairments in the Saginaw River and Saginaw Bay* (PSC, 2000). The 2000 Measures of Success document also identified the importance of protecting

upland buffers. An upland buffer is a vegetated area of land adjacent to a water resource (e.g., wetland) that helps to protect the water resource from anthropogenic land uses and nonpoint source pollution. Upland buffers provide habitat and serve a variety of functions including shading and water temperature control, and they help to protect water quality by filtering out nutrients, sediments, and other contaminants carried in stormwater runoff.

## **Analysis**

The status of Saginaw River/Bay AOC's Loss of Fish and Wildlife Habitat BUI has been assessed several times. The most recent assessment was completed by Ducks Unlimited (DU) in 2012. Using the most recent information available, DU conducted a geospatial analysis to evaluate the progress made towards meeting the restoration targets. Detailed information about the analysis and methodology is available in the DU's report, *Refining and Updating the Wetland Protection Status in the Saginaw Bay Coastal Plain* (DU, 2012). A brief summary of DU's methods and analysis is below:

### Updated 585-Foot Contour

Using a Geographic Information System (GIS), DU re-created the AOC's 585-foot contour using more accurate Digital Elevation Models (DEM) based on Light Detection and Range data and U.S. Geological Survey's 3-meter and 10-meter National Hydrography Dataset. DU then combined the newly created 585-foot contour line with parcel data provided by the counties to create a more accurate GIS shape file of the area below the 585-foot contour. The parcel data was used to create the lakeward boundary of the area below the 585-foot contour.

### Updated Conservation and Recreation Land Data

As a part of the 2012 analysis, DU updated the Conservation and Recreation Lands (CARL) GIS data layer. With the updated CARL data, DU created a GIS shape file of the current conservation and recreation land located in the area below the AOC's 585-foot contour.

### Analysis of Wetland Conversion

DU has been in the process of updating the National Wetlands Inventory (NWI) for Michigan including an analysis of wetland conversion from 1980, 1998, and 2005. At the time of the analysis, DU had completed the update for the area encompassing the AOC. The updated NWI was used with GIS to identify the wetlands and acreage located below the 585-foot contour. Further, the wetlands were categorized and grouped into six wetland types based on the Cowardin classification code: forested, emergent, scrub-shrub, open water, aquatic bed, and mixed.

### Analysis of Currently Protected Wetlands

Using the updated GIS layers mentioned above (585-foot contour, CARL, and NWI), DU overlaid the layers in GIS and ran a query to identify the currently protected acres of wetlands. The results of this analysis show that 63.6 percent (19,100.3 acres) of the wetlands located below the AOC's 585-foot contour are now protected (Table 1 and Figure 2).

Table 1: 2012 Analysis of Wetland Protected

PROTECTION TYPE *	WETLAND TYPE (acres) **						UPLAND BUFFER (acres)	TOTAL (acres)
	Forested	Emergent	Shrub	Open Water	Aquatic Bed	Mixed		
Federal	1682.7	1888.3	60.5	93.6	0.0	444.2	4236.0	8405.3
State	3782.6	5606.8	605.3	456.9	658.6	2987.1	9332.7	23430.0
County	0.0	0.0	0.0	0.0	0.0	7.7	241.3	249.0
Local Government	4.3	69.8	25.5	16.4	0.0	126.4	424.9	667.3
Non-Governmental Organization	54.1	226.5	9.5	16.4	0.0	12.3	692.3	1011.0
Private	205.8	34.5	0.3	0.4	0.0	23.9	761.0	1025.9
<b>Total Protected Wetlands</b>	<b>5729.6</b>	<b>7825.8</b>	<b>701.1</b>	<b>583.6</b>	<b>658.6</b>	<b>3601.5</b>		
<b>Wetlands Currently Not Protected</b>	<b>3695.1</b>	<b>2603.1</b>	<b>1204.8</b>	<b>1015.5</b>	<b>16.1</b>	<b>2420.6</b>		
<b>Total Wetlands</b>	<b>9424.7</b>	<b>10429.0</b>	<b>1905.9</b>	<b>1599.1</b>	<b>674.6</b>	<b>6022.1</b>		
<b>Percentage Protected</b>	<b>60.8%</b>	<b>75.0%</b>	<b>36.8%</b>	<b>36.5%</b>	<b>97.6%</b>	<b>59.8%</b>		
<b>Total Protected Upland Buffer</b>							<b>15688.1</b>	
<b>Total Wetlands Protected</b>	<b>19100.3</b>							
<b>Total Wetlands</b>	<b>30055.4</b>							
<b>Total Wetlands Percent Protected</b>	<b>63.6%</b>							

\* PROTECTION TYPE: protection type was determined from Ducks Unlimited/TNC CARL layer for Michigan, see <http://glaro.ducks.org/CARL>  
 \*\* WETLAND TYPE: wetland type was determined from Ducks Unlimited's updated NWI layer, see <http://glaro.ducks.org/NWI>  
 \*\*\* The 585 contour line was created from USGS DEMs. The shoreline boundary was created from county parcel data.

Source: Modified from DU, 2012

### Currently Protected Upland

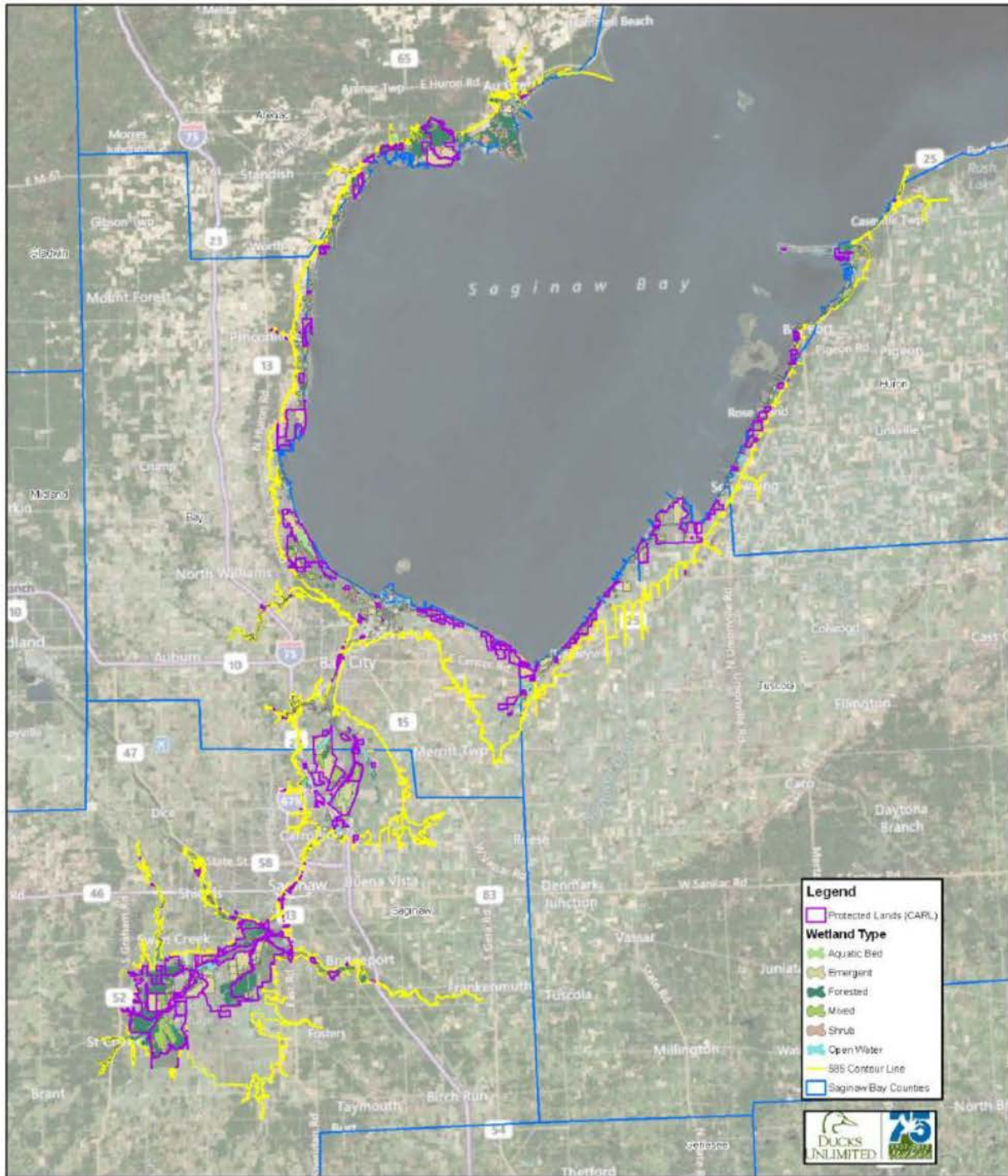
As previously stated, DU used the CARL database to create a GIS shape file of the currently protected land located below the AOC's 585-foot contour. Using the NWI GIS layer, the total acreage of protected land below the 585-foot contour was then identified as either upland or wetland (wetlands were further classified by wetland type: forested, emergent, scrub-shrub, open water, aquatic bed, and mixed). Based on DU's analysis, 15,688.1 acres of upland are currently protected below the 585-foot contour (Table 1).

### Analysis of Priority Unprotected Wetlands

The current acreage of unprotected wetlands was calculated by subtracting the acres of protected wetlands from the total acres of wetlands located below the 585-foot contour. As stated in the DU report, "in order to give a protection priority status to each wetland in the study area, the NWI layer was spatially joined with the Saginaw Bay Coastal Wetland Protection Priority Analysis layer (Schools, 2009). The resulting layer was intersected with the CARL layer to give the amount of wetlands protected in each of the status categories (moderate, high, highest priority) and to identify priority wetlands that are not currently protected" (DU, 2012). A map of the priority unprotected wetlands is included below, and a list of priority unprotected wetlands is attached (Figure 3 and Attachment B).

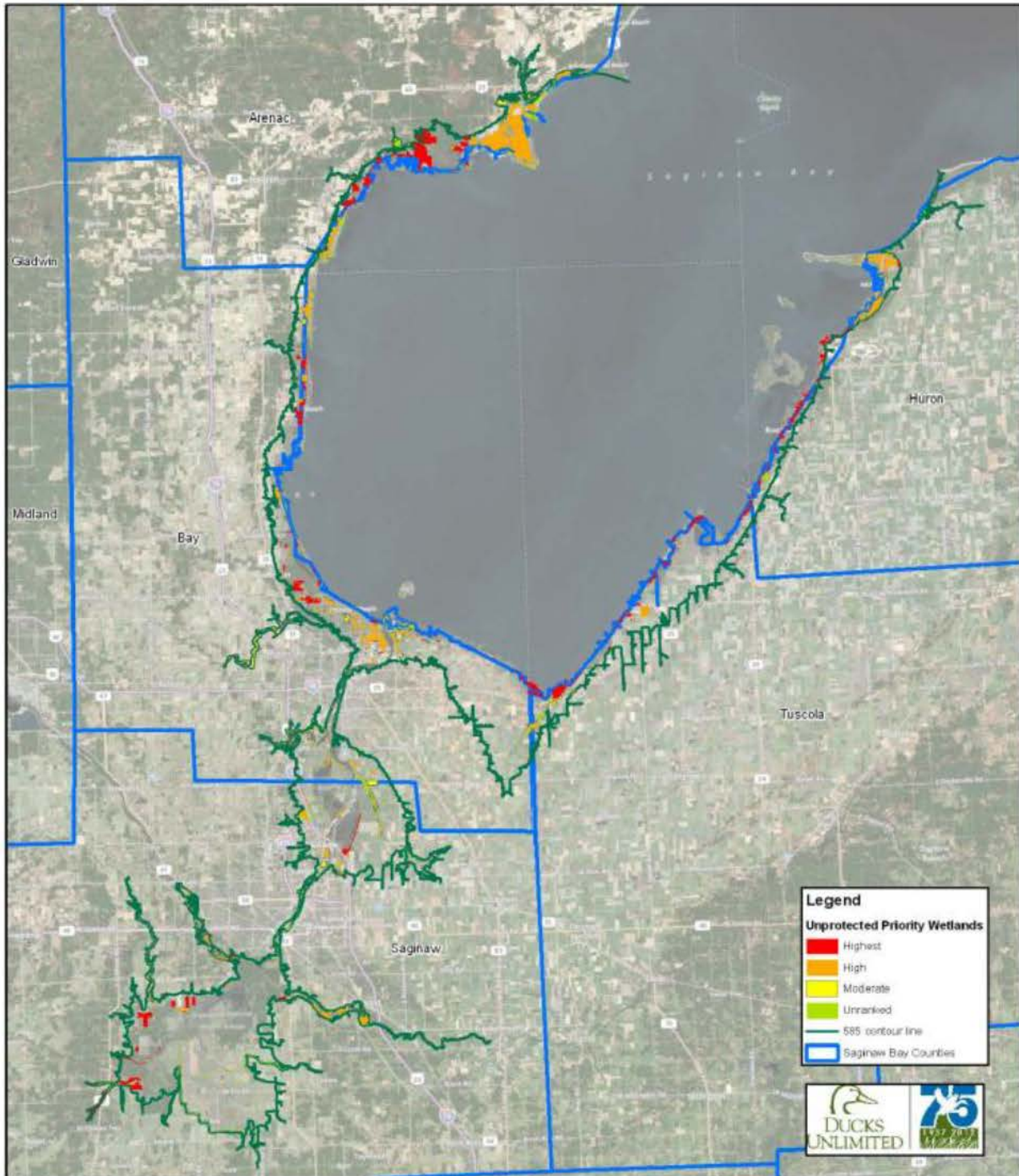


Figure 2: Map of Currently Protected Coastal Wetlands



Source: DU, 2012

Figure 3: Map of Currently Unprotected Priority Coastal Wetlands



Source: DU, 2012

In addition to the DU's report, the 2012 *Saginaw River/Bay Area of Concern Restoration Plan for Habitat and Populations BUIs* includes an assessment of the progress made towards meeting the restoration targets for the Loss of Fish and Wildlife Habitat BUI. The assessment was based on DU's 2012 geospatial analysis and in consultation with a technical committee comprised of representatives from the United States Fish and Wildlife Service, MDEQ, MDNR, DU, The Conservation Fund, the Saginaw Basin Land Conservancy, and the Partnership. The plan indicates that "the most recent estimates show that 60 percent of wetlands below the 585-foot contour have been protected through public ownership and permanent conservation easements, and the remaining unprotected wetlands have been prioritized and identified by parcel for continued protection, pursuant to the delisting criteria" (PSC, 2012). On October 17, 2012, the technical committee met and supported the finding that the habitat restoration targets have been achieved.

The Partnership is continuing to support and work with many local organizations (e.g., Ducks Unlimited, Saginaw Basin Land Conservancy, etc.) on their efforts to conserve the remaining unprotected wetland. The methodology used to prioritize the wetlands, as detailed in the Methodology Report for Prioritizing Saginaw Bay Wetlands (Schools, 2009), along with electronic copies of the GIS models used were distributed to many of the coastal communities, counties, and other interested stakeholders so that it could be used as a tool to help stakeholders protect coastal wetlands within the AOC.

This removal recommendation was discussed during the Partnership's December 6, 2012 and July 22, 2013 meetings. During the July 22, 2013 meeting, the Partnership Board unanimously voted to support the removal of Loss of Fish and Wildlife Habitat BUI from the Saginaw River/Bay AOC. A copy of the Partnership's letter of support for removing the Loss of Fish and Wildlife Habitat BUI is attached (Attachment C).

Two public meetings sponsored by the Saginaw Bay Watershed Partnership were held on May 29, 2013 to discuss the finding that the habitat restoration criteria had been met. A summary of the public meetings is included in Attachment D. This proposed action was public noticed via listing in the MDEQ Calendar (Attachment E). Supporting documents were posted on the MDEQ's AOC program web page for public review and comment from September 11, 2013 through October 14, 2013. A public meeting sponsored by the MDEQ was held on October 8, 2013, at the Bay County Public Library's Wirt Branch, to discuss this removal recommendation with the Saginaw River/Bay AOC community (a summary of the public meeting is included as Attachment F).

During the public notice period some concerns were raised regarding the potential removal of the Habitat BUI. These concerns ranged from issues that were either outside the scope of the AOC program (e.g., property taxation, wetland and floodplain regulations, etc.) or related to other beneficial uses that, at this time, are still impaired and not currently being considered for removal (e.g., Degradation of Fish and Wildlife Populations, Degradation of Benthos, Bird or Animal Deformities or Reproductive Problems BUIs.). A couple of commenters suggested that the restoration criteria for the BUI should be changed. Because the restoration criteria (1) has been in place for over ten years; (2) was negotiated amongst a variety of federal and state agencies, non-governmental organization and local representatives; and (3) formally accepted by the MDEQ, it was determined that it was not appropriate to change the criteria. The OGL did not receive any comments objecting to the finding that the established restoration criteria for the Habitat BUI had been met.

## Supporting Lines of Evidence

As specified in the 2008 and 2012 restoration plans, species-specific restoration targets for the Degradation of Fish and Wildlife Populations BUI were not appropriate due to complex ecosystem changes caused by invasive species and food web alterations. Species-specific restoration targets were determined not to be appropriate for the following reasons:

Walleye: “The measurable recovery target for walleye was set to achieve a population density such that walleye grow no faster than 110 percent of the state average mean length at age three. The walleye population met this goal for the first time in 2006, and again in 2007, but it is not known whether this goal will be sustainable in the future, as the food web continues to change. For this reason, the technical committee in 2008 and 2012 concluded that the walleye target can no longer be used as a relevant target for monitoring restoration of these BUIs” (PSC, 2012).

Yellow Perch: The initial recovery target set for yellow perch called for a sustained annual harvest of 750,000 pounds per year with increasing abundance of larger, faster-growing individuals. The technical committee determined that this was a problematic target because it focused on annual harvests instead of on the health of the yellow perch population. Further, “while yellow perch exhibit high rates of natural reproduction, survival to yearling size is poor as a result of the combined effects of food web alteration and high mortality, due to predation. Growth rates of perch surviving past the age of one are very good, but numbers of larger perch are near historic lows. Based on this information, it is likely that perch are impacted by predator-prey imbalances, rather than a lack of available spawning habitat” (PSC, 2012). In addition, the technical committee in 2008 and 2012 determined that the challenges facing yellow perch population in the Saginaw River/Bay AOC are no different than the challenges facing population in Lake Huron (i.e., disruptions in food web dynamics and increased competition from invasive species) and therefore concluded that a yellow perch target was no longer an appropriate restoration target (PSC, 2012).

Lake Sturgeon: The restoration target for lake sturgeon called for documented evidence of natural reproduction in the Saginaw Bay. However, the technical committee found that “...the challenges to the sturgeon recovery in the Saginaw River and Bay are indistinguishable from those impacting sturgeon populations beyond the AOC boundary, including lack of access to historic spawning locations and a limited population of sexually mature sturgeon. For this reason, the 2008 technical committee concluded that sturgeon target can no longer be used as a relevant target for monitoring restoration of these BUIs, which was reaffirmed in 2012” (PSC, 2012).

However, the Saginaw Bay walleye fishery has rebounded and is once again a world class fishery. In the early 2000s the MDNR, Fisheries Division set a walleye restoration target for the bay to restore walleye levels to 110 percent of the statewide average growth rate for three of five consecutive years by natural reproduction. Available data indicates that this criterion was met in 2009 for the first time since the 1950s. Further, natural reproduction has been so strong that that the MDR has not stocked walleye in Saginaw Bay since 2005 (Fielder and Thomas, in press).

While not a localized AOC issue, it is beneficial to note that resource managers are actively pursuing the management and treatment of phragmites. Phragmites is an invasive wetland plant that has spread across the Great Lakes Basin. Within the Saginaw Bay Watershed, a Cooperative Weed Management Area is being organized to help inventory, treat, and control phragmites and other invasive species. This is a collaborative effort with many partners including the United States Fish and Wildlife Service, Michigan Department of Natural Resources, and many local organizations and conservation districts. Phragmites control is likely to be a long-term effort within Saginaw Bay and throughout the Great Lakes.

### **Recommendation**

Based upon review of the data and input from the Technical Committee, the MDEQ AOC program staff recommends removal of the Loss of Fish and Wildlife Habitat BUI, in the Saginaw River/Bay AOC. This removal recommendation is made with consultation from the United States Fish and Wildlife Service, MDNR Fisheries, and Ducks Unlimited.

Prepared by: Bretton Joldersma, Saginaw River/Bay AOC Coordinator  
Great Lakes Management Unit  
Office of the Great Lakes  
Michigan Department of Environmental Quality  
November 5, 2013

### **Attachments**

Attachment A: Loss of Fish and Wildlife Habitat and Degradation of Fish and Wildlife Populations criteria-setting process; pages 47-51 of the *Guidance for Delisting Michigan's Great Lakes Areas of Concern*.

Attachment B: List of Highest Priority Unprotected Wetlands (DU, 2012).

Attachment C: The Partnership's letter of support for removing the Loss of Fish and Wildlife Habitat BUI, July 23, 2012.

Attachment D: Information from the Partnership's May 29, 2013 Public Meeting (e.g., Meeting Agenda, Sign-in Sheet, and Meeting Minutes).

Attachment E: MDEQ's September 23, and October 7, 2013 Calendars.

Attachment F: Summary of public comments from the October 8, 2013 MDEQ public meeting.

## References

- Bush, D., Bohr, J. 2012. Assessment of the Bird or Animal Deformities or Reproductive Problems Beneficial Use Impairment in Michigan's Great Lakes Areas of Concern. Lansing, Michigan. MI/DEQ/WRD-12/032. Lansing, Michigan.
- Ducks Unlimited. 2012. Refining and Updating the Wetland Protection Status in the Saginaw Bay Coastal Plain. Final Report Revised February 2013. Ann Arbor, Michigan.
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- Schools, Ed, et al. 2009. Methodology Report for Prioritizing Saginaw Bay Wetlands. Michigan State University Extension, Michigan Natural Features Inventory. Lansing, Michigan.
- Sunday, Erik. 2010. Michigan Department of Environmental Quality. Personal Communication February 8, 2010. Lansing, Michigan.

**Attachment A**

**2008 Guidance for Delisting Michigan's Great Lakes Areas of Concern:  
Loss of Fish & Wildlife Habitat and Degradation of Fish & Wildlife Populations  
Criteria-setting Process**

## ***Loss of Fish and Wildlife Habitat***

### ***Degradation of Fish and Wildlife Populations***

These 2 BUIs are being considered together in recognition of the integral relationship between them. For the purpose of assessing restoration, both of these BUIs will use the same criteria-setting process.

#### **Significance in Michigan's Areas of Concern**

Twelve AOCs in Michigan have identified Loss of Fish and Wildlife Habitat as a BUI in their RAPs (all except Deer Lake and Torch Lake). Nine AOCs in Michigan have identified Degradation of Fish and Wildlife Populations as a BUI including: Kalamazoo River, Muskegon Lake, White Lake, Menominee River, St. Marys River, Saginaw River/Bay, Clinton River, Rouge River, and River Raisin. Little quantitative information was available in the 1980s regarding habitat loss and population degradation, when impairments were first determined. Therefore, there is wide variability in these impairments among the AOCs due to both real variability in habitat and populations as well as variability in initial assessments.

#### **Michigan Restoration Criteria and Assessment**

Restoration of this BUI requires that a local aquatic habitat or population restoration plan be developed and implemented. The plan must be part of the RAP for the AOC, and contain at least the following components:

- A. A short narrative on historical fish and wildlife habitat or population issues in the AOC, including how habitat or populations have been impaired by water quality.
- B. Description of the impairment(s) and location for each aquatic habitat or population site, or for multiple sites where determined appropriate at the local level to address all habitat or population issues identified in the RAP and RAP updates.
- C. A locally derived restoration target for each impacted habitat or population site. Sources of information for targets may include data from social science surveys, if appropriate. Habitat restoration targets may be based on restoration of fish and wildlife populations, if appropriate.
- D. A list of all other ongoing habitat or population planning processes in the AOC, and a description of their relationship to the restoration projects proposed in the plan.



- E. A scope of work for restoring each impacted aquatic habitat or population site. The scope of work should describe specific habitat or population restoration action(s) to be completed, including:
  - 1. Timetable
  - 2. Funding
  - 3. Responsible entities
  - 4. Indicators and monitoring
  - 5. Evaluation process based on indicators
  - 6. Public involvement
  
- F. A component for reporting on habitat or population restoration implementation action(s) to the MDEQ.

Removal of this BUI will be based on achievement of full 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.

## **Rationale**

### Practical Application in Michigan

While most Michigan AOCs have habitat impairments and/or populations degradation, none were designated as impaired primarily as a result of these. The AOCs vary widely in their levels of habitat or population degradation, historical habitat or population types, and current needs for habitat or population restoration. The extent of habitat or population restoration necessary in an AOC will be determined at the local level and documented in the RAP.

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 RAPs. Individual, AOC-specific restoration plans and criteria will be developed and implemented through a federal/state/local partnership.

Sources of water quality contamination must be controlled before habitat or population restoration is 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.

1991 IJC General Delisting Guideline: Loss of Fish and Wildlife Habitat

*When the amount and quality of physical, chemical, and biological habitat required to meet fish and wildlife management goals have been achieved and protected.*

#### IJC Delisting Guideline: Degradation of Fish and Wildlife Populations:

*When environmental conditions support healthy, self-sustaining communities of desired fish and wildlife at predetermined levels of abundance that would be expected from the amount and quality of suitable physical, chemical and biological habitat present. An effort must be made to ensure that fish and wildlife objectives for AOCs are consistent with Great Lakes ecosystem objectives and Great Lakes Fishery Commission fish community goals. Further, in the absence of community structure data, this use will be considered restored when fish and wildlife bioassays confirm no significant toxicity from water column or sediment contaminants.*

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 Program and Authorities for Evaluating Restoration**

Habitat or population restoration projects to address these use impairments will be implemented by a variety of programs at the federal, state, and local level, as determined in the restoration planning process. For the development of local habitat or population restoration plans and criteria, the MDEQ, in consultation with MDNR Fisheries and Wildlife Divisions, commits to partnering with local AOC groups to determine what those actions should be, and make available to the PACs the existing monitoring and reporting elements in state programs as applicable.

Michigan assesses water bodies throughout the state on a 5-year basin rotation plan 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 expanded and improved monitoring of biological integrity and physical habitat.

This element includes all monitoring conducted for fish and benthic invertebrate community structure, nuisance aquatic plants, algae, and slimes, and assessment of physical habitat. Because biological communities integrate the cumulative effects of multiple environmental stresses, this element is an

important tool for evaluating water quality. The MDEQ's goal in conducting the watershed surveys is to assess 80% of the stream and river miles in Michigan over a 5-year period.

The specific objectives of biological integrity and physical habitat monitoring are to:

1. Determine whether waters of the state are attaining standards for aquatic life.
2. Assess the biological integrity of the waters of the state.
3. Determine the extent to which sedimentation in surface waters is impacting indigenous aquatic life.
4. Determine whether the biological integrity of surface waters is changing with time.
5. Assess the effectiveness of best management practices and other restoration efforts in protecting and/or restoring biological integrity and physical habitat.
6. Evaluate the overall effectiveness of MDEQ programs in protecting the biological integrity of surface waters.
7. Identify waters that are high quality, as well as those that are not meeting standards.
8. Identify the waters of the state that are impacted by nuisance aquatic plants, algae, and bacterial slimes.

The biological integrity and physical habitat element consists of several components that, in combination, provide data necessary to achieve the following objectives:

- Rapid biological assessment of wadeable streams;
- Rapid assessment procedure for nonwadeable rivers; and
- Trend monitoring procedure for biological communities.

Rapid, qualitative biological assessments of wadeable streams and rivers are conducted using the SWAS Procedure 51, which compares fish and benthic invertebrate communities at a site to the communities that are expected at an unimpacted, or reference, site. This is a key tool used by the MDEQ to determine whether waterbodies are attaining Michigan WQS. However, this procedure cannot be used on nonwadeable rivers. The MDEQ has been partnering with Michigan State University to develop and validate a procedure for assessing aquatic communities in nonwadeable rivers which the State plans to begin implementing in 2006.

The State will support efforts in all AOCs with this BUI to complete the items the checklist above. Support may be both direct, with partnership commitments from the MDEQ and MDNR to specific elements as appropriate, as well as indirect through grants to local AOC partners. Depending on available resources, support for local development of habitat or population restoration plans and criteria may be spread out among AOCs over multiple years.

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 meet quality assurance and control requirements, they may be used to demonstrate restoration success.

**Attachment B**

**List of Highest Priority Unprotected Wetlands**

**APPENDIX B: Landowners of Unprotected Wetlands**  
(over 5 acres in size)

ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
506791461	Goins William P & Dolores Trust	26.0	9.0	Arenac
506791786	Luenser Karl	20.7	5.9	Arenac
506794527	Saginaw Chippewa Indian Tribe Of Michigan	34.4	10.5	Arenac
506796145	Grier Jan A & Mark G & Alan	25.2	9.8	Arenac
506796156	Hewitt Leland J & Cecelia	27.6	10.7	Arenac
506796189	Barshaw Daniel Etal	60.4	28.9	Arenac
506797471	Beardsley Richard K Sr & Marcella	71.0	10.0	Arenac
506799887	Wright Donald N & Margaret J	30.3	9.0	Arenac
506799999	Targosz Felix & Victoria L	11.5	6.0	Arenac
506800001	Davis Robert F & Madaline	11.5	6.0	Arenac
506800002	Olsen Harold D & Beverly J	11.5	6.0	Arenac
506800003	Smith Charles E	11.5	6.0	Arenac
506800004	Salwa Lawrence & Pamela	11.5	6.0	Arenac
506800005	Revord Kenneth C & Gail M	11.5	6.0	Arenac
506800006	Marentette Robert & Charlene	11.5	6.0	Arenac
506800007	Tyler Leonard & Diana E Trust	30.3	9.0	Arenac
506800959	Burkhart Norman	86.6	9.7	Arenac
506801436	Morrison Ricky L & Susan M 655 S Main St	49.9	13.3	Arenac
506801437	Grabowski Jean B & Linda J	49.9	13.3	Arenac
506801438	Stanley Dennis & Patricia & Michael & Holland Da	49.9	13.3	Arenac
506801439	Griffore Charles A & Bonnie A	49.9	13.3	Arenac
506801440	Stanley Holland & Dennis & Patricia & Michael	49.9	13.3	Arenac
506801441	Inland Marine Inc Horton Wm	49.9	13.3	Arenac
506801442	Inland Marine Corp	49.9	13.3	Arenac
506801443	Rousseau II Apartments Suite 100	49.9	13.3	Arenac
506801513	Leesch Walter Arthur Iii & Cheryl C Trust	38.2	5.8	Arenac
506801514	Bcrushko William & Mary	38.2	5.8	Arenac
506801515	Krebsbach Hugo & Janice	38.2	5.8	Arenac
506801516	Mielock Gary & Cahleen	38.2	5.8	Arenac
506801529	Ex Victor	53.7	18.3	Arenac
506801530	Ex Duane & Marilyn	53.7	18.3	Arenac
506801531	Peterson Judith K & Robinson Kimberly	53.7	18.3	Arenac
506801532	Peterson Judith K & Robinson Kimberly S	53.7	18.3	Arenac
506801761	Csicsila Darryl R	127.1	13.6	Arenac
506801967	Pierson Donna C Trust	17.5	7.8	Arenac
506802444		12.0	6.2	Arenac
506802554	Lentz William & Gail M	132.8	22.3	Arenac
506803104	Green Point Farm David M Schlanderer	305.6	136.4	Arenac
506803115	Davis Thomas H Jr	20.8	9.3	Arenac
506803123	Bcrushko Marty	60.1	19.1	Arenac
506803127	Ruse Kim A - Lynn P & Kevin & Kurt - Abbey Ruse	80.5	40.0	Arenac
506803128	Willett Gerald & Joyce	32.6	6.0	Arenac
506803467	Keefe Martha A M Trust & Etal	75.5	36.3	Arenac
506803551	Waldie Kenneth & Sherry	38.9	11.2	Arenac
506803558	Burnside Susanne Gail Trust %Comerica Bank	46.8	10.0	Arenac
506803563	Green Point Farms David M Schlanderer	609.5	100.0	Arenac
506803597	Manor James R Jr & Margaret	121.0	53.0	Arenac
506803598	Hoerlein Paul & Mary Etal	44.8	22.2	Arenac
506803638	Mitchell Fred T & WF	147.4	71.2	Arenac
506803734		67.0	7.5	Arenac
506803769	Hartley Jeffrey	152.0	33.8	Arenac
506803786		49.4	10.0	Arenac

ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
506803794	Mattis Kenneth H Trust	285.9	111.8	Arenac
506803881	Mattis Kenneth H Trust	31.6	16.3	Arenac
506803935	Fearnside Stafford & Judith	10.0	5.1	Arenac
506803973	Lauinger Patrick G & Lauinger Jerome Joseph	34.8	12.8	Arenac
506803987	Ebert Betty Jane	32.4	6.0	Arenac
506803990	Dewald Brent J	17.2	7.3	Arenac
506803997	Manor Mark C/O Devin Manor	17.5	9.0	Arenac
506803998	Ahern Richard H & Marion M	69.9	7.1	Arenac
506804003	Valley Craig J & Dorna L	79.9	18.1	Arenac
506804005	Whitney Terry K & Vickie L	63.7	21.1	Arenac
506804014	Andersen Ronald & Delores	15.6	7.4	Arenac
506804020	Zemore John A	71.5	27.9	Arenac
506804087	Mattis Kenneth H Trust	66.0	29.0	Arenac
506804088	Mattis Kenneth H Trust	118.7	58.1	Arenac
506804089	Mattis Kenneth H Trust	233.7	120.8	Arenac
506804090	Mattis Kenneth H Trust	34.9	18.1	Arenac
506804106	Martindale Family Trust	16.4	8.5	Arenac
506804174	Jankowiak Brian P & Rebecca M 2282 Swenson	14.0	7.2	Arenac
506804175	Schaeding Leonard & Colleen	19.0	9.0	Arenac
506804188	Bayside Builders Augres Llc Dan Ralph	37.3	16.4	Arenac
506804206	Streeter Jason G	37.5	18.3	Arenac
506804207	Luberda Fem L/E C/O Luberda Albert &	77.1	23.8	Arenac
506804211	Luberda Fem (L/E) C/O Luberda Michael	90.6	39.9	Arenac
506804212	Manor Edward	20.9	10.2	Arenac
506804213	Selle Walter L & Robert A	76.9	39.7	Arenac
506804216	Urban Gregory L & Brenda	80.7	41.7	Arenac
506804217	Urban Gregory L & Brenda	58.4	26.7	Arenac
506804219	Mattis Kenneth H Trust	114.7	51.5	Arenac
506804221	Mattis Kenneth H Trust	79.6	41.1	Arenac
506804225	Schwiderson Patrick & Helena	16.9	7.7	Arenac
506804285	Carswell Jimmy L	22.1	10.5	Arenac
506804324	Selle Robert Glen & Walter	38.2	19.6	Arenac
506804371	Volk Thomas & Mary Ellen	22.4	10.8	Arenac
506804406	Willis Elmer Jr & Patricia	20.0	7.5	Arenac
506804413	Shorkey Mark A & Karen J Penkala-Shorkey	158.4	20.3	Arenac
506804420	Borushko Marty	114.3	28.0	Arenac
506804421	Borushko Marty	18.3	6.8	Arenac
506804427	Campau James C & Carol S	147.9	54.7	Arenac
506804445	Cracchiolo Anthony J	74.8	8.4	Arenac
506804446	Butler Joel D & Rebecca L	18.8	5.0	Arenac
506804449	Labean Robert L & Doris B & Butler Joel David	57.3	13.1	Arenac
506804455	Gordon Ira Joe & Audrey Ann	66.4	25.5	Arenac
506804466	Davis Lawrence M	73.4	22.1	Arenac
506804468	Selle Robert Glen & Walter	35.4	18.2	Arenac
506804473	Dewald Pamela	156.4	80.0	Arenac
506804474	Dewald Alloyes & Troy S	79.4	38.0	Arenac
506804475	Morgan Dennis Trust & Robert Trust & Leonard	147.6	76.1	Arenac
506804477	Stanolis Christopher J	77.3	40.0	Arenac
506804484	Larson Paul A	137.7	49.8	Arenac
506804523	Armstrong Rudolph Sr & Bridgette M	20.1	5.4	Arenac
506804524	Stanolis Christopher J	22.8	11.1	Arenac
506804525	Larson Paul A	22.7	5.9	Arenac

ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
506804649	Willett Gerald & Joyce	77.8	31.3	Arenac
506804657	Looney Vernon W & Brenda L	51.7	20.7	Arenac
506804659	Ruse Sheridan C Jr & Tanja E	51.7	23.0	Arenac
506804754	Niernberg Robert T & Jeannett	22.6	10.6	Arenac
506804988	Trombley Nancy C & Thomas Nathan	257.7	22.4	Arenac
506805010	Puwal E Louis	64.6	10.9	Arenac
506805023	Selle Theodore A & Lou Ann	160.4	28.8	Arenac
506805024	Selle Dwight & Marvin	79.9	37.5	Arenac
506805026	Daniels Ernest G & Karen	62.4	29.1	Arenac
506805030	Roberts Family Trust Roberts Lloyd & Mary	103.0	13.3	Arenac
506805032	Augres Property Lic	79.2	40.9	Arenac
506805037	Markley Joseph L & Francis L Trust	77.2	39.7	Arenac
506805074	Orel Albin J & John P	31.1	9.0	Arenac
506805114	Augres Property Lic	148.1	75.9	Arenac
506805116	Olsen Harold D & Beverly J	73.4	37.5	Arenac
506805209		79.7	34.1	Arenac
506805212		69.9	11.9	Arenac
506805284		62.3	20.0	Arenac
506805291	Nowak Richard	139.2	53.0	Arenac
506805462	United States Of America Saginaw Chippewa Ind	116.8	39.6	Arenac
506805496	Holmes Doris Kinch	11.1	5.2	Arenac
506805520	Wiegand Dean & Lisa J Dean W Wiegand Trust	22.1	7.9	Arenac
506805944	Baudry John R	78.8	6.8	Arenac
506806005	Yotkois George W & Patti Jane	68.4	32.3	Arenac
506806007	Powell Patricia	73.4	37.9	Arenac
506806010	Olsen Harold D & Beverly J	73.7	37.7	Arenac
506806219	Bilacic Gary	70.2	21.1	Arenac
506806454	Porath John C & Lynn M	80.5	21.0	Arenac
506806917	Nowak Charles A & Nancy & Nowak Gerald J & Jud	141.0	10.1	Arenac
506807440	United States Of America	16.0	5.2	Arenac
506808115	Allen Doyle & Dorothy	30.4	15.0	Arenac
506808426	Brown Thomas & Judith	24.8	12.6	Arenac
506808569	Foco Ronald G & Susan M	59.1	25.2	Arenac
506808679	Fabisiak Matthew M	20.5	9.1	Arenac
506808797	Murphy Robert E & Sharron M Trust	20.9	7.9	Arenac
506808850	Petty William A Trust	20.0	8.2	Arenac
506808894	Bundesen Milford & Irene Trust	16.8	7.7	Arenac
506808928	Glazier Darrell G & Phyllis M	20.3	9.1	Arenac
506808973	Dubowsky Harold S Jr	17.0	6.4	Arenac
506809752	Boyle David H & Rose M	136.2	9.2	Arenac
506809912	Parent Charles L & Karen S	74.7	6.7	Arenac
506810116	Goretcki David E & Carol C	35.7	12.7	Arenac
506810171	Rekosz Dolores	20.6	9.0	Arenac
010-003-300-010-00		336.4	103.4	Bay
010-004-100-010-00		94.6	50.2	Bay
010-004-200-010-00		8.4	6.4	Bay
010-004-200-090-00		19.9	6.6	Bay
010-004-200-220-00		17.4	14.6	Bay
010-004-400-020-00		25.1	9.9	Bay
010-004-400-140-00		24.1	14.0	Bay
010-010-200-005-00		573.2	274.2	Bay
010-011-300-010-00		52.5	13.8	Bay



ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
010-011-300-025-00		30.2	29.8	Bay
010-015-200-025-00		29.4	23.9	Bay
010-031-100-165-00		27.9	24.9	Bay
010-031-100-180-00		10.0	5.9	Bay
010-031-100-225-00		16.9	14.9	Bay
010-031-100-240-00		9.9	5.7	Bay
010-031-100-250-00		9.9	5.3	Bay
010-031-200-145-00		15.8	8.5	Bay
010-031-200-175-00		11.0	8.4	Bay
010-031-200-250-00		11.0	5.9	Bay
010-031-200-265-00		6.9	5.4	Bay
010-031-200-275-00		17.0	10.0	Bay
010-032-200-005-00		103.8	13.7	Bay
010-032-300-055-00		8.9	7.0	Bay
010-032-400-010-00		18.1	6.3	Bay
010-032-400-245-00		7.9	5.4	Bay
010-033-400-020-00		20.1	12.2	Bay
030-001-100-010-00		24.7	7.2	Bay
030-001-100-015-00		22.9	8.0	Bay
030-001-100-020-00		20.1	6.5	Bay
030-001-200-105-00		52.3	14.1	Bay
030-001-300-045-00		11.7	8.8	Bay
030-001-400-035-04		45.0	5.7	Bay
030-002-400-050-00		172.6	12.5	Bay
030-040-100-005-02		40.9	6.1	Bay
030-040-100-100-00		19.0	15.3	Bay
030-040-300-035-05		16.2	5.1	Bay
030-041-100-005-00		53.7	17.8	Bay
030-041-100-010-00		19.2	8.2	Bay
030-041-200-005-00		96.7	18.3	Bay
030-041-300-015-11		56.7	16.0	Bay
030-043-100-005-00		38.9	5.2	Bay
030-043-300-010-00		15.4	6.5	Bay
030-046-200-005-00		290.4	5.6	Bay
040-012-200-005-00		38.1	20.7	Bay
040-012-200-020-01		38.5	35.5	Bay
040-012-200-035-00		80.0	9.3	Bay
040-035-200-020-00		7.8	6.3	Bay
040-035-200-025-03		7.1	6.4	Bay
040-035-400-030-01		12.6	9.1	Bay
040-035-400-060-00		6.8	5.6	Bay
040-035-400-070-02		11.4	9.4	Bay
040-035-400-075-00		10.7	8.5	Bay
040-035-400-085-00		10.7	8.3	Bay
040-040-100-040-00		48.5	9.3	Bay
040-040-300-005-00		20.6	13.6	Bay
040-040-300-040-00		11.3	5.5	Bay
040-040-300-055-00		9.0	6.5	Bay
070-001-100-005-00		870.6	65.0	Bay
070-001-200-005-00		236.7	86.2	Bay
070-002-200-005-10		73.1	5.8	Bay
070-002-200-005-20		54.7	6.6	Bay

ParcelID	Landowner	Acreeage of Parcel	Acreeage of Unprotected Wetlands	County
070-002-200-005-30		101.9	7.1	Bay
070-011-200-005-00		56.7	45.0	Bay
070-011-200-005-01		12.3	8.8	Bay
070-012-200-005-00		477.8	102.1	Bay
070-013-100-020-00		69.8	8.9	Bay
070-040-200-020-00		148.0	21.8	Bay
080-001-100-010-03		18.6	7.9	Bay
080-001-300-010-00		24.3	10.1	Bay
080-013-300-030-00		10.9	6.3	Bay
080-023-200-015-00		42.0	7.0	Bay
080-023-400-015-03		58.0	5.8	Bay
080-023-400-020-00		17.9	14.3	Bay
080-025-200-010-00		162.1	117.5	Bay
080-036-200-040-00		19.6	7.8	Bay
080-036-200-105-00		9.6	8.2	Bay
090-001-200-020-00		27.9	13.0	Bay
090-001-200-030-00		34.8	31.1	Bay
090-001-400-010-00		19.8	6.9	Bay
100-001-100-115-00		19.4	13.3	Bay
100-001-300-005-00		77.7	5.4	Bay
100-002-300-070-02		86.8	7.1	Bay
100-002-400-020-00		45.3	10.8	Bay
100-002-400-080-00		59.3	7.7	Bay
100-002-400-160-01		25.9	21.3	Bay
100-003-400-070-00		47.7	6.2	Bay
100-010-100-010-00		52.2	9.3	Bay
100-010-200-010-00		49.5	14.5	Bay
100-010-200-070-00		48.1	9.3	Bay
100-010-300-020-00		9.3	6.0	Bay
100-010-300-030-00		55.8	28.4	Bay
100-015-100-020-00		117.2	28.1	Bay
100-015-100-030-00		120.1	38.4	Bay
100-015-200-120-02		73.2	7.2	Bay
100-016-100-020-02		57.3	6.9	Bay
100-016-200-060-00		18.0	10.9	Bay
100-036-300-020-00		58.2	10.7	Bay
100-038-400-380-00		11.1	10.3	Bay
120-025-400-010-00		74.2	5.4	Bay
120-037-100-060-00		41.8	14.0	Bay
120-037-300-010-00		18.7	8.3	Bay
120-037-300-095-00		15.2	11.2	Bay
120-038-100-035-02		27.8	15.4	Bay
120-038-100-050-00		45.7	16.7	Bay
120-038-300-010-00		39.8	28.8	Bay
120-038-300-040-00		41.2	37.7	Bay
120-039-100-040-02		24.3	12.7	Bay
120-039-300-010-00		26.0	23.4	Bay
120-039-300-050-02		8.3	5.2	Bay
120-039-300-050-03		19.3	15.5	Bay
120-041-300-010-00		16.6	10.9	Bay
120-041-300-060-01		57.9	51.5	Bay
120-042-100-010-01		17.9	10.1	Bay



ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
120-042-100-020-00		27.3	21.8	Bay
120-042-300-011-01		28.2	16.0	Bay
120-042-300-015-00		14.3	8.9	Bay
120-L05-000-044-00		20.3	18.0	Bay
130-015-200-020-00		37.1	14.9	Bay
170-012-300-010-00		18.9	6.2	Bay
170-013-200-020-00		6.0	5.6	Bay
159106742	Henne John	8.5	6.0	Huron
159106848	Fernar Frank & Carolyn V	3.6	19.0	Huron
159107004	Seward Richard L & Cornie L	1.1	6.4	Huron
159107005	Bromley Karen L & Kubacki Alicia K	9.2	18.8	Huron
159115625	Good Shepherd Lutheran Church	1.5	10.4	Huron
159115647	Bieri Ronald R & Dolores A	1.7	121.7	Huron
159115648	Bieri Lorraine H	7.0	10.7	Huron
159115649	Caseville Twp Airport Land Corp	4.7	7.6	Huron
159115687	Cbb Properties Llc	1.5	13.4	Huron
159115688	Morgan Billy T li & Sharon A	3.6	33.6	Huron
159115690	Bieri Ronald R & Dolores A	3.4	9.9	Huron
159115951	Clabuesch Henry J	3.5	21.1	Huron
159116233	Beadle Jeanette E	4.2	14.1	Huron
159116665	Freeman William J	8.4	7.2	Huron
159117559	Tuckey Iris C Trustee	1.3	10.5	Huron
159118111	Vivian Edwin D	1.0	6.4	Huron
159118164	Ciesielski Ronald J	9.0	7.6	Huron
159118270	Scenic Golf & Country Club Inc	1.1	7.3	Huron
159118290	Barlow Dale & Litos Donna	2.7	6.2	Huron
159118292	Brown William	1.9	9.7	Huron
159118298	Baur Bruce A	7.9	51.5	Huron
159118299	Thebe Michael J & Dorna L	1.9	18.2	Huron
159118300	Leach Gregory L	1.9	5.8	Huron
159118451	Thebe Michael J & Dorna L	9.3	8.5	Huron
159133839	Old Colony Farms Lc	6.7	13.1	Huron
159133840	Old Colony Farms Lc	2.4	16.5	Huron
159134530	Michigan Sugar Company	5.3	34.1	Huron
159135060	Beadle Jeanette E	2.7	12.4	Huron
159135064	Scenic Realty Company	1.3	9.1	Huron
159135085	Diebel Robert D & Kirk D	3.2	24.9	Huron
159135097	Old Colony Farms Lc	1.1	57.3	Huron
159135115	Old Colony Farms Lc	1.5	28.1	Huron
159135272	Abbott Richard H & Bonnie J Trustee	1.2	6.3	Huron
159135612	Michigan Sugar Company	5.6	29.3	Huron
159135614		7.7	15.0	Huron
159135620	Sebewaing Township	9.1	5.3	Huron
388738671	Dnr Grants Administration Div	8.1	8.1	Saginaw
388740102	Central Foundry Tax Staff, Pl-Pont Eng(Px44)	8.5	8.5	Saginaw
388751410	Turner, Melvin E & Esther H	5.8	5.8	Saginaw
388751924	Csx Transportation Inc	5.7	5.7	Saginaw
388752482	Remediation & Liability Mgt Co Inc	5.7	5.7	Saginaw
388753390	City Of Saginaw	8.8	8.8	Saginaw
388765862	Weh-Ran Properties Llc	12.2	12.2	Saginaw
388765959	Boess, G M & S E	23.5	23.5	Saginaw
388766361	Rice, D M & V J	5.5	5.5	Saginaw

ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
388766583	Young Family Trust	21.8	21.8	Saginaw
388766868	Wendland, A R Etal	35.7	35.7	Saginaw
388767654	Schmidt, Paul	35.3	35.3	Saginaw
388768036	Bourdow Trucking	16.2	16.2	Saginaw
388768575	Consumers Energy Co	13.0	13.0	Saginaw
388768645	Kulhanek, Lucille Etal	12.0	12.0	Saginaw
388768673	Section 12 Farms, Llc	5.9	5.9	Saginaw
388768737	Kimberley Oaks Land Co Llc	8.9	8.9	Saginaw
388772384	Bourdow, D G & P A	15.7	15.7	Saginaw
388777539	Madden, T M & M E	24.3	24.3	Saginaw
388779480	Stevens Family Farm, Llc	7.7	7.7	Saginaw
388780001	Wenzel, J E & S H	13.3	13.3	Saginaw
388780078	Crooked Creek Investment Co	6.0	6.0	Saginaw
388782341	Soc Of Miss Sisters	8.2	8.2	Saginaw
388782973	Kaufmann, Leonard &	74.7	74.7	Saginaw
388783235	Kretz, J & T	15.0	15.0	Saginaw
388783586	Zilwaukee Township	12.3	12.3	Saginaw
388783831	Benkert, Bergetta Trust	27.0	27.0	Saginaw
388783841	Hamlin M & C Etal	83.3	83.3	Saginaw
388785078	Crooked Creek Investment Co	11.1	11.1	Saginaw
388787097	Cushman, J & N	7.5	7.5	Saginaw
388788337	Gosen, William F & Mary A	43.7	43.7	Saginaw
388788644	Schonaker, R J & G F Trust	7.4	7.4	Saginaw
388788819	Kasper, J S & C M	16.5	16.5	Saginaw
388788820	Darling R P & K A	15.3	15.3	Saginaw
388790131	Kluck, Thomas & Karen	5.3	5.3	Saginaw
388790136	Gosen, C D & K	10.5	10.5	Saginaw
388790163	Kluck, Thomas & Karen	13.8	13.8	Saginaw
388790824	Mdot State Highway Dept	85.4	85.4	Saginaw
388791773	Dgf & M Associates	5.2	5.2	Saginaw
388792731	Schmidt, P H & M M	6.2	6.2	Saginaw
388792819	Gross D R & J L	21.5	21.5	Saginaw
388792993	DNR Grants Administration Div	8.0	8.0	Saginaw
388793127	Benkert, L M	10.8	10.8	Saginaw
388793941	Benkert, Bergetta Trust	28.8	28.8	Saginaw
388794007	Sapak P & Stallings B	12.6	12.6	Saginaw
388794192	Saginaw County Road Commission	26.1	26.1	Saginaw
388794640	Sapak P & Stallings B	10.2	10.2	Saginaw
388795234	Benkert, R A & M Etal	8.8	8.8	Saginaw
388795761	Walker, R D & W F	13.7	13.7	Saginaw
388795796	Sapak P & Stallings B	8.8	8.8	Saginaw
388796379	Walker, R D & W F	13.9	13.9	Saginaw
388796790	Bridgeport Charter Township	195.3	195.3	Saginaw
388798403	Hunter, Ronald	36.9	36.9	Saginaw
388798412	Davis, Eileen M	13.4	13.4	Saginaw
388798954	Langschwager, H R & M M Etal	69.6	69.6	Saginaw
388799128	Powertrain R 51300 Fm200	13.1	13.1	Saginaw
388799268	Vandriessche, Gene R Etal	10.0	10.0	Saginaw
388799492	Powertrain R 51300 Fm200	11.4	11.4	Saginaw
388800217	Woolcock, Mary E Trust	28.1	28.1	Saginaw
388800264	Mdot State Highway Dept	18.1	18.1	Saginaw
388801224	Section 12 Farms, Llc	12.6	12.6	Saginaw

ParcelID	Landowner	Acreage of Parcel	Acreage of Unprotected Wetlands	County
388801271	Fort Cass Farms Llc	37.9	37.9	Saginaw
388801467	Bridgeport Charter Township	5.0	5.0	Saginaw
388802149	Kunitser Family Realty Llc	17.7	17.7	Saginaw
388802403	Saginaw Rock Products Co	5.4	5.4	Saginaw
388802587	Champagne & Marx Excav	6.0	6.0	Saginaw
388803393	Hunter, Ronald	48.0	48.0	Saginaw
388803700	Rapanos, John A	30.6	30.6	Saginaw
388803984	Griffin, Christopher S & Alice	5.3	5.3	Saginaw
388804186	Langschwager, H R & M M Etal	19.1	19.1	Saginaw
388804355	Powertrain R 51034 Fm200	11.7	11.7	Saginaw
388805167	Alj Corp	10.4	10.4	Saginaw
388805337	Section 12 Farms Llc	6.8	6.8	Saginaw
388806090	Markey, Steven F & Lili C	53.7	53.7	Saginaw
388806193	Bridgeport Charter Township	7.7	7.7	Saginaw
388807015	Conagra Foods Inc Tax Dept	5.8	5.8	Saginaw
388807069	Parker, G & M A	18.0	18.0	Saginaw
388808012	B M T Terminal Inc	63.0	63.0	Saginaw
388808198	Schmidt, P H & M M	53.5	53.5	Saginaw
388808909	Wendland, A R Etal	9.4	9.4	Saginaw
388809850	Stroebel, G W & S J	9.3	9.3	Saginaw
388809924	Young Family Trust	17.8	17.8	Saginaw
388810213	Wendland, A R & Wendland, D R	23.4	23.4	Saginaw
388810352	Sahr, Dale & Ellen	13.6	13.6	Saginaw
388810497	Sawatzki, T L & S M	6.4	6.4	Saginaw
388810865	Kadlec, R J & A M Trust	15.3	15.3	Saginaw
388812431	Pasionek, L J & B J	49.4	49.4	Saginaw
388812786	Wohlfeil, Raymond R	22.3	22.3	Saginaw
388813498	Vlasic Foods International Inc	13.3	13.3	Saginaw
388813642	Hammerbacher, T & M	49.4	49.4	Saginaw
388813794	Sivey, James Etal	5.9	5.9	Saginaw
388813901	Gustavison, D K & C S	10.9	10.9	Saginaw
388814427	Billeter, A L & R G	8.0	8.0	Saginaw
388814892	Rivercrest Farms Nc	10.9	10.9	Saginaw
388816118	Kline, J A & K T	7.6	7.6	Saginaw
388816719	Robinson, E A & B J	25.6	25.6	Saginaw
388816959	Misteguay Creek Farms	20.7	20.7	Saginaw
388817430	Kulhanek Farms Inc	32.9	32.9	Saginaw
388817648	Lisik, Sylvia Etal	7.4	7.4	Saginaw
388817677	Oakes, E G & K A	5.5	5.5	Saginaw
388817808	Mid Michigan Golf Course Inc	6.2	6.2	Saginaw
388818425	Wend, Eugene Etal	6.5	6.5	Saginaw
388819570	Bowen, J O & B A	6.0	6.0	Saginaw
388819709	Albosta, J P & G M Trust	7.5	7.5	Saginaw
388819763	Alderman, D S	5.8	5.8	Saginaw
388820120	Prokop, Marianne Trust	7.6	7.6	Saginaw
388821228	Johnson, Craig W & Jennifer M	20.5	20.5	Saginaw
388821413	Fisher, James	6.8	6.8	Saginaw
388824428	Alderman, D S	25.9	25.9	Saginaw
388831506	Gilmour, R K Trust	19.1	19.1	Saginaw
388831507	Pasionek, P A Et Al	109.6	109.6	Saginaw
388831511	Garno, Andrew	9.0	9.0	Saginaw
388831794	Blaine, H F & B M Trust	13.5	13.5	Saginaw

**Attachment C**

**The Partnership's Letter of Support for Removing the  
Loss of Fish and Wildlife Habitat BUI, July 23, 2012.**



Partnership for the Saginaw Bay Watershed  
1817 Center Avenue  
Bay City, Michigan 48708

July 23, 2013

Bretton Joldermsma  
Area of Concern Coordinator  
Office of the Great Lakes  
Michigan Department of Environmental Quality  
525 West Allegan Street  
Lansing, Michigan 48909-7973

Dear Bretton,

A forum of the Partnership for the Saginaw Bay Watershed Board of Directors met at a regular meeting on July 22, 2013. One of the items discussed was the two public meetings we hosted held on May 29, 2013 to discuss the 2012 Habitat and Populations BUI Plan for the Saginaw River/Bay Area of Concern. A summary of this meeting including questions and answers were reviewed and the Board found no reason to change their decision we should pursue the removal of the Fish and Wildlife Habitat BUI. This was confirmed with a unanimous vote of the Board to continue the process of removal.

The Partnership requests that the DEQ continue their own review of this data and take the appropriate defined steps in the removal process if they concur with our decision.

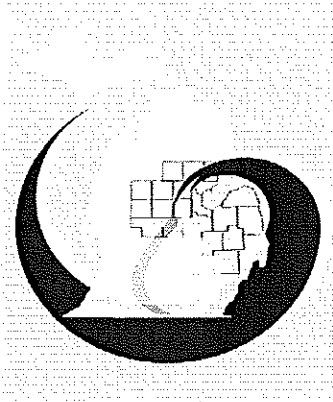
Respectfully,

Warren R. Smith  
Acting Director  
Partnership for the Saginaw Bay Watershed

**Attachment D**

**Information from the Partnership's May 29, 2013 Public Meeting**





## Partnership for Saginaw Bay

Loss of Fish and Wildlife Habitat  
Beneficial Use Impairment (BUI)

**May 29, 2013**

3:00–4:30 PM & 6:30–8:00 PM

Delta College Planetarium  
100 Center Ave., Bay City, Michigan

### AGENDA

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- |      |  |                                      |
|------|--|--------------------------------------|
| I.   | Welcome and Introduction (5 min.)  | Bill Wright, <i>Partnership</i>      |
| II.  | Area of Concern Program in Context (10 min.)                             | Bretton Joldersma, <i>MDEQ</i>       |
| III. | Loss of Fish and Wildlife Habitat BUI: 1987 Designation to Now (15 min.) | Jon Beard, <i>PSC</i>                |
| IV.  | Saginaw Bay Wetland Protection Analysis (15 min.)                        | Robb Macleod, <i>Ducks Unlimited</i> |
| V.   | Facilitated Discussion (45 min.)   | Bill Wright, <i>Partnership</i>      |



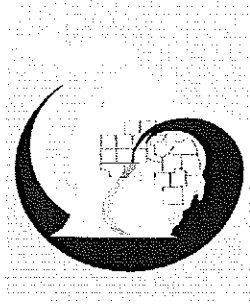
Please Sign IN

5/29/13

Evening

Email

Name	Organization	Email
Warren Smith	PBSW	
Tom Ryder	Fisherman	tomryderso@yahoo.com
Kelvin Zimmerman	Spicer	
Russ BEAUBIEN	Spicer Group	
Laura Oger	Bay Co.	ogarl@baycounty.net
Brad Hill	PBSW	



## Partnership for Saginaw Bay Watershed

Loss of Fish and Wildlife Habitat  
Beneficial Use Impairment (BUI)

### MAY 29, 2013 PUBLIC FORUM SUMMARY

The Partnership for the Saginaw Bay Watershed (Partnership) hosted two public forums on May 29, 2013 regarding the Loss of Fish and Wildlife Habitat (Habitat) Beneficial Use Impairment (BUI) for the Saginaw River/Bay Area of Concern (AOC). Two identical sessions were held from 3:00–4:30 p.m. and 6:30–8:00 p.m. at the Delta College Planetarium located in downtown Bay City.

The forum commenced with a welcome and brief introduction from Partnership board member, Bill Wright. The purpose of the forums was to discuss and seek public input on recent analysis of the Habitat BUI which suggests that restoration targets have been met, and the prospect of seeking removal of the BUI. About 35 people attended the two sessions, not including Partnership board members and presenters.

#### *Presentations*

**Bretton Joldersma**, the Saginaw River/Bay AOC Coordinator for the Michigan Department of Environmental Quality–Office of the Great Lakes, presented information regarding the goals and objectives of the AOC program and an overview of the policy framework for environmental restoration through the AOC program.

**Jonathon Beard**, a consultant with Public Sector Consultants (PSC), presented information regarding restoration planning for the Loss of Fish and Wildlife Habitat BUI since the Saginaw River/Bay was first designated as an AOC in 1987. He noted that PSC has provided consulting and facilitation support to the Partnership since the late 1990s. He reviewed the removal targets for the Habitat BUI that were developed in 2000 through a community-driven planning effort that culminated in the *Measures of Success* report. He also summarized planning and monitoring efforts that have occurred since 2000, the most recent of which suggest that BUI restoration goals have been met.

The restoration criteria for the Loss of Fish and Wildlife Habitat BUI are as follows:

- At least 60 percent of the coastal marsh areas (below the 585-foot contour) and adequate upland buffers representing essential fish and wildlife habitat are preserved through public ownership, covered under conservation easements, or otherwise protected under agreements with landowners
- The most vulnerable portions of the remaining 40 percent of the essential coastal marsh areas have been clearly identified so that governmental agencies, local conservation/environmental organizations, and concerned citizens can monitor their status, enhance enforcement of existing laws, and conduct public educational programs to better protect these areas

Robb Macleod, the National Geographic Information Systems Coordinator for Ducks Unlimited (DU), presented information about data analysis used to measure progress toward the BUI restoration goals. DU started tracking the amount of preserved coastal wetlands along the Saginaw River and Bay in 2005. The most recent analysis of preserved wetlands used parcel data from Saginaw River and Bay coastal counties, the National Wetlands Inventory, and the Conservation and Recreation Lands database to identify wetland areas that are permanently protected. Of the coastal wetlands an estimated 63.3 percent are currently protected, which exceeds the restoration goal. Robb also discussed the methodology that was developed by the Michigan Natural Features Inventory to prioritize the remaining wetlands for continued preservation beyond BUI removal.

### ***Discussion***

Following the presentations Bill Wright facilitated a discussion with forum attendees. Attendees asked questions regarding the relationship of the Habitat BUI to other BUIs for the AOC, the implications of potentially removing the BUI and the process for seeking BUI removal. Partnership board members and representatives from the MDEQ, Public Sector Consultants, and Ducks Unlimited responded to individual questions and comments during the discussion. General questions/comments and responses are summarized below.

**Question:** How does the Saginaw River/Bay AOC and the Loss of Fish and Wildlife Habitat BUI relate to the Tittabawassee Natural Resource Damage Assessment (NRDA)? Should the NRDA be completed before BUIs are removed?

**Response:** The AOC program is separate from the NRDA in both geography and scope. Additionally, environmental concerns within the AOC related to hazardous chemicals are considered as part of other BUIs such as the Bird and Animal Deformities or Reproductive Problems BUI, and the Restrictions on Fish and Wildlife Consumption BUI.

**Question:** What is the point of removing a BUI -- why not keep it on the list?

**Response:** Once established restoration targets have been met, removing a BUI is important to demonstrate progress and communicate success. It also helps the environmental community focus efforts on the remaining impairments.

**Question:** The 1988 remedial action plan (RAP) identifies other impairments not addressed by wetland preservation including reduced dissolved oxygen levels, river barriers, gravel beds and rock reefs; how are these problems being addressed?

**Response:** The Habitat BUI is one of 10 remaining BUIs for the Saginaw River/Bay AOC. Many of these issues are being addressed through restoration plans for other BUIs. Additionally, conditions have continued to improve in the AOC since it was first listed. For instance, low dissolved oxygen levels were largely attributed to high nutrient loading. According to the 1995 RAP, dissolved oxygen levels throughout Saginaw Bay were generally near saturation levels. Additionally, the 2002 RAP update states that "dissolved oxygen measurements in the Saginaw River indicated that levels are now consistently higher than the minimum state water quality standard for the protection of warm-water fish of 5.0 mg/l." In 2009, the MDEQ monitored several locations throughout the Saginaw Bay Watershed (including the Saginaw, Cass, and Tittabawassee Rivers) and determined that dissolved oxygen levels were in attainment with the state's warm-water dissolved oxygen standard of 5.0 mg/l.

**Question:** Why were the restoration criteria for the Habitat BUI and the Degradation of Fish and Wildlife Populations (Populations) BUI originally separate, tied together, and then separated again?

**Response:** The AOC program continues to evolve and restoration targets are evaluated from time to time as new information becomes available. When the program first began to set restoration goals, species-specific targets were set for the Populations BUI. Over time it was determined that these targets no longer served as a good proxy for AOC restoration because of complex changes in food-web dynamics and broader ecosystem changes that affect Lake Huron and the rest of the Great Lakes broadly. Recognizing these limitations, restoration targets for the Population BUI were tied to the Habitat BUI because the two BUIs are related. At the time, a technical committee held the view that if habitat restoration was completed then the populations would be restored.

In a later evaluation of the BUIs it was determined that even if the wetland habitat was protected, fish and wildlife populations may still have some concerns due to chemicals in the environment. This led to the tiered restoration approach established in 2012 that essentially requires that wildlife reproductive and deformities issues related to chemicals be addressed before the fish and wildlife populations will be considered restored.

**Question:** Areas outside of parcel boundaries may not be included in the wetland analysis—but individual property owners sometimes believe that their property extends to the water's edge. How was this considered?

**Response:** The wetland analysis was conducted using the best available data which was provided by each of the counties along the Saginaw River and Bay. Each county provided digital geographic information systems (GIS) files that indicate parcel boundaries that were used to determine which areas are permanently protected and those that are not protected. If wetlands are not included within any parcel boundary then they may not be owned by an individual; these wetlands were excluded from the analysis. Some consider these areas to be public trust lands held by the state.

**Question:** Does the United States Fish and Wildlife Service (USFWS) support removal of this BUI?

**Response:** The USFWS provided funding support to develop the 2012 Habitat and Populations BUIs Restoration Plan and was involved with the development of the plan, which notes that the wetland restoration target had been met.

**Comment:** Phragmites is an ongoing concern within Saginaw Bay coastal wetlands; this problem should be addressed.

**Response:** The AOC program focuses on issues that are unique to AOC regions and generally does not address matters that affect the entire Great Lakes basin broadly, such as invasive species. Other state and federal programs are in place that are working to address these issues.

### ***Conclusion***

Nearing the end of the discussions, a few attendees expressed their opinions regarding the prospect of seeking removal of the Loss of Fish and Wildlife Habitat BUI. Some expressed their opposition to seeking removal while others expressed support for seeking removal.

An online comment form was established by the Partnership to accept comments regarding the wetland analysis and the prospect of BUI removal. A link to this form was included in the meeting

announcement that was distributed through various listservs. As of June 30, 2012 no responses were entered.

**Attachment E**

**MDEQ's September 23, and October 7, 2013 Calendars**



# ENVIRONMENTAL CALENDAR

September 23, 2013

tissue paper. The draft permit is intended to simplify and clarify the facility's applicable requirements and will not result in any air emission changes at the stationary source. The ROP public notice documents can be viewed at [www.deq.state.mi.us/aps](http://www.deq.state.mi.us/aps). The responsible official of the stationary source is Clarence Roznowski, 437 South Main Street, Cheboygan, Michigan 49721. Written comments on the draft ROP or a request to hold a public hearing are to be submitted to Rebecca Radulski, Michigan Department of Environmental Quality, Air Quality Division, Cadillac District Office, Gaylord Field Office, 2100 West M-32, Gaylord, Michigan 49735, or via e-mail to [radulskir@michigan.gov](mailto:radulskir@michigan.gov) by October 9, 2013. The decision-maker for the permit is Janis Denman, Cadillac District Supervisor. If requested in writing by October 9, 2013, a public hearing may be scheduled. Information Contact: **Rebecca Radulski**, Air Quality Division, [radulskir@michigan.gov](mailto:radulskir@michigan.gov) or 989-705-3404.

OCTOBER 9, 2013

**DEADLINE FOR PUBLIC COMMENT REGARDING CODING PRODUCTS INCORPORATED, KALKASKA, KALKASKA COUNTY (SRN: B6175)**, for the draft renewal of a Renewable Operating Permit (ROP) for the operation of a solvent base coating operation. The draft permit is intended to simplify and clarify the facility's applicable requirements and will not result in any air emission changes at the stationary source. The ROP public notice documents can be viewed at [www.deq.state.mi.us/aps](http://www.deq.state.mi.us/aps). The responsible official of the stationary source is Mike Rasmussen, 475 North Gary Avenue, Carol Stream, Illinois 60188-4900. Written comments on the draft ROP or a request to hold a public hearing are to be submitted to Gloria Torello, Michigan Department of Environmental Quality, Air Quality Division, Cadillac District, Gaylord Field Office, 2100 West M32, Gaylord, Michigan 49735, or via e-mail to [torellog@michigan.gov](mailto:torellog@michigan.gov) by October 9, 2013. The decision-maker for the permit is Janis Denman, Cadillac District Supervisor. If requested in writing by October 9, 2013, a public hearing may be scheduled. Information Contact: **Gloria Torello**, Air Quality Division, [torellog@michigan.gov](mailto:torellog@michigan.gov) or 989-705-3410.



OCTOBER 14, 2013

**DEADLINE FOR PUBLIC COMMENT REGARDING THE PROPOSED REMOVAL OF THE LOSS OF FISH AND WILDLIFE HABITAT BENEFICIAL USE IMPAIRMENT FROM THE SAGINAW RIVER/BAY AREAS OF CONCERN.** A link to the Removal Recommendation document can be found by clicking on "Progress Toward Restoring Beneficial Uses..." under the "Information" heading at: [www.michigan.gov/aocprogram](http://www.michigan.gov/aocprogram). Submit written comments to Bretton Joldersma, Michigan Department of Environmental Quality, Office of the Great Lakes, P.O. Box 30273, Lansing, Michigan 48909-7973, or to [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov) by midnight on October 14, 2013. In addition, a public meeting will be held on October 8, 2013, from 6:30-7:30 p.m. at the Bay County Public Library, 500 Center Avenue, Bay City, MI 48708. All comments received by October 14, 2013, will be considered prior to final action. Additional details on this proposed action may be obtained from: **Bretton Joldersma**, Office of the Great Lakes at 517-284-5048, or at [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov).

OCTOBER 14, 2013

**DEADLINE FOR PUBLIC COMMENT REGARDING THE PROPOSED REMOVAL OF THE BIRD OR ANIMAL DEFORMITIES OR REPRODUCTIVE PROBLEMS BENEFICIAL USE IMPAIRMENT FROM THE ST. MARYS RIVER AREAS OF CONCERN.** A link to the Removal Recommendation document can be found by clicking on "Progress Toward Restoring Beneficial Uses..." under the "Information" heading at: [www.michigan.gov/deqaocprogram](http://www.michigan.gov/deqaocprogram). Submit written comments to Bretton Joldersma, Michigan Department of Environmental Quality, Office of the Great Lakes, P.O. Box 30273, Lansing, Michigan 48909-7973, or to [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov) by midnight on October 14, 2013. If requested in writing, a public hearing may be scheduled. All comments received by October 14, 2013, will be considered prior to final action. Additional details on this proposed action may be obtained from: Bretton Joldersma, Office of the Great Lakes at 517-284-5048, or at [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov).

OCTOBER 14, 2013

**DEADLINE FOR PUBLIC COMMENT REGARDING THE PROPOSED REMOVAL OF THE DEGRADATION OF AESTHETICS BENEFICIAL USE IMPAIRMENT FROM THE ST. MARYS RIVER AREAS OF CONCERN.** A link to the Removal Recommendation document can be found by clicking on "Progress Toward Restoring Beneficial Uses..." under the "Information" heading at: [www.michigan.gov/aocprogram](http://www.michigan.gov/aocprogram). Submit written comments to Bretton Joldersma, Michigan Department of Environmental Quality, Office of the Great Lakes, P.O. Box 30273, Lansing, Michigan 48909-7973, or to [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov) by midnight on October 14, 2013. If requested in writing, a public hearing may be scheduled. All comments received by October 14, 2013, will be considered prior to final action. Additional details on this proposed action may be obtained from: Bretton Joldersma, Office of the Great Lakes at 517-284-5048, or at [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov).

# ENVIRONMENTAL CALENDAR

October 7, 2013

Joldersma, Michigan Department of Environmental Quality, Office of the Great Lakes, P.O. Box 30273, Lansing, Michigan 48909-7973, or to [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov) by midnight on October 14, 2013. If requested in writing, a public hearing may be scheduled. All comments received by October 14, 2013, will be considered prior to final action. Additional details on this proposed action may be obtained from: **Bretton Joldersma**, Office of the Great Lakes at 517-284-5048, or at [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov).



OCTOBER 14, 2013

**DEADLINE FOR PUBLIC COMMENT REGARDING THE PROPOSED REMOVAL OF THE LOSS OF FISH AND WILDLIFE HABITAT BENEFICIAL USE IMPAIRMENT FROM THE SAGINAW RIVER/BAY AREAS OF CONCERN.** A link to the Removal Recommendation document can be found by clicking on "Progress Toward Restoring Beneficial Uses..." under the "Information" heading at: [www.michigan.gov/aocprogram](http://www.michigan.gov/aocprogram). Submit written comments to Bretton Joldersma, Michigan Department of Environmental Quality, Office of the Great Lakes, P.O. Box 30273, Lansing, Michigan 48909-7973, or to [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov) by midnight on October 14, 2013. In addition, a public meeting will be held on October 8, 2013, from 6:30-7:30 p.m. at the Bay County Public Library, 500 Center Avenue, Bay City, MI 48708. All comments received by October 14, 2013, will be considered prior to final action. Additional details on this proposed action may be obtained from: **Bretton Joldersma**, Office of the Great Lakes at 517-284-5048, or at [joldersmab@michigan.gov](mailto:joldersmab@michigan.gov).

OCTOBER 15, 2013  
6:30 p.m.

**PUBLIC HEARING ON PERMIT APPLICATION SUBMITTED BY HIDDEN VILLAGE HOMEOWNERS ASSOCIATION.** The Water Resources Division will hold a public hearing at 6:30 p.m. at the Bagley Town Hall, 2946 Old 27 South, Gaylord, Michigan 49735-8436. The hearing will be for Hidden Village Homeowner's Association, 303 Weydon Road, Worthington, Ohio, 43085. The applicant proposes to install a Laminar Flow Aeration System for Kassuba Lake. The system is proposed to consist of one C1144 Inversion System with 14 Micro-Porous Diffusers and 9,800 feet of self-sinking airline. Airline will be trenched from the compression station to the lake. System is proposed to be run during no-ice cover periods (approximately April 11 – November 30). No dredging is proposed. No mitigation is proposed. The project is located in T30N, R3W, Section 12, Bagley Township, Otsego County, Michigan. Information Contact: **Roxanne Merrick**, Water Resources Division, [merrickr@michigan.gov](mailto:merrickr@michigan.gov) or 989-705-3442,

OCTOBER 16, 2013  
10:00 a.m.

**TENTATIVELY SCHEDULED PUBLIC HEARING REGARDING WHITE PINE ELECTRIC POWER, LLC, WHITE PINE, ONTONAGON COUNTY (SRN: B1966),** for the draft renewal of a Renewable Operating Permit (ROP) for the operation of their steam and electricity generating plant. The permit is intended to simplify and clarify the facility's applicable requirements and will not result in any air emission changes at the stationary source. The ROP public notice documents can be viewed on the Web at [www.deq.state.mi.us/aps](http://www.deq.state.mi.us/aps). The responsible official of the stationary source is Steve Walsh, 29639 Willow Road, White Pine, Michigan 49971. Written comments on the draft ROP or a request to hold a public hearing are to be submitted to Thomas Maki, Michigan Department of Environmental Quality, Air Quality Division, Upper Peninsula District Office, 420 Fifth Street, Gwinn, Michigan 49841, or via e-mail to [makit@michigan.gov](mailto:makit@michigan.gov) by October 9, 2013. If requested in writing by October 9, 2013, a public hearing will be held at 420 Fifth Street in Gwinn, Michigan on October 16, 2013 at 10:00 am. Those interested may contact Thomas Maki on October 10, 2013 to determine if a hearing was requested and will be held. Information Contact: **Thomas Maki**, Air Quality Division, [makit@michigan.gov](mailto:makit@michigan.gov) or 906-346-8503.

OCTOBER 16, 2013  
5:30 p.m.  
INFORMATIONAL  
SESSION  
7:00 p.m.  
PUBLIC HEARING

**INFORMATIONAL SESSION, PUBLIC HEARING, AND DEADLINE FOR PUBLIC COMMENT REGARDING DETROIT WATER AND SEWERAGE DEPARTMENT, DETROIT, WAYNE COUNTY,** on a proposed draft Permit for proposed upgrades of the Complex II sewage sludge incinerators and construction of a biosolids drying facility. Additionally, the upgrades of the Complex II sewage sludge incinerators and construction of a biosolids drying facility will require revisions to Renewable Operating Permit (ROP) No. 1996 00412. This public comment period meets the public participation requirements for a future administrative amendment to the ROP. The facility is located at 9300 West Jefferson Avenue, Detroit, Michigan. The responsible official for the source is Samuel A. Smalley, Assistant Director, 9300 West Jefferson Avenue, Detroit, Michigan. New Source Review and ROP public notice documents can be viewed at [www.deq.state.mi.us/aps](http://www.deq.state.mi.us/aps). The public hearing will be held on October 16, 2013, at the Delray Neighborhood House, 420 South Leigh Street, Detroit, Michigan. Prior to the hearing, an informational session will be held from 5:30 p.m. to 7:00 p.m., where staff will provide a brief introduction regarding the proposed project and be available to answer questions; the public hearing will immediately follow. Written comments should be sent to Ms. Mary Ann Dolehanty, Permit Section Supervisor, Michigan Department of

**Attachment F**

**Summary of Public Comments from October 8, 2013 DEQ Public Meeting**

**Public Meeting Summary:**  
**Proposed Removal of the Loss of Fish and Wildlife Habitat**  
**Beneficial Use Impairment from the Saginaw River/Bay Area of Concern**

**Meeting Date:** October 8, 2013; 6:30pm – 7:30pm

**Location:** Bay County's Writ Public Library; 500 Center Ave., Bay City, MI 48708

**Meeting Summary:**

The Michigan Department of Environmental Quality (MDEQ), Office of the Great Lakes (OGL), hosted a public meeting on October 8, 2013 to present information about the possible proposal to remove the Loss of Fish and Wildlife Habitat (Habitat) Beneficial Use Impairment (BUI) for the Saginaw River/Bay Area of Concern (AOC). The OGL started the meeting with a short presentation detailing the findings from Ducks Unlimited's 2012 Habitat BUI status assessment which found that the restoration criteria for the Habitat BUI had been met. Following the presentation the floor was opened to the public for questions and comments. Below is a summary of the general questions/comments that were raised during the meeting.

**Comment:** Concerns were raised about the mapping of wetlands on private property and that the MDEQ would designate their property as a wetland resulting in a "taking" of private property.

**Response:** The AOC program is non-regulatory program and is not responsible for the implementation or enforcement of the state's wetland regulations. The current wetlands (below the 585-foot contour) that were identified as being protected include both public and private land. The conservation of private land is voluntary and it up to individual landowners to decide if they want to participate in any land conservation programs.

**Comment:** A question was raised about what happens to property taxes when a wetland is identified on a property.

**Response:** Taxable value of land is determined by local units of government and is outside the scope of the AOC program.

**Comment:** Concerns were raised about MDEQ's wetland program and the Federal Emergency Management Agency's (FEMA) floodplain maps.

**Response:** The Habitat beneficial use was listed as impaired primarily due to the historic loss/degradation of coastal wetland. The protection of coastal wetlands below the 585-foot contour is based on a conservation priority for the Saginaw Bay Watershed and is important for the protection of the plants and animals that live and migrate through the Saginaw Bay. The identification of the 585-foot contour has no connection to FEMA's floodplain maps or MDEQ's wetland program.

**Comment:** Concerns were raised about contaminated sediment, eutrophication, and "muck" at Bay City State Recreation Area.

**Response:** The OGL shares these concerns and indicated that these issue are still being addressed but under different beneficial uses (i.e. Degradation of Benthos, Eutrophication or Undesirable Algae, Degradation of Phytoplankton or

Zooplankton Populations, etc.). At this time, these other beneficial uses are still impaired and only the Habitat BUI is being considered for potential removal. Further, the proposed removal of the Habitat BUI does not mean that work is done in the AOC. If the Habitat BUI were to be removed the Saginaw River/Bay AOC would still have 9 beneficial uses listed as impaired and there would still be many environmental problems that will need to be addressed.

The public meeting ended at 7:30pm and everyone in attendance (see sign-in sheet) was offered an opportunity to provide comments. In addition, the audience was informed that all comments received by October 14, 2013 will be considered prior to any final action on the status of the Habitat BUI.

# SIGN-IN-SHEET

## Loss of Fish and Wildlife Habitat Beneficial Use Impairment Public Meeting

October 8, 2013; 6:30pm – 7:30pm  
Bay County's Writ Public Library  
500 Center Ave., Bay City, MI 48708

Name	Organization	Email
WILLIAM McPherson		MACATTACK_ONE@Yahoo.COM
ERNIE KYGIE	Bay County Comm.	Ernie Kygic Service @ Hot Mail
Mike Bristow	SBEC	
James Hess		
Bill McPherson		
Dennis Zimmerman	PSBW + SPAC	denniszimm@chertv.net
Warren Smith	PSBW	wfsmith@PSBCGlobal.net
Jon Beard	PSC	jbeard@pscinc.com
BRETTON SOLDERSMA	MDEQ- OGL	soldersmab@michigan.gov
Rick Habrle	MDEQ- OGL	habrle@michigan.gov