The Wisconsin Department of Natural Resources and Michigan Department of Environmental Quality are proposing to remove the "Degradation of Benthos" and "Restrictions on Dredging Activities" Beneficial Use Impairments from the Lower Menominee River Great Lakes Area of Concern. The proposals will be submitted to the U.S. Environmental Protection Agency as removal packages, which discuss the rationale for the decision and are summarized in this fact sheet.

Lower Menominee River Area of Concern: Achieving Goals for a Cleaner River

Some Definitions:

Area of Concern (AOC)

Areas of Concern are geographically-defined portions of selected Great Lakes tributaries and harbors with especially severe legacies of pollution due to historical urban, agricultural, and industrial development.

Beneficial Use Impairment (BUI)

A "beneficial use" is any way that a water body can improve the quality of life for humans or for fish and wildlife. If the beneficial use is unavailable due to environmental problems, then that use is impaired.

Benthos

"Benthos" refers collectively to all aquatic organisms that live on, in, or near the bottom of water bodies. Some examples are clams, snails, worms, amphipods, crayfish, and the larvae of many aquatic insects.

PAHs

Polyaromatic hydrocarbons (PAHs) are a group of compounds that are produced during the incomplete burning of fossil fuels, garbage, or other organic substances and are associated with cancer and other adverse health effects.

What is being proposed?

In 1987, the lower three miles of the Menominee River, along with Green Island and the Green Bay shoreline three miles north and south of the river mouth, were designated an AOC primarily due to toxic chemical contamination. PAHs, heavy metals (specifically arsenic), and paint sludge associated with industrial activities were present in river and bay sediments at high levels within the AOC. Six impairments were assigned to the AOC, including the "Degradation of Benthos" and "Restrictions on Dredging Activities" BUIs. The first impairment indicates that organisms living in or on the river or lake bottom are being negatively affected by the toxic chemicals in the sediments. The second impairment indicates that that special handling and disposal is needed when dredging AOC sediment due to potential human health or ecological risks associated with disturbing contaminated sediment. Therefore, a great deal of remediation work has been done in recent years and the WDNR and MDEQ are now proposing to remove both impairments.

Why is it being proposed?

To address the impairments, polluted sediments were removed from the river and bay by dredging them and disposing of them in approved locations. Cleanup efforts took place at the Green Bay paint sludge site from 1993 through 1998, the Ansul/Tyco arsenic site from 2012 through 2015 (river portion), the Wisconsin Public Service Corp. (WPSC) coal tar site from 2012 through 2015), and the Menekaunee Harbor site from 2014 through 2015. The projects are being monitored according to their approved plans and are meeting their remedial action goals to the extent practicable. In addition, sediment assessments in the Lower Scott Flowage and Rio Vista Slough show that no remediation is needed at those sites. Therefore, the sediment contamination that was degrading the benthos and requiring special handling and disposal for dredged material has been addressed and restoration targets for these impairments have been met.

Cheryl Bougie, WDNR

Dredging contaminated sediment from Menekaunee Harbor.

What does this mean for the future?

While the bulk of the worst contamination has been removed, some low level contamination will persist for some time. Clean sand cover was applied to this lower level contamination to enhance natural deposition that is likely to occur in certain areas of the river. Monitoring will continue at these sites to assure that the projects are meeting their sediment-related remedial action objectives.

Now that the contamination has been removed from their habitat, benthic organisms should recover and move into areas that before were too toxic for them to survive. Over time, there will be greater numbers and diversity of benthos in the formerly contaminated areas, and the benthos will also have less toxic chemicals in their bodies. This will benefit other animals that eat them, such as fish and birds, and result in a cleaner, healthier river and bay.

For more information on the Area of Concern, visit us on the web:
WDNR: http://dnr.wi.gov/ (search “Menominee River AOC”)

What you can do:

- Talk with WDNR staff about these decisions and ask any questions that you may have
- Review the drafts of the BUI removal proposal packages at http://dnr.wi.gov/topic/greatlakes/menominee.html under the “Impairments” tab
- Offer comments on the decisions and the two removal packages by September 22, 2016 by emailing laurel.last@wisconsin.gov or by submitting them in writing to the address below

For more information, contact:

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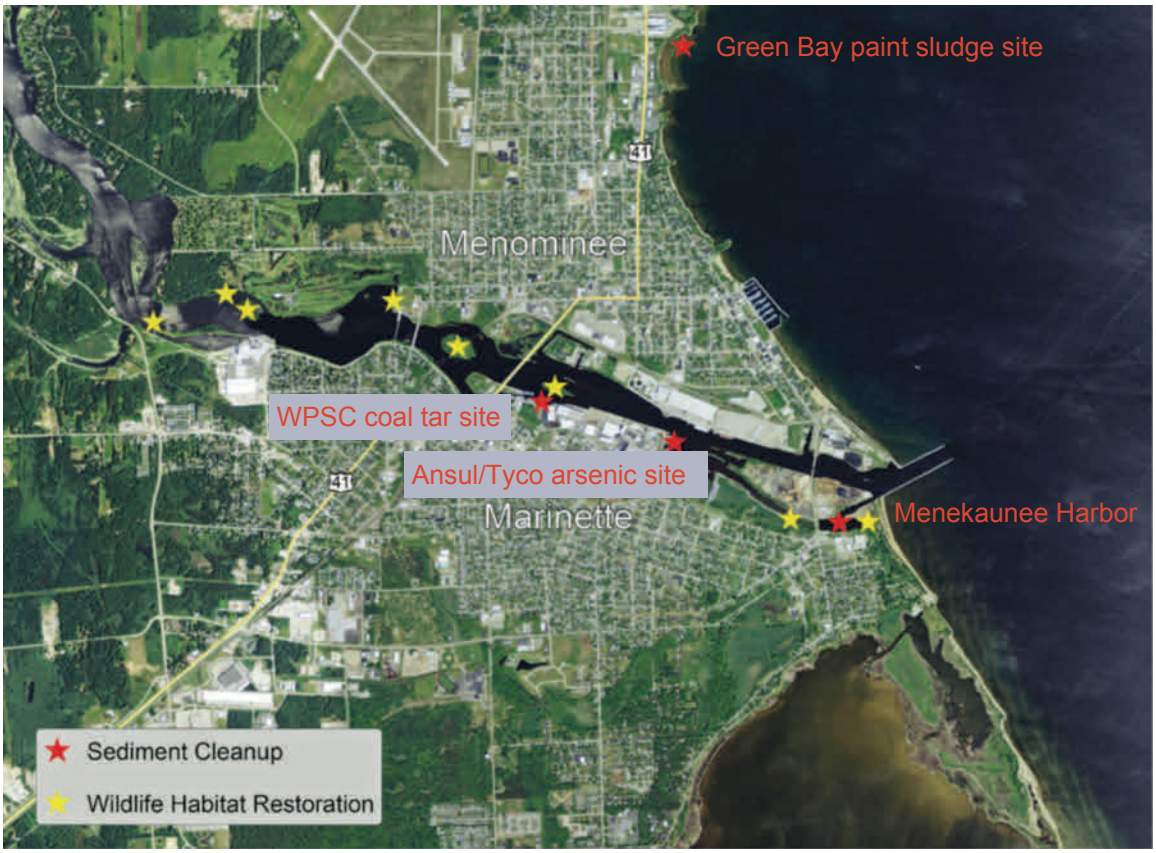

Several sediment remediation projects occurred between 1993 and 2015 along the lower Menominee River and Green Bay shoreline, resulting in better habitat for benthos, the organisms that live in and on the bottom material in the river and bay.

Sediment Remediation in the Lower Menominee River:

1993-1998 Green Bay paint sludge site– Approximately 5,300 tons of bulk paint waste and 10,500 tons of contaminated sediment and soil removed

2012-2015 Ansul/Tyco arsenic site– Approximately 300,056 cubic yards of arsenic-contaminated sediment removed

2012-2015 WPSC coal tar site– Approximately 15,221 cubic yards of PAH-contaminated sediment removed

2014-2015 Menekaunee Harbor site– Approximately 27,129 cubic yards of contaminated sediment removed