Spring 2015

Creating a **better future** for our communities by restoring the health of the

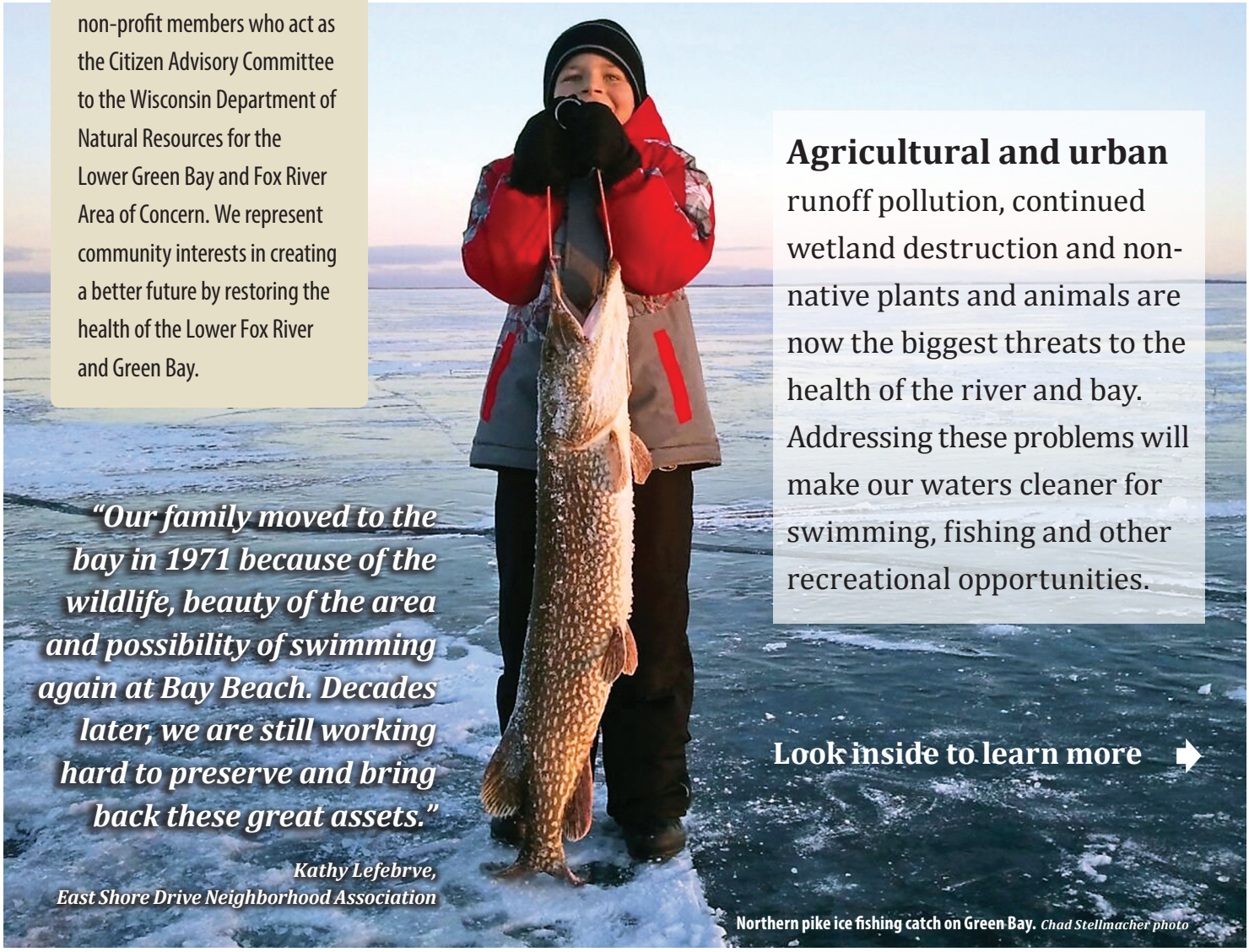
Fox River & bay of Green Bay

CLEAN BAY BACKERS

Clean Bay Backers is a diverse group of public, private and non-profit members who act as the Citizen Advisory Committee to the Wisconsin Department of Natural Resources for the Lower Green Bay and Fox River Area of Concern. We represent community interests in creating a better future by restoring the health of the Lower Fox River and Green Bay.

The river and bay have long fueled the region's economy as a source of water, food, jobs and recreation. Prior to the 1970s, sewage and industrial wastes polluted the river and bay, contaminating bottom sediments. Clean-up of these pollutants has greatly improved the quality of our waters, but big challenges remain.

Families enjoying the Fox River. *Erin Hanson photo*



Agricultural and urban runoff pollution, continued wetland destruction and non-native plants and animals are now the biggest threats to the health of the river and bay. Addressing these problems will make our waters cleaner for swimming, fishing and other recreational opportunities.

"Our family moved to the bay in 1971 because of the wildlife, beauty of the area and possibility of swimming again at Bay Beach. Decades later, we are still working hard to preserve and bring back these great assets."

Kathy Lefebrve,
East Shore Drive Neighborhood Association

Look inside to learn more

Northern pike ice fishing catch on Green Bay. *Chad Stellmacher photo*

Kayaking the lower bay. *Erin Hanson photo*

Community partnerships have helped make a difference!

"The restoration of the Cat Islands is a win-win that demonstrates the economic and environmental benefits of reusing dredge material."

Dean Haen, Director
Brown County Port & Resource Recovery Department

The benefits of a clean bay for the community include reduced public health risks, more tourism and recreation opportunities and a higher quality of life for residents.

Benefits of a clean bay:

- Safe swimming waters and less frequent harmful algae blooms
- Edible fish and waterfowl
- Clean and beautiful public parks, trails and beaches
- Reduced disposal costs for routine navigational dredging
- Abundant fishing, hunting and wildlife viewing opportunities
- Thriving local business and tourism

The Lower Fox project is the **largest PCB cleanup in the world.** From 2009 to 2014, dredging removed enough material to send **74,000 dump trucks** to the landfill.

In 2014, Brown County recorded over **30,000 Northern Pike young fry** that hatched in ditches and wetlands on the bay of Green Bay's West Shore. Many of these came from Brown County's **34 acres of restored wetlands.**

The islands will hold **4.5 million cubic yards of outer harbor dredge material** and take 20-30 years to fill.

What are PCBs? They are chemicals that were once used in industry and commerce before their production in the U.S. was banned in 1979. While their stability was a beneficial property in industrial applications, it also allows the PCBs to accumulate in the tissues of fish, wildlife and people. Studies have linked PCBs to reproductive problems in fish, wildlife and people, and to cancer in animals.

Lower Fox River PCB Cleanup

Removal of contaminated sediment from the river bottom is expected to be completed in 2017. PCB levels in walleye and other fish have already dropped in areas where toxic sediments have been removed. Once complete, the dredging project will result in a cleaner, deeper river with fish that are safer to eat.

Northern Pike Habitat Restoration

As a popular sport fish, each adult northern pike is estimated to be worth up to $143 in local revenue from anglers. Northern pike are also a top predator that feed on invasive carp eggs and young fish. This project is restoring fish access to wetlands that provide natural spawning grounds for one of the bay of Green Bay's most important fish.

Cat Island Chain Restoration

The Cat Islands, destroyed by severe storms in the 1970s, are being rebuilt with clean, dredged material from the outer bay shipping channel. This project saves tax dollars by significantly reducing sediment disposal costs. It also restores important fish and wildlife habitat that will improve sport fishing, birding and waterfowl hunting in the region.

Many improvements to clean up the river and bay of Green Bay are bringing back fish and wildlife

Big challenges remain to restore the fishable, swimmable waters of one of the most valuable regions in the Great Lakes. The *Great Lakes Restoration Initiative* provides an opportunity to reduce runoff pollution and improve habitat in the river and bay.

Great blue heron and yellow perch. *Jeffrey J. Strobel photos*

Above: Construction of the Cat Island Chain rock spine structure in the lower bay. *Brown County/USACE photo*

Top priorities for action

✓ **Reduce Polluted Runoff**

Farmers, industries, municipalities and residents all have a role in reducing nutrients, soil loss and other pollutants (such as bacteria and pesticides) that enter the bay through snow melt and rain water. A substantial reduction in these pollutants is needed to make the river and bay clearer and cleaner.

✓ **Protect, Restore and Enhance Coastal Wetlands**

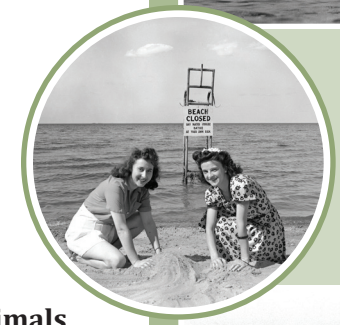
Wetlands clean the water and provide important breeding and feeding areas for fish and wildlife. However, 90% of the coastal wetlands in southern Green Bay have been lost due to development and non-native plant and wildlife invasions. **Green Bay is home to more than half of Lake Michigan's remaining coastal wetlands,** making it critical that these natural areas are protected.

✓ **Improve Coastal Public Access and Recreation**

Public beaches, parks, trails and boat launches increase tourism and improve quality of life for area residents. Bringing back the Bay Beach public swimming area will attract families and visitors to the area.

✓ **Prevent, Manage and Monitor Invasive Plants and Animals**

In Green Bay, the establishment of zebra and quagga mussels and common reed grass (*Phragmites australis*) has already significantly changed the ecosystem. Preventing new introductions is critical because, once established, invasive species are difficult or impossible to remove. Managing and monitoring invasive species will help us restore fish and wildlife habitat and understand their impacts on the bay.



Bay Beach was a popular swimming destination for decades before it was permanently closed in 1943 from raw sewage and industrial pollution. Scientists are currently testing the beach for harmful bacteria and algae with the hopes that someday it might once again provide a safe place for residents and visitors to enjoy the bay of Green Bay.

photos courtesy of Neville Museum

Clean Bay Backers include representation from:

CLEAN BAY BACKERS

- Bay-Lake Regional Planning Commission
- Brown County Land and Water Conservation Department
- Citizen volunteers
- City of Green Bay
- Ducks Unlimited
- East Shore Drive Neighborhood Association
- Fox-Wolf Watershed Alliance
- K-12 education
- League of Women Voters (Lake Michigan Chapter)
- NEW Paddlers Association
- NEW Water (Green Bay Metropolitan Sewerage District)
- University of Wisconsin–Extension
- University of Wisconsin-Green Bay
- University of Wisconsin Sea Grant Institute
- Wisconsin Department of Natural Resources
- Wisconsin Marine Association

For more information, contact:

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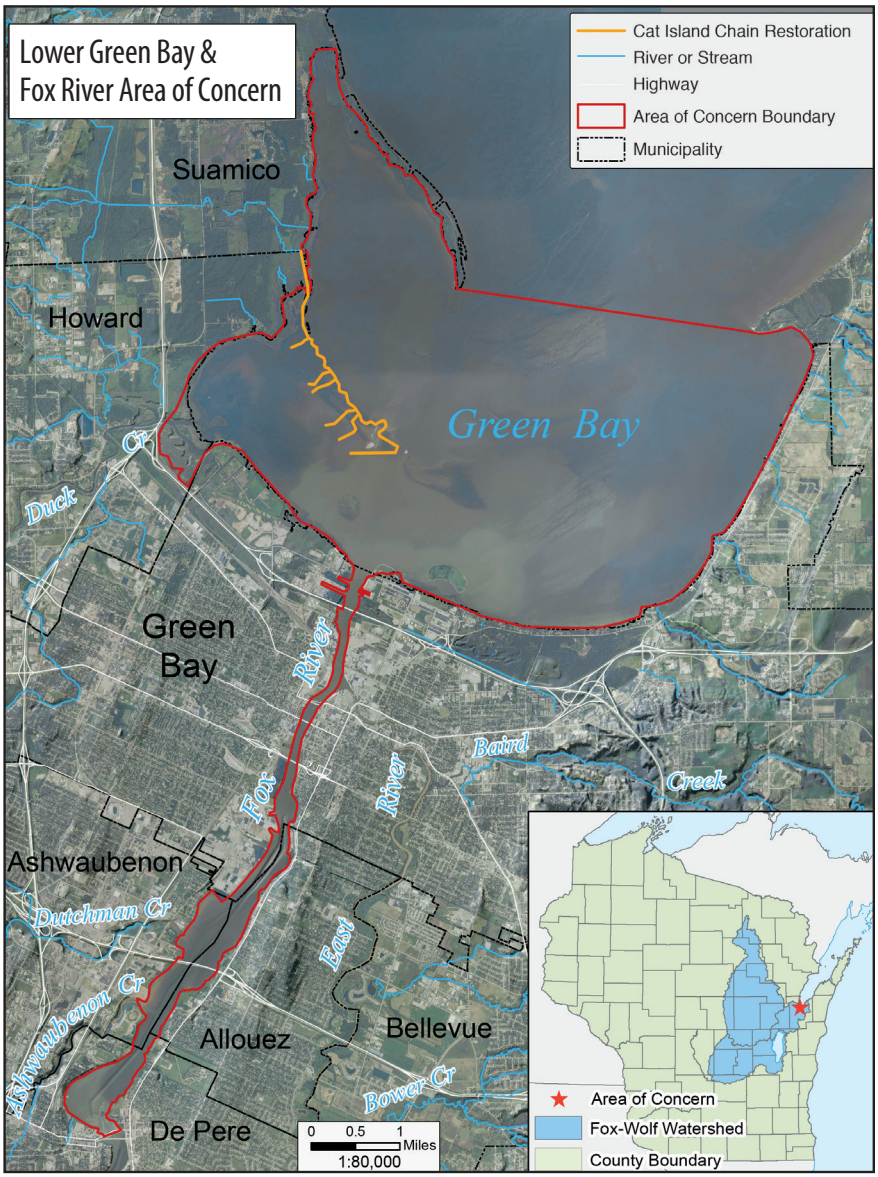
"We need all hands on deck to improve our waters. Pulling together as a community, we can achieve that dream of having fishable, swimmable waters again right here in our back yard."

Tom Sigmund, Executive Director, NEW Water



Please visit us online at:

fyi.uwex.edu/aocs/fox-river-green-bay and visit: **dnr.wi.gov/topic/greatlakes/greenbay.html**

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