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

RECEIVED DEQ - ANC - RAU
SEP 30 2008

SEP 24 2008

Mail Code: R-19J

James K. Cleland, Acting Chief
Water Division
Michigan Department of Environmental Quality
P.O. Box 30273
Lansing, Michigan 48909

Dear Mr. Cleland:

This letter is the U.S. Environmental Protection Agency's (EPA) official response to your letter of July 21, 2008, requesting the delisting of the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment (BUI) in the Saginaw River and Bay Area of Concern (AOC). As your request points out and the supplied data supports, the following restoration criteria for Tainting of Fish and Wildlife Flavor BUI in the Saginaw River and Bay AOC have been met:

The Tainting of Fish and Wildlife Flavor BUI will be considered restored when:

- *No more than three reports of fish tainting have been made to the MDNR or MDEQ for a period of three years;*

Or, if there have been reports of tainting:

- *A one-time analysis of representative fish species in an AOC in accordance with MDEQ's Great Lakes and Environmental Assessment Section (GLEAS) Procedure #55 for conducting taste and odor studies indicate that there is no tainting of fish flavor.*

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

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

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

Sincerely,

Walter W Kovalick for

Lynn Buhl
Great Lakes National Program Manager

cc: Diana Klemans, MDEQ
Rick Hobrla, MDEQ
Michelle Selzer, MDEQ
Dennis Zimmerman, Partnership for the Saginaw Bay Watershed
Karen Vigmostad, Director, Great Lakes Regional Office, IJC
James Schardt, AOC Liaison, EPA-GLNPO
Mark Elster, RAP Coordinator, EPA-GLNPO
Pete Christich, EPA-Office of International Activities

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

STEVEN E. CHESTER
DIRECTOR

Final

File Copy

July 21, 2008

Mr. Gary Gulezian, Director
Great Lakes National Program Office
United States Environmental Protection Agency
Region 5
77 West Jackson Boulevard (G-17J)
Chicago, Illinois 60604-3507

Dear Mr. Gulezian:

The purpose of this letter is to request the U.S. Environmental Protection Agency (U.S. EPA), Great Lakes National Program Office's (GLNPO) concurrence with the removal of the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment (BUI) in the Saginaw River/Bay Area of Concern (AOC). The Michigan Department of Environmental Quality (MDEQ) has evaluated the restoration of this BUI based on the process in the state's *Guidance for Delisting Michigan's Great Lakes Areas of Concern*, which is consistent with the U.S. Policy Committee's *Delisting Principles and Guidelines* document, and believe that the BUI should be removed from the list of impairments in the Saginaw River/Bay AOC.

Enclosed please find documentation to support the removal of this BUI in the Saginaw River/Bay AOC, including the recommendation briefing paper from the MDEQ's technical staff; an assessment titled, *Fish Tainting Beneficial Use Impairment (BUI), Saginaw River/Bay Area of Concern: Assessment and Recommendation*; and other supporting documentation that was used by the MDEQ to assess the status of this BUI.

We look forward to our continuing partnership in the AOC Program, and working closely with the U.S. EPA, GLNPO, in the delisting of AOCs. If you need further information or assistance, please contact Ms. Michelle Selzer, Aquatic Nuisance Control and Remedial Action Unit, Surface Water Assessment Section, Water Bureau, at 517-241-3731, or you may contact me.

Sincerely,

James K. Cleland

James K. Cleland, Acting Chief
Water Bureau
517-241-1287

Enclosures

cc: Mr. Mark Elster, U.S. EPA
Mr. James Schardt, U.S. EPA
Ms. Vicki Thomas, U.S. EPA
Ms. Diana Klemans, MDEQ
Mr. Richard Hobrla, MDEQ
Ms. Michelle Selzer, MDEQ

BRIEFING PAPER
REMOVAL OF THE TAINTING OF FISH AND WILDLIFE FLAVOR BENEFICIAL USE IMPAIRMENT FOR THE SAGINAW RIVER/BAY AREA OF CONCERN

Issue or Request

Based upon the review of Remedial Action Plan (RAP) documentation, consultation with agency staff, Technical Committee review, and public input, we would like to request removal of the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment (BUI) in the Saginaw River/Bay Area of Concern (AOC), per the process outlined in the *Guidance for Delisting Michigan's Great Lakes Areas of Concern* (Guidance) (Michigan Department of Environmental Quality [MDEQ], 2006, page 8, attached).

Background/Facts

The physical boundary of the Saginaw River/Bay AOC is defined as 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. On May 31, 2006, the Saginaw River/Bay Public Advisory Council, known as the Partnership for the Saginaw Bay Watershed (the Partnership), held a meeting and voted to adopt the delisting targets included in the Guidance to evaluate the status of the AOC BUIs.

The Saginaw River/Bay AOC has 12 BUIs as identified in Annex 2 of the Great Lakes Water Quality Agreement (International Joint Commission [IJC], 1987) including: Restrictions on Fish and Wildlife Consumption, Tainting of Fish and Wildlife Flavor, Bird or Animal Deformities or Reproductive Problems, Degradation of Benthos, Restrictions on Dredging Activities, Eutrophication or Undesirable Algae, Restrictions on Drinking Water Consumption or Taste and Odor Problems, Beach Closing, Degradation of Aesthetics, Degradation of Phyto- or Zooplankton Populations, Degradation of Fish and Wildlife Populations, and Loss of Fish and Wildlife Habitat. This document only addresses the fish tainting aspect of the Restrictions on Tainting of Fish and Wildlife Flavor BUI. This use impairment was listed in all of the AOCs because of taste and odor problems associated with fish, not wildlife.

According to the 1988 RAP, chemical odors and tastes associated with fish harvested in the Saginaw River, the Tittabawassee River, and the Saginaw Bay were frequently reported from the 1940s through the 1970s (Michigan Department of Natural Resources [MDNR], 1988). The potential sources of these tainting problems were most likely related to water quality contaminants resulting from municipal and industrial discharges into the surface waters of the Saginaw River and Bay.

According to the MDEQ's Guidance document (see attached pages 18-19 of the Guidance), the fish tainting BUI will be considered restored when:

- No more than three reports of fish tainting have been made to the MDNR or MDEQ for a period of three years.

OR, if there have been reports of tainting:

- A one-time analysis of representative fish species in an AOC in accordance with MDEQ's Great Lakes and Environmental Assessment Section (GLEAS) Procedure #55 for conducting taste and odor studies indicates that there is no tainting of fish flavor.

Analysis

In April 2007, in accordance with the Guidance, Public Sector Consultants, Inc. (PSC), on behalf of the Partnership for the Saginaw Bay Watershed (the Partnership), sent letters to the MDNR and MDEQ requesting information on any reports of tainted or off-flavored fish made by the public in the past three years. Neither the MDNR or the MDEQ in the Saginaw River or Bay area have received reports in the past three years of tainted or off-flavored fish. The responses satisfy the requirements of MDEQ's Guidance for removing this BUI. The attached assessment document titled, *Fish Tainting Beneficial Use Impairment (BUI), Saginaw River/Bay Area of Concern: Assessment and Recommendation*, summarizes the results of the assessment and recommends the removal of the fish tainting BUI from the Saginaw River/Bay AOC (PSC, 2007).

Michelle Selzer, the RAP liaison for the Saginaw River/Bay AOC, convened a Technical Committee to review PSC's assessment document and the attached supporting documentation. The Technical Committee members included: Joe Bohr, Surface Water Assessment Section, MDEQ; Jim Baker, Fisheries Division, MDNR; Mark Coscarelli and Shivaugn Rayl, PSC; Warren Smith, Vice Chair of the Partnership; Dennis Zimmerman, member of the Partnership; Kory Groetsch, Michigan Department of Community Health; and Jamie Schardt U.S. Environmental Protection Agency, Great Lakes National Program Office (U.S. EPA, GLNPO).

The Technical Committee concluded that the information gathered to assess the current status of this BUI indicate that this beneficial use has been restored in the Saginaw River/Bay AOC.

Recommendation

The status of this fish tainting aspect of the Tainting of Fish and Wildlife Flavor BUI has been discussed with MDEQ technical staff, a Technical Committee, and the Partnership. A public meeting was also held on April 2, 2008, to discuss this recommendation with the public. The MDEQ technical staff, the Technical Committee, the Partnership, and the community expressed their support for recommending the removal of this BUI.

Therefore, the MDEQ AOC staff recommends that the acting chief of the MDEQ, Water Bureau, approve the recommendation to remove the Tainting of Fish and Wildlife Flavor BUI. Consistent with the Guidance, we also recommend submittal of a letter from the acting chief of the MDEQ, Water Bureau, to the U.S. EPA, GLNPO, requesting the removal of this BUI from the Saginaw River/Bay AOC.

Prepared by: Michelle Selzer, Environmental Quality Analyst
Aquatic Nuisance Control and Remedial Action Unit
Surface Water Assessment Section
Water Bureau
Michigan Department of Environmental Quality
July 15, 2008

Attachments

Supporting Documentation

Document reviewed by Technical Committee and presented at the Public Meeting: *Fish Tainting Beneficial Use Impairment (BUI), Saginaw River/Bay Area of Concern: Assessment and Recommendation*, December 2007.

May 7, 2008, e-mail and letter from Warren Smith, Partnership, to Michelle Selzer, MDEQ

Removal of Beneficial Use Impairments; page 8 of the Guidance for Delisting Michigan's Great Lakes AOCs

Tainting of Fish and Wildlife Flavor BUI criteria; pages 18-19 of the Guidance for Delisting Michigan's Great Lakes AOCs

March 13 and 31, 2008, DEQ Calendar public notices

Saginaw River/Bay AOC Public Meeting Minutes

News article: *Saginaw Bay's Black Eye is Healing*. The Bay City Times, March 26, 2008

References

IJC. 1987. *U.S./Canada Great Lakes Water Quality Agreement of 1978*, as amended by protocol, signed November 18, 1987.

MDEQ. 2006. *Guidance for Delisting Michigan's Great Lakes Areas of Concern* Report No. MI/DEQ/WB-06/001.

MDNR. 1988. *Remedial Action Plan for Saginaw River and Bay Areas of Concern.* Surface Water Quality Division.

PSC. 2007. *Fish Tainting Beneficial Use Impairment (BUI), Saginaw River/Bay Area of Concern: Assessment and Recommendation.*

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PAC Support

Michelle D. Selzer
RAP Liaison
Aquatic Nuisance Control and Remedial Action Unit
Michigan Department of Environmental Quality
Water Bureau
PO Box 30273
Lansing, MI 48909-7773

May 7, 2008

Dear Michelle,
Following review by the public and Executive Committee of the Partnership for the Saginaw Bay Watershed, we fully support the Removal Recommendation of the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment for the Saginaw River/Bay Area of concern.

Please use this letter as our support in moving this Beneficial Use Impairment Removal forward to completion.

The Partnership appreciates your valued assistance in keeping this project on track and moving it forward to completion.

Respectively,

Warren R. Smith
Vice President of the Executive Committee
Partnership for the Saginaw Bay Watershed

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2 of 2
PAC Support

From: Warren & Faye Smith <wfesmith@sbcglobal.net>
To: SelzerM@michigan.gov
Date: 5/8/2008 10:02:02 AM
Subject: Partnership support for Fish Tainting BUI Removal

Dear Michelle,
Here is the the support Partnership's letter of support for the Fish Tainting BUI removal.
I also attached a recent picture of where I am on the restoration of our Victorian porch. A good place for wedding pictures.

As usual, thank for your assistance and perseverance.

Waren Smith

'06 Guidance
1 of 1

Removal of Beneficial Use Impairments

This section describes the actions and policies for removing a BUI and documenting these activities in MDEQ's AOC file. The BUIs can be removed individually, in groups, or all at the same time. The MDEQ is committed to a partnership with the local PACs and U.S. EPA in this effort.

a) When the MDEQ AOC coordinator, in consultation with the PAC, determines a BUI is ready for final review of restoration according to the applicable criteria, a team of relevant MDEQ and MDNR (as applicable) agency staff is convened to review the documentation and support or not support removal of the BUI. Deliberations are documented with a briefing memo by the MDEQ AOC coordinator to the Chief of the MDEQ Water Bureau.

b) The team consults with the PAC during the review and a public meeting is held in the AOC. When the public review is completed, the Chief of the MDEQ Water Bureau requests a letter of support from the PAC for the removal of the BUI.

c) When the technical and public review is complete, a letter is sent from the Chief of the MDEQ Water Bureau to U.S. EPA to document removal of the BUI(s) and the support of the PAC. The letter requests concurrence with the removal from U.S. EPA. The letters from MDEQ, the PAC and U.S. EPA are part of the permanent AOC file.

d) Once documented as removed, there is no further assessment of the BUI in order to delist an AOC. While BUIs which have been removed are not re-assessed as part of the AOC program, waters of the state continue to be monitored as part of MDEQ's regular 5-year Basin Cycle Monitoring and other state monitoring programs.

e) After removal of a BUI, if additional contamination is found in an AOC during routine or other program monitoring, it is addressed on a case-by-case basis by the MDEQ under existing programs. This is not a cause for delaying delisting unless the contamination is indicative that the original BUI was not resolved.

f) All local, state, and federal partners cooperate on publicizing the BUI restoration, as appropriate.

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Fish Tainting Beneficial Use Impairment (BUI), Saginaw River/Bay Area of Concern: **Assessment and Recommendation**

December 2007

Prepared for
Michigan Department of Environmental Quality
Lansing, Michigan

On behalf of
The Partnership for the Saginaw Bay Watershed
Bay City, Michigan

Prepared by
Public Sector Consultants Inc.
Lansing, Michigan
https://publicsectorconsultants.com/

The purpose of this document is to outline restoration activities, including remedial actions and source controls, and support the recommendation to remove the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment (BUI) in the Saginaw River/Bay Area of Concern (AOC). The process used to arrive at this recommendation is outlined in the Michigan Department of Environmental Quality (MDEQ) document, *Guidance for Delisting Michigan's Great Lakes Areas of Concern.*[1]

BACKGROUND

The physical boundary of the Saginaw River/Bay AOC is defined as 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.

The Partnership for the Saginaw Bay Watershed is a local watershed group comprising citizens, government representatives, and members of the environmental community. The Partnership provides the necessary framework to address beneficial use impairments in the Saginaw River/Bay AOC.

On May 31, 2006, the Partnership, which serves as Public Advisory Council for AOC activities, held a meeting and voted to adopt the delisting targets included in the *Guidance* document to evaluate the status of the AOC beneficial use impairments. The Saginaw River/Bay AOC contains 12 of the 14 BUIs determined under the Annex 2 of the Great Lakes Water Quality Agreement (GLWQA).[2] These are:

- Restrictions on fish and wildlife consumption
- Tainting of fish and wildlife flavor
- Bird or animal deformities or reproductive problems
- Degradation of benthos
- Restrictions on dredging activities
- Eutrophication or undesirable algae
- Restrictions on drinking water consumption or taste and odor problems
- Beach closings
- Degradation of aesthetics
- Degradation of phytoplankton and zooplankton populations
- Degradation of fish and wildlife populations
- Loss of fish and wildlife habitat.

It is important to note the distinction between the BUI for tainting of fish and wildlife *flavor* and the BUI for restriction on fish and wildlife *consumption.* This document does

[1] Michigan Department of Environmental Quality (MDEQ), Water Bureau, *Guidance for Delisting Michigan's Great Lakes Areas of Concern* (Lansing, Mich.: 2006). [Online, accessed 7/12/07.] Available: *(The link provided was broken and has been removed)*

[2] International Joint Commission [IJC], Annex 2. [Online, accessed 7/12/07. Last updated 1/29/07.] Available: *(The link provided was broken and has been removed.)*

not address the latter. Fish consumption advisories exist in the AOC regardless of the lack of tainted flavor. Information provided by the Michigan Department of Community Health on the state fish consumption advisories can be accessed online at *www.michigan.gov/mdch-toxic* or by phone at 1-800-648-6942. The *Guide to Safe Fish and Wild Game Consumption in the Saginaw Bay Watershed* contains information specific to safe fish and wildlife consumption in the Saginaw Bay watershed; it can be accessed online at *(The link provided was broken and has been removed.)*

According to the 1988 Remedial Action Plan (RAP), chemical odors and tastes associated with fish harvested in the Saginaw River, the Tittabawassee River, and the Saginaw Bay were frequently reported from the 1940s through the 1970s.[3] The potential sources of these tainting problems were directly related to water quality contaminants resulting from industrial discharges into the surface waters of the Saginaw River and Bay.[4]

The long-established fishery in the Saginaw River/Bay has undergone many changes since European settlement. Fish populations have seen both improvements and declines. Unanticipated introductions of exotic species and other species purposefully introduced for sport fishing have fundamentally altered the food web, in many cases with unknown consequences. However, over the course of these events the most popular sport fish—walleye, yellow perch, lake trout, and lake whitefish—have remained highly desirable and actively pursued for food consumption. The importance of ensuring that environmental impacts do not impair the enjoyment of this valuable food source is the goal embodied in the targeted restored conditions for the fish tainting BUI.

METHODOLOGY

The fish tainting BUI will be considered restored and ready for delisting (1) if the Michigan Department of Natural Resources (MDNR) and the MDEQ has not received more than three reports from members of the public of tainted or off-flavored fish in the Area of Concern within the previous three years; or (2) if more than three reports have been made during the three-year period, an MDEQ-sanctioned taste test determines that the impairment no longer exists.

In July 2006, the Partnership sought and received an amendment to the original grant agreement with the U.S. Environmental Protection Agency (USEPA) to use the newly adopted criteria to determine whether tainting and odor problems still existed in edible fillets of fish caught in the Saginaw River and Bay. In addition, the project period was extended to August 31, 2007.

The Partnership complied with MDEQ delisting guidance by querying Michigan MDNR and MDEQ officials to determine whether tainting reports persist and, if so, whether the tainting is confined to specific areas where contributing sources can be addressed.

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[3] Michigan Department of Natural Resources (MDNR), Surface Water Quality Division (SWQD) Great Lakes and Environmental Assessment Section, *Michigan Department of Natural Resources Remedial Action Plan for Saginaw River and Saginaw Bay Areas of Concern* (Lansing, Mich.: 1988).
[4] MDEQ, *Guidance.*

REMEDIAL ACTIONS AND SOURCE CONTROL ACTIVITIES TO ADDRESS THIS BUI

Many pollution reduction regulations and programs have been instituted since the designation of the AOC. Some have been aimed at reducing pollution in general across the country. Others have been focused in the Saginaw Bay specifically. All have served, directly or indirectly, to improve the conditions in the AOC. These indirect source control and remedial actions discussed below provide a weight of evidence that significant tainting sources have been addressed by past regulations and programs, or are presently being addressed by existing regulations and programs.

National Water Regulation

National Pollutant Discharge Elimination System (NPDES)

The National Pollutant Discharge Elimination System (NPDES) Program was initiated by the Federal Water Pollution Control Act amendments of 1972. The purpose of the program is to control the discharge of pollutants into surface waters by imposing effluent limitations to protect the environment. Point source discharges to state surface waters from municipal, industrial, and commercial facilities must be authorized by permit under Michigan's NPDES program. This program has reduced the amount of conventional point source pollutants entering the Saginaw River/Bay Area of Concern.

Clean Water Act (CWA)

The 1977 amendments to the 1972 legislation, known as the Clean Water Act (CWA) of 1977, shifted emphasis from controlling conventional pollutants to controlling toxic discharges. In addition to technology-based treatment standards, the Clean Water Act also requires that minimum receiving water quality standards be achieved. The Michigan standards are designed to not only protect for aquatic life and fish consumption (the "fishable" standard) and total body contact recreation (the "swimmable" standard), but also for all other uses of the receiving waters, including agriculture, public and industrial water supply, and navigation.

Water Quality Act (WQA)

On February 4, 1987, Congress amended the CWA with the Water Quality Act (WQA) of 1987. The amendments outlined a strategy to accomplish the goal of meeting water quality standards set by the states. The WQA requires all states to identify waters that are not expected to meet water quality standards after technology-based controls on point sources have been imposed. States are then required to prepare an individual control strategy to reduce discharges from point and nonpoint sources in order to meet the water quality standards.

Among other measures, these plans were expected to address control of pollutants beyond technology-based levels. Additionally, municipal separate storm sewer system (MS4) discharges and sewage sludge were brought within CWA regulation in order to reduce discharges of pollutants.

The WQA also established a statutory anti-backsliding requirement that does not allow an existing permit to be modified or reissued with less stringent effluent limitations, standards, or conditions than those already imposed, with limited exceptions.

Great Lakes Critical Programs Act of 1990

Title I of the Great Lakes Critical Programs Act of 1990 put into place parts of the Great Lakes Water Quality Agreement of 1978, signed by the United States and Canada, in which the two nations agreed to reduce certain toxic pollutants in the Great Lakes. That law requires the USEPA to establish water quality criteria for the Great Lakes addressing 29 toxic pollutants with maximum levels that are safe for humans, wildlife, and aquatic life. It also requires the USEPA to help the states implement the criteria on a specific schedule.

Conservation Reserve Enhancement Program

The Conservation Reserve Enhancement Program (CREP), implemented in 2001, is a 15-year program to reduce sediment, phosphorus, and nitrogen loadings entering the surface water supply of the Saginaw Bay, Macatawa River, and River Raisin watersheds. Since July 2006, the Saginaw Bay watershed has had the largest number of acres (44,441) enrolled in the program, and the highest percentage (79 percent) of all the CREP implementation sites. In addition, 19 of the 22 counties in the Saginaw Bay watershed have implemented CREP practices. The counties in the Saginaw Bay watershed with the most acreage enrolled in the program include Saginaw (8,702), Huron (8,111), and Tuscola (7,069).

Improved Wastewater Treatment

Information gathered in a recent examination of the Saginaw River/Bay drinking water BUI documents the improvement of wastewater treatment in the watershed. According to the 2001 RAP update, communities in the Saginaw Bay watershed have spent approximately $700 million since 1972 to improve wastewater treatment facilities. These improvements have significantly reduced the amount of nutrients entering the bay, especially phosphorus loadings, which historically contributed to impaired water quality[5].

Combined Sewer Overflows (CSOs)

Under the MDEQ's Saginaw Bay Coastal Initiative, all municipalities along the Saginaw River are evaluating their treatment of CSOs to determine whether they are meeting the design standards established in their National Pollutant Discharge Elimination System (NPDES) Permits.[6]

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[5] Public Sector Consultants Inc. (PSC), *Targeting Environmental Restoration in the Saginaw River/Bay Area of Concern (AOC): 2001 Remedial Action Plan Updates* (Lansing, Mich.: 2002). [Online, accessed 7/12/07.] Available: *(The link provided was broken and has been removed.)*

[6] MDEQ, *Saginaw Bay Costal Initiative, State of Michigan, Current Activities in the Saginaw Bay Costal Area* (Lansing, Mich.: August 2006). [Online, accessed 7/12/07.] Available: *(The link provided was broken and has been removed.)*

Efforts to Reduce Nonpoint Source Pollution

The Saginaw Bay Soil Erosion and Sedimentation Control Program

The Saginaw Bay Watershed received three annual $600,000 grant awards from the USEPA under the Great Lakes Basin Program between 1993 and 1996, funding 49 projects addressing soil erosion and sedimentation in the Saginaw Bay watershed. One measure of program success for the Saginaw Bay Soil Erosion and Sedimentation Control Program is pollutant reductions; that is, the volume of sediment, nutrients, and associated toxic chemicals avoided as a result of the control measures. Total cumulative savings (reduction) from row crops utilizing no-till and conservation tillage, fertilizer management, or water course treatments were: 286,971 tons of soil, 294 tons of phosphorus, and 237 tons of nitrogen over the duration of the project.

Saginaw Bay Watershed Initiative Network (WIN)

Through its Agriculture and Pollution Prevention Task Group and Water Resources Task Group, the Saginaw Bay WIN develops and supports projects that address a broad range of issues including reducing soil erosion and preventing pollution, and addressing water quality generally.

Phosphorous Policy Advisory Committee

In June 2006, MDEQ Director Steven Chester requested the participation of a wide range of stakeholders on the department's Phosphorus Policy Advisory Committee. The charge to the Advisory Committee was to identify the major source categories of phosphorus loadings to Michigan's surface waters, and for each of these categories, to review and compile the voluntary and regulatory management approaches that are being or could be used to control phosphorus. Based on that review, the Advisory Committee developed findings and recommendations to help advance phosphorus management strategies protective of Michigan's surface waters, taking into consideration effectiveness, costs of implementation, feasibility, and the potential reductions associated with the various phosphorus control options. The Advisory Committees findings were reported in *Phosphorous Policy Advisory Committee: Final Report.*[7] These findings will augment the Saginaw Bay Phosphorus Reduction Strategy, in place since 1987 and lead to further improvements in the phosphorous load in the Saginaw Bay.

Historic Fish Tainting Reports

While formal records of reports of fish flavor tainting were not kept, these tainting complaints were likely related to pollutants resulting from industrial discharges in the watershed. MDEQ's *Guidance* document indicates that it is likely that pollutants contributed to historic fish tainting in the Saginaw AOC because they have been identified as tainting contaminants in other areas in Michigan.

Anecdotal evidence available from DNR fisheries biologists suggests that there were common reports of off-flavored fish in the Saginaw Bay/River AOC in the 1970s and early 1980s, though there was no scientific inquiry into the specific chemicals responsible for the tainting. No precise quantification of past conditions exists.

[7] PSC (Lansing, Mich.: 2007).

However unknown the specific chemical cause was, it is likely that the cause was related to pollution, most of which no longer occurs in the Saginaw River/Bay AOC as a result of subsequent remedial actions and source controls within the AOC. The recent lack of reports of tainted fish can be used to document and benchmark restoration in combination with evidence of reduced pollution in the AOC.

Previous Indications of Decreasing Incidence of Fish Tainting

1989 DNR Fish Flavor Impairment Study

Though the Titabawassee River is not within the boundaries of the AOC, it is a tributary of the Saginaw River. Improvements in fish flavor demonstrated in the Titabawassee provide an indication that pollution in the Titabawassee River was no longer contributing to fish tainting in the lower Saginaw River and Bay.

In 1989, a fish flavor impairment study was conducted on walleye from the Tittabawassee River, a tributary of the Saginaw River, by the Surface Water Quality Division of the MDNR (now MDEQ). The walleye were captured from reaches both above and below the Sanford dam. A walleye purchased from a commercial fish company was used as a control specimen. A panel of volunteers convened to assess the taste of the fish. The results indicate that there was no significant difference observed between the control specimen and specimens of either the upstream or downstream walleye. These results suggested that there was no significant flavor impairment in walleye from the Tittabawassee River when compared with the control fish.[8]

Previous RAP Updates

In the 1995 RAP for the Saginaw River/Bay AOC, the Surface Water Quality Division of MDNR (now MDEQ) reported that there had been no reports of off-flavor fish taken from Saginaw Bay in the years immediately preceding 1994. According to the 1995 RAP update, there had been "occasional angler reports of off-flavor in Saginaw River fish," however "the number of these reports has declined in recent years." The cause was listed as "unknown."

In 2000, it was reported that the MDEQ had received no fish tainting reports from the area in 1999 and only one complaint had been received in 2000 from the Saginaw River[9].

ASSESSMENT OF RESTORATION

According to MDEQ's *Guidance* document, the fish tainting BUI will be considered restored when:

- No more than three reports of fish tainting have been made to the MDNR or MDEQ for a period of three years, OR, if there have been reports of tainting,

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[8] MDNR, *Results of a Fish Flavor Impairment Study Conducted using Fish taken from the Tittabawassee River, Midland County, Michigan, October 4, 1989*, Report #MI/DNR/SWQ-89/161 (Lansing, Mich.: 1990).

[9] PSC, *Targeting Environmental Restoration in the Saginaw River/Bay AOC: 2001 Remedial Action Plan Update* (Lancing, Mich.: 2002).

- A one-time analysis of representative fish species in an AOC in accordance with MDEQ Surface Water Assessment Section (SWAS) Procedure #55 for conducting taste and odor studies indicates that there is no tainting of fish flavor.

Consistent with MDEQ delisting guidance, Public Sector Consultants (PSC), on behalf of the Partnership, sent letters to the MDNR and MDEQ in April 2007. In addition to the requirements of the guidance, PSC also sent letters to local health organizations and the Michigan Department of Community Health (MDCH). Respondents were asked to respond within three weeks. Phone calls and e-mails were used to follow up. All of the organizations replied to the inquiry.

Results: Inquiry of MDNR and MDEQ

The MDNR, MDEQ were contacted by letter requesting information on any reports of tainted or off- flavored fish made by the public in the past three years. Neither the MDNR nor the MDEQ in the Saginaw River or Bay area have received reports in the past three years of tainted or off-flavored fish. The responses satisfy the requirements of MDEQ's guidance criteria for delisting.

Other Considerations

Results: Inquiry of Local Health Officials

Local health departments were contacted by letter requesting information on any reports of tainted or off-flavored fish made by the public in the past three years (see Exhibit 1). All organizations responded that no reports of tainted or off-flavored fish had been made.

EXHIBIT 1
Health Organizations Contacted

Bay County Health Department
Central Michigan District Health Department
District Health Department #2, Iosco County
Genesee County Health Department
Huron County Health Department
Lapeer County Health Department
Livingston County Department of Public Health
Midland County Health Department
Mid-Michigan District Health Department
Oakland County Health Division
Sanilac County Health Department
Saginaw County Department of Public Health
Shiawassee County Health Department
Tuscola County Health Department

Subjectivity of Taste

The criteria for delisting the fish tainting BUI were developed specifically such that any tainting event significant enough to be reported was considered.[10] In addition, it is important that other factors that may contribute to off-flavored fish, such as cooking method, duration of storage before consumption, and quality of storage before consumption, NOT be considered in a determination of whether tainting exists.

Saginaw Bay Walleye Club Poll

An information request regarding anglers' potential observations of fish tainting was included in the May 2007 newsletter of the Saginaw Bay Walleye Club. The newsletter is a four-page, monthly publication that is distributed to the club's membership of approximately 300. Newsletter recipients were asked to report any observations of tainted fish in the last three years to Public Sector Consultants. No reports of tainted or off-flavored fish were received as a result of this information request.

MDCH Survey

The MDCH reported that it has not received any unsolicited reports of fish tainting from AOC residents. However, the MDCH conducted a survey of fish consumption habits within the Saginaw Bay watershed, including the Saginaw Bay, Saginaw River, Tittabawassee River, and the Shiawassee River/Bad River, in the spring and summer of 2005 and the winter of 2006. The survey was designed to gather information about respondents' fish consumption patterns in relation to their awareness of the MDCH's fish consumption advisory.11 The survey included a question asking whether respondents "ever noticed any odd smells or tastes in fish" harvested from the water body they were presently fishing. Twenty-eight of 460 survey respondents replied that they had noticed "odd smells or tastes in fish" within the previous year. Descriptions of the "odd smells or tastes" varied widely; the majority were described as "bad," "odd," or "different." To a lesser degree, interviewees described fish as tasting or smelling "chemical" and "fishy."

The MDEQ Guidance criteria do not require a comparison of the frequency of fish tainting reports in the AOC with a non-AOC water body, but the MDCH survey data make such a comparison possible. The MDCH survey responses for the Shiawassee River and the Bad River were combined and were considered a non-AOC control area for the comparison because of their connectivity to the Saginaw River, and because the Shiawassee/Bad River water bodies were not considered part of the historical fish tainting problems. Statistical analysis showed no significant difference between the percentages of respondents within the AOC and those in the control area reporting tainted fish. The complete results of the MDCH survey are available online at *(The link provided was broken and has been removed.)*

[10] Personal Communication, Shanna Draheim, June 15, 2007.
[11] Personal communication, Kory Groetsch, June 7, 2007.

SUMMARY AND RECOMMENDATION

Summary of Assessment Findings

The responses from the MDEQ and MDNR indicate that the MDEQ criteria enumerated in the MDEQ *Guidance* document for removing the fish tainting BUI have been met. The MDEQ document states that the BUI will be considered restored when "no more than three reports of fish tainting have been made to the MDNR or MDEQ for a period of three years." No reports of fish tainting have been reported to MDEQ or MDNR in the past three years. In addition, none of the county health organizations has received any reports of fish tainting in the last three years.

The analysis for this BUI removal was more extensive than that required by the *Guidance* criteria. It included solicitation of information from local health departments, the MDCH, the Saginaw Bay Walleye Club, and a comparison study between the AOC area and a non-AOC control area. All of the additional information collected further indicated that no fish tainting use impairment exists within the Saginaw Bay/River AOC. In addition, the water quality control laws that have been instituted since the designation of the fish tainting BUI have served to greatly reduce pollutant discharges into the surface water of the Saginaw River/Bay AOC. Improvements to wastewater treatment methods as well as ongoing efforts to reduce nonpoint source pollution also contribute to the continued restoration of the watershed. While off-flavor in fish is perceived to occur at an extremely low rate today, it is nevertheless important to note that fish consumption advisories are still in effect for specific chemical contaminants of concern.

Recommendation

Recently gathered information assessing the current status of this BUI, in addition to the remedial actions, source control programs, and other considerations described in this document, indicate that this beneficial use has been restored in the Saginaw Bay/River AOC. The delisting process should commence with the submission of this document to the Michigan Department of Environmental Quality, followed by a public meeting and comment period and initiation of the removal of this BUI.

Appendix

Text of Letter Sent to Agencies

April 24, 2007

Addressed to:
Saginaw Bay Watershed - County Health Departments
Michigan Department of Community Health
Michigan Department of Environmental Quality
Michigan Department of Natural Resources

Salutation:

Public Sector Consultants of Lansing is conducting a project on behalf of the Partnership for the Saginaw Bay Watershed, a local watershed group comprised of citizens, government representatives, and members of the environmental community, to assess the presence of ongoing environmental Beneficial Use Impairments (BUIs) in the Saginaw River/Bay Area of Concern (AOC). One of those impairments is the tainting of fish and wildlife flavor in edible portions of fish and wildlife caught in the Saginaw Bay and Saginaw River.

The purpose of this letter is to determine if your agency has been contacted by members of the public over the last three years to report the occurrence of catching and/or consuming fish caught from these waters that contain an off flavor.

The Great Lakes Water Quality Agreement of 1972 (amended by Protocol in 1987), resulted in the designation of Saginaw River/Bay as one of 43 AOCs because degraded water quality conditions impaired certain beneficial uses as defined by the Agreement. Contaminated sediments, excessive nutrients such as phosphorus and nitrogen runoff, soil erosion, fish consumption advisories, degraded fisheries, and the loss of significant recreational opportunities were the primary causes for the Saginaw River/Bay AOC designation. The Saginaw River/Bay is one of fourteen AOCs located within Michigan, including three that are shared with Canada.

As a result of this designation, Michigan embarked on an effort to document and address these impairments, which are summarized in a local Remedial Action Plan (RAP) developed first in 1988, and in subsequent RAP updates. The goal of the RAP is to restore and maintain beneficial uses. Subsequent actions carried out to meet the goal will eventually result in the removal of the AOC designation through a delisting process. The goal for delisting revolves around the implementation of remedial actions that target BUIs and lead to restored and maintained conditions.

As you may know, chemical odors and tastes associated with harvested fish were frequently reported from the 1940s through the 1970s in the Saginaw and Tittabawassee rivers and in Saginaw Bay. The sources of these tainting problems were directly related to the discharge of certain industrial chemicals. In the 1994 RAP, the Surface Water Quality Division of Michigan Department of Natural Resources (MDNR) reported that

no off flavor was detected in taste tests conducted on fish taken from the Tittabawassee River and that there had been no reports of off-flavor fish taken from Saginaw Bay in the years immediately preceding 1994. In 2000, it was reported that the Michigan Department of Environmental Quality (MDEQ) had received no fish tainting reports from the area in 1999 and only one complaint had been received in 2000 from the Saginaw River. It is our understanding that while the state has no formal methodology for evaluating wildlife tainting, there have been no complaints reported to the MDNR or MDEQ of tainted wildlife caught in the Saginaw River or Bay.

If this project confirms that taste and odor problems are no longer prevalent in fish and have not been documented in wildlife, the Partnership will initiate a process to remove this impairment from the Saginaw River/Bay AOC.

We would appreciate a letter or e-mail response to our office by April 30 to confirm whether or not any such tainting reports by the public exist. Please contact Shivaugn Rayl at: *srayl@pscinc.com* or 517-484-4954.

If you have any questions, or need additional information, please contact me at 517-484-4954.

Sincerely,

Mark Coscarelli
Public Sector Consultants

'06 Guidance
1 of 2

Tainting of Fish and Wildlife Flavor

Significance in Michigan's Areas of Concern

Three of Michigan's AOCs are listed as either impaired or unknown for fish and wildlife tainting – Detroit River, Saginaw River/Bay, and St. Clair River. The impairment in all of these AOCs is fish, not wildlife, tainting.

Michigan Restoration Criteria and Assessment

This BUI will be considered restored when:

- No more than three reports of fish tainting have been made to the MDNR or MDEQ for a period of three years.

OR, if there have been reports of tainting

- A one-time analysis of representative fish species in an AOC in accordance with MDEQ Surface Water Assessment Section (SWAS) Procedure #55 for conducting taste and odor studies indicates that there is no tainting of fish flavor.

Rationale

Practical Application in Michigan

Throughout Michigan, including the AOCs identified above, there have been historical taste and odor complaints related to fish. Tainting has been associated with water quality contaminants such as oils, grease, metals, phenols, PCBs, and wastewater, as well as algae over-abundance from high levels of nutrients.

The SWAS Procedure #55 lays out a specific methodology for evaluating fish tainting in compliance with Rule 55 of the Michigan Water Quality Standards (WQS). Rule 55 states that "waters of the state shall contain no taste-producing or odor-producing substances in concentrations which impair or may impair their use for a public, industrial, or agricultural water supply source, or which impair the palatability of fish ..." This BUI restoration criteria is consistent with Rule 55 of the state WQS and SWAS Procedure #55.

The State has no formal methodology for evaluating wildlife tainting, but none has been reported. The only means of tracking wildlife tainting is through calls or complaints to the MDNR or MDEQ.

No Guidance
2 of 2

1991 IJC General Delisting Guideline

When survey results confirm no tainting of fish or wildlife flavor.

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 Programs/Authorities for Evaluating Restoration

If a taste and odor study is necessary in an AOC, the MDEQ will work with the PAC to develop a tainting study according to Procedure #55. After the assessment is completed, the MDEQ will evaluate whether the data indicate that the restoration criteria for this BUI has been met.

Local AOC communities also have programs for monitoring water quality and related parameters which may be applicable to this BUI. If an AOC would like 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, it may be used to demonstrate restoration success.

DEQ 1 of 2

Level, South Tower, Constitution Hall, 525 W. Allegan, Lansing. Information Contact: ***Robert Reisner***, Remediation and Redevelopment Division, 517-335-6843 or Email at reisnerr@michigan.gov.

APRIL 2, 2008

DEADLINE FOR PUBLIC COMMENT REGARDING DECO'PLATE MANUFACTURING COMPANY (SRN: N1863), LAPEER, LAPEER COUNTY, for the proposed approval of a draft renewal of a Renewable Operating Permit (ROP) for the operation of one automotive plastic parts coating line, eight thermo-plastic injection molding machines, and a decorative chrome plating process. 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 on the Web at michigan.gov/air. The responsible official of the stationary source is John Hubbarth, 395 DeMille, Lapeer, Michigan 48446. Comments on the draft permit are to be submitted to Robert Lamrouex, Michigan Department of Environmental Quality, Air Quality Division, Lansing District Office, 4N, 525 West Allegan Street, P.O. Box 30242, Lansing, Michigan 48909. The decision-maker for the permit is Michael F. Masterson, District Supervisor. If requested in writing by April 2, 2008, a public hearing may be scheduled. Information Contact: ***Robert Lamrouex***, Air Quality Division, 517-335-6345.

APRIL 2, 2008

DEADLINE FOR PUBLIC COMMENT REGARDING ESCANABA PAPER COMPANY, DIVISION OF NEW PAGE CORPORATION, (SRN A0884), ESCANABA, DELTA COUNTY, for the proposed approval of the draft Renewable Operating Permit (ROP) for the facility located at 7100 County Road 426. The draft ROP is intended to simplify and clarify the facility's applicable requirements and will not result in any air emission changes at the facility. The draft ROP is for the renewal of the facility's ROP #199600346c. The ROP public notice documents can be viewed on the Web at michigan.gov/air. The responsible official is Laszio Lukacs, Vice President Escanaba Operations, 7100 County Road 426, Escanaba, Michigan. Comments on the proposed ROP are to be submitted in writing to Ronald Raisanen, Michigan Department of Environmental Quality, Air Quality Division, 420 Fifth Street, Gwinn, Michigan 49841. If requested in writing by April 2, 2008, a public hearing will be held on April 9, 2008 (see April 9 listing in this calendar). Information Contact: ***Ronald Raisanen***, Air Quality Division, 906-346-8504.

APRIL 2, 2008

DEADLINE FOR PUBLIC COMMENT REGARDING DGP, INC. (SRN: N2383), MARLETTE, SANILAC COUNTY, for the proposed approval of a draft renewal of a Renewable Operating Permit (ROP) for the operation of a manufacturing facility used to produce custom fiberglass products. 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 on the Web at michigan.gov/air. The responsible official of the stationary source is Chris Clark Jr., Owner, 3260 Fenner Street, Marlette, Michigan 48453. Comments on the draft permit are to be submitted to Ben Witkopp, Michigan Department of Environmental Quality, Air Quality Division, Saginaw Bay District Office, 503 North Euclid Avenue, Bay City, Michigan 48706. The decision-maker for the permit is Mark D. Reed, Saginaw Bay District Supervisor. If requested in writing by April 2, 2008, a public hearing may be scheduled. Information Contact: ***Ben Witkopp***, Air Quality Division, 989-686-8025, Extension 8252.

APRIL 2, 2008

DEADLINE FOR PUBLIC COMMENT REGARDING MERIT ENERGY COMPANY (SRN: B4292), KALKASKA, KALKASKA COUNTY, for the proposed approval of a draft renewal of a Renewable Operating Permit (ROP) for the operation of a natural gas extraction and fractionation plant. 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 on the Web at michigan.gov/air. The responsible official of the stationary source is Randall Sanders, 1510 Thomas Road SW, Kalkaska, Michigan 49646. Comments on the draft permit are to be submitted to Rob Dickman, Michigan Department of Environmental Quality, Air Quality Division, Cadillac District Office, 120 West Chapin Street, Cadillac, Michigan 49601. The decision-maker for the permit is Janis Denman, Cadillac District Supervisor. Information Contact: ***Rob Dickman***, Air Quality Division, 231-775-3960, Extension 6254.

APRIL 2, 2008
7:00 p.m.

1st notice

PUBLIC MEETING REGARDING THE POTENTIAL REMOVAL OF THE BENEFICIAL USE IMPAIRMENT (BUI) TAINTING OF FISH AND WILDLIFE FLAVOR IN THE SAGINAW RIVER/BAY AREA OF CONCERN (AOC). The Saginaw River/Bay is a Great Lakes AOC; and in order to be "delisted" as an AOC, all BUIs must be restored. The purpose of the public meeting is to discuss the restoration status of the fish tainting aspect of this BUI and to obtain comments on removing this

stationary source is John Hubbarth, 395 DeMille, Lapeer, Michigan 48446. Comments on the draft permit are to be submitted to Robert Lamrouex, Michigan Department of Environmental Quality, Air Quality Division, Lansing District Office, 4N, 525 West Allegan Street, P.O. Box 30242, Lansing, Michigan 48909. The decision-maker for the permit is Michael F. Masterson, District Supervisor. If requested in writing by April 2, 2008, a public hearing may be scheduled. Information Contact: ***Robert Lamrouex***, Air Quality Division, 517-335-6345.

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APRIL 2, 2008

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APRIL 2, 2008
7:00 p.m.

2nd notice

PUBLIC MEETING REGARDING THE POTENTIAL REMOVAL OF THE BENEFICIAL USE IMPAIRMENT (BUI) TAINTING OF FISH AND WILDLIFE FLAVOR IN THE SAGINAW RIVER/BAY AREA OF CONCERN (AOC). The Saginaw River/Bay is a Great Lakes AOC; and in order to be "delisted" as an AOC, all BUIs must be restored. The purpose of the public meeting is to discuss the restoration status of the fish tainting aspect of this BUI and to obtain comments on removing this BUI from the Saginaw River/Bay AOC. The public meeting will be held on April 2, 2008, at 7:00 p.m. at the Bay City State Recreation Area, 3582 State Park Drive, Bay City, Michigan 48706. Written comments may also be submitted to Michelle Selzer, Michigan Department of Environmental Quality, Water Bureau, P.O. Box 30273, Lansing, Michigan 48909-7773, by May 2, 2008. Information regarding the status of the BUI may be obtained by contacting the Water Bureau. Information Contact: ***Michelle Selzer***, Water Bureau, 517-241-3731, or Email at selzerm@michigan.gov .

APRIL 4, 2008

DEADLINE FOR PUBLIC COMMENTS REGARDING THE DRAFT SOUTH BRANCH RIVER RAISIN *E. COLI* TOTAL MAXIMUM DAILY LOAD (TMDL). The Water Bureau is announcing the availability of the draft South Branch River Raisin *E. coli* TMDL for comment. This water body is

1 of 2
Minutes

Saginaw River/Bay Area of Concern
Public Meeting Notes & Comments
Bay City State Recreation Area
3582 State Park Drive
Bay City, Michigan 48706
Wednesday, April 2, 2008
7pm-8pm

Purpose: Removal Recommendation for the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment (BUI) in the Saginaw River/Bay Area of Concern

Welcome and Review of Agenda – Michelle Selzer, Michigan Dept. of Environmental Quality (MDEQ), Water Bureau

Removal Recommendation of the Tainting of Fish and Wildlife Flavor Beneficial Use Impairment for the Saginaw River/Bay Area of Concern (Power Point Presentation and handout presented at the Public Meeting: *Fish Tainting Beneficial Use Impairment (BUI), Saginaw River/Bay Area of Concern: Assessment and Recommendation*) – Michelle Selzer

I. Area of Concern Program Background
II. Criteria Review & Assessment of Restoration
III. Recommendation

The Tainting of Fish and Wildlife Flavor BUI in the Saginaw River/Bay Area of Concern is recommended for removal.

Public Questions/Comments
Written comments can be submitted to Michelle Selzer by May 2, 2008.

Comments Received at the Public Meeting
Question: Is the Tittabawassee River part of the Area of Concern (AOC)?
Response: No, but may be considered a potential source area impacting other use impairments such as fish consumption advisory in the AOC.

Question: Could we delist AOC and relist it if fish in the Tittabawassee River are found to be tainted?
Response: No, Tittabawassee not part of the AOC. Concerns in AOC will be addressed under other programs.

Comment: Fish caught in Consumer's Energy "hot ponds" taste bad.
Comment: '50s and '60s the bay and river stunk like chemicals. In the '70s wouldn't eat fish. By mid-'90s, smell almost disappeared. Can't smell now.
Comment: [Historically] perch fishing was bad, none to catch to make comparison.

Question: Drinking water removal, how was that perceived?
Response: Perception was discussed with stakeholders. Assessment based on water quality standards. Complaints had significantly decreased from when originally listed and water treatment plants have met state and federal drinking water standards.

Question: Saginaw contamination issues seem to be increasing. Shouldn't tainting be increasing?

Response: Fish consumption advisory listed contaminants are not known to cause fish taste and odor problems.

Question: Were the Michigan Department of Community Health fish consumption survey tainting survey results considered as part of the 3 complaints stated in the MDEQs criteria?
Response: These were solicited responses, but we did consider them and conducted a statistical analysis to determine whether or not these responses might be background (i.e., what one might expect in any waterbody). The results indicated no statistical significant between the Saginaw River/Bay reports from those received from the Shiawassee/Bad River (the non-AOC) comparison site. Taste and odor perception/fish handling and preparation were discussed.

Questions: Could the removal of fish tainting be misleading, fish consumption advisory still in effect, people may get confused?
Response: Possible. Flavor is not an issue in the AOC. MDEQ could work with MI Dept. of Community Health to develop a fact sheet to outline the difference between the tainting BUI removal and the fish consumption advisory. Media has done a good job of explaining that there is a difference. Group discussed the AOC as the "worst of the worst" and the progress that has been made in AOC (e.g., chemical causing fish consumption are likely going down, NPDES/regulations in place, industrial pretreatment programs implemented, ISO14000 standards – new accountability).

Next Steps - Michelle Selzer
Once a letter of acceptance for the removal recommendation is received from the Public Advisory Council and the public comment period closes, the Water Bureau will send a letter to the U.S. Environmental Protection Agency – Great Lakes National Program Office (GLNPO) requesting concurrence. Once the GLNPO has concurred, the Tainting of Fish and Wildlife Flavor BUI will be formally removed.

Meeting adjourned at 8:00 PM

Contact:
Michelle Selzer, AOC Liaison
Michigan Department of Environmental Quality
Constitution Hall
P.O. BOX 30273
Lansing, MI 48909-7773
Phone: (517) 241-3731
Fax: (517) 335-4381
selzerm@michigan.gov

1 of 2

Saginaw Bay's black eye is healing

Posted by Jeff Kart | The Bay City Times March 26, 2008 12:35PM
Categories: The Green Scene

Saginaw River and Bay is the most polluted spot in the Great Lakes.

But maybe not for long.

The river and bay was designated a federal Area of Concern in 1987.

There are 14 AOCs in Michigan. Saginaw River and Bay has the most beneficial use impairments in the region - 12 of a possible 14.

The bay still has its problems (think muck and dioxins) but it might soon cease to be the most polluted spot in the lakes, due to efforts of the Partnership for the Saginaw Bay Watershed.

That citizens group, designated as the Public Advisory Council for our AOC, sent documents to the U.S. Environmental Protection Agency last year asking that one of the 12 impairments, for drinking water taste and odor, be removed.

While the group waits for word on that request, it is embarking on another delisting, for "tainting of fish and wildlife flavor," a problem that dates back to "chemical" and "scotch whisky" tastes and smells in fish from the 1940s through the 1960s, said Michelle Selzer, state AOC coordinator.

If successful, both requests would take the River and Bay off the top of the most polluted list.

We'd be able to say we're cleaner than the Detroit River, with 11 impairments.

If you want to sound off on the latest delisting, for tainted-tasting fish, you can attend a public meeting at 7 p.m. Wedneday at the Bay City State Recreation Area in Bangor Township.

Or, write to Selzer. The deadline for comments is May 2. The e-mail address is selzerm@michigan.gov. The mailing address is Michelle Selzer, Michigan Department of Environmental Quality, Water Bureau, P.O. Box 30273, Lansing, MI 48909-7773.

The Partnership received a $25,000 EPA grant for the latest delisting, Selzer said.

Public Sector Consultants of Lansing was hired to research state records.

The consultants found that there haven't been any reports of tainted-tasting fish to the DEQ or state Department of Natural Resources in the past three years. That makes the river and bay eligible for delisting in that category.

Read the full report (pdf)

The reason: Water quality regulations, including 1977 amendments to the Clean Water Act, have reduced industrial and other discharges to the river and bay.

But while fish taste better these days, there are still consumption advisories due to

contaminants in fish tissue.

2 of 2

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