LOWER GREEN BAY & FOX RIVER AREA OF CONCERN

Green Bay is one of the world’s largest freshwater estuaries and it historically sustained native cultures of the area with its abundant fish, waterfowl and wild rice. As significant urbanization and industrialization occurred along the Fox River and bay of Green Bay, both waterbodies were severely degraded by pollution and habitat loss, leading to the eventual designation as an Area of Concern (AOC) in 1987.

For over 30 years, major efforts have been underway to address the environmental problems in the AOC, including regulations on urban runoff and industrial discharge contributing to degraded water quality and one of the world’s largest PCB (polychlorinated biphenyl) cleanups.

To learn more and get involved, please visit https://dnr.wi.gov/topic/GreatLakes/GreenBay.html

AOC ACCOMPLISHMENTS:

FOX RIVER PCB CLEANUP PROJECT COMPLETED
The lower Fox River was one of the most contaminated waterways worldwide before environmental regulations were in place to limit industrial and urban waste discharge. Toxic substances discharged for decades along the Fox River remained in the sediments of the river and Green Bay. Pollutants in the sediment were taken up by fish and wildlife, making several fish species unsafe for human consumption and causing deformities and reproduction problems in fish and wildlife. In 2004, after many years of working with the parties responsible for the damage to evaluate how best to address the sediment contamination, the Fox River PCB Cleanup Project began. The cleanup finished in 2020. Through this project, over 8 million cubic yards of polluted sediment were remediated from the Fox River and lower bay of Green Bay — enough to fill nearly 700,000 dump trucks which would span from Wisconsin to London, England when lined up!

The cleanup is championed as one of the largest and most innovative sediment remediation projects worldwide. The project cost just over $1 billion and was paid for by industries responsible for discharging the toxins. Completion of this project marks the most significant milestone on the path to delisting this AOC.

FIRST BENEFICIAL USE IMPAIRMENT (BUI) REMOVED
The Tainting of Fish and Wildlife Flavor beneficial use impairment was the first of 13 identified impairments to be officially removed in early 2020. BUI removal occurs when available evidence (e.g., monitoring data, community surveys, etc.) demonstrates that AOC–specific goals have been achieved. Several other impairments are being evaluated by DNR and partners for removal in the next five years.

Photo credit JF Brennan

Photo credit Amanda Smith
CONTINUING THE PATH TO DELISTING THE LOWER GREEN BAY & FOX RIVER AOC:

IMPROVING WATER QUALITY
The AOC program is working with many regional partners to prioritize where practices to restore water holding capacity can be installed to reduce nutrient pollution loading to the AOC and provide flood protection for urban communities. A project was completed in partnership with Outagamie County in 2020 that identified where there are opportunities to restore water storage capacity in the Lower Fox River Watershed. This work will contribute to the broader regional effort to implement practices that will meet nutrient and sediment reductions goals outlined in the Lower Fox River Basin Total Maximum Daily Load.

IMPROVING FISH & WILDLIFE HABITAT & POPULATIONS
Over the past three years, we have worked with many local partners to develop a list of potential habitat restoration projects that would benefit many species of fish and wildlife. We are now soliciting public input on this list of restoration projects to help prioritize the list and refine individual project concepts. We are also collaborating with the Fox River Natural Resource Damage Assessment (NRDA) to evaluate how Great Lakes Restoration Initiative (GLRI) and NRDA settlement dollars can be leveraged to restore habitat for fish and wildlife species injured by PCBs. A plan to implement all fish and wildlife restoration projects is expected to be complete by the end of 2021, with a goal of completing all restoration projects by 2024.

ASSESSMENTS OF ONGOING ENVIRONMENTAL PROBLEMS
Harmful algal blooms (HABs) are a public health problem in many waterbodies. A 5-year assessment with many partners began in 2015 to evaluate the effects of HABs on public health and recreation. Field assessments will be complete in 2020, and a report detailing trends and severity of HABs in the AOC will be available in 2021.

Several other assessments of a variety of indicator species are ongoing to track recovery as environmental remediation and restoration occurs. If you’re interested in learning more about how the WDNR tracks recovery of the AOC, please visit the most recent Remedial Action Plan Update for more details.