



About the Great Lakes AOCs

Although discharges of toxic substances into the Great Lakes have been reduced over the last 20 years, high concentrations of pollution remain in the bottom of some rivers and harbors, posing health risks to people and wildlife.

The tributaries and harbors identified as having pollution problems are known as "Areas of Concern," or AOCs. There are 40 AOCs on the Great Lakes – 25 on the U.S. side, 10 in Canada and five shared between the two countries. The Kinnickinnic River is part of the Milwaukee Estuary Area of Concern.

For more information

Kinnickinnic River Project:

Ajit Vaidya

EPA Region 5 312-353-5713 vaidya.ajit@epa.gov

Great Lakes Legacy Act:

Marc Tuchman

EPA Region 5 312-353-1369 tuchman.marc@epa.gov

WDNR:

Xiaochun Zhang

608-264-8888 xiaochun.zhang@wisconsin.gov

EPA and WDNR Web sites

www.epa.gov/glla www.epa.gov/glnpo/aoc/index.html http://dnr.wi.gov/org/water/wm/sms/ kkriver/

Legacy Act Project Sets Stage for Revitalized River Neighborhood

Kinnickinnic River Legacy Act Site/Milwaukee AOC

Milwaukee Wisconsin

November 2009

U.S. Environmental Protection Agency Great Lakes National Program Office and state partner Wisconsin Department of Natural Resources are celebrating the end of a Great Lakes Legacy Act project that dredged a section of Milwaukee's Kinnickinnic River—an important step in a revitalized river community. The Kinnickinnic River project removed around 167,000 cubic yards of sediment contaminated with PCBs and PAHs (polychlorinated biphenyls and polycyclic aromatic hydrocarbons) between Becher Street and Kinnickinnic Avenue on the south side of Milwaukee. Dredging began June 1 and as of the end of October all major field operations were completed.

Using Great Lakes Legacy Act funds – money set aside by Congress to clean up polluted sediment (mud) along U.S. shores of the Great Lakes – EPA funded 65 percent or \$14.3 million of the \$22 million cost of the project. The required nonfederal share of 35 percent or \$7.7 million came from a state bond fund under the Governor's Growing Milwaukee Initiative for sediment cleanup. The special fund was approved by the State Legislature and signed into law by Gov. Jim Doyle in 2007.

Success of an urban river partnership

The cleanup of this urban river is the result of many years of planning and collaboration between U.S. EPA, U.S. Army Corps of Engineers, WDNR, the city and Port of Milwaukee, U.S. Coast Guard, and local stakeholders including Business Improvement District No. 35. The local Business Improvement District undertook shoreline improvements in preparation



The Great Lakes Legacy Act cleanup of a section of the Kinnickinnic River in South Milwaukee is aiding an ongoing revitalization of businesses and riverfront areas in the neighborhood

for the cleanup. The endeavor directly employed as many as 60 workers, providing economic stimulus to the region.

Project outcome

The undertaking removed sediment containing about 1,200 pounds of PCBs and 13,000 pounds of PAHs. The sediment was transported by barge and disposed of in the special cell built at the Milwaukee Area Confined Disposal Facility at Jones Island that is owned by the Port of Milwaukee and operated by the Corps of Engineers.

Remediation to revitalization

In addition to the positive environmental effects to the Milwaukee Estuary AOC, a side benefit of the removal of the contaminated sediment is a safer, deeper and more navigable river. Several areas where accumulated sediment or sunken obstacles had blocked passage were removed. The improved navigation conditions are expected to attract more boaters and visitors to the project area. Property owners are planning to expand their businesses with additional boat slips, moorings, fisherman wharves, riverwalks, and a boat launch ramp. A former industrial brownfields site next to the river is also being redeveloped for commercial use. The construction of a boaters lounge is currently under way in a newly refurbished office building and a restaurant recently opened on another riverfront property in the project area.

Legacy Act successes

The Great Lakes Legacy Act was passed by Congress in 2002 as a tool to accelerate the pace of sediment cleanup within the Great Lakes Areas of Concern. One of the goals of the GLLA is to help restore "beneficial uses" to polluted sections in the Great Lakes AOCs. Beneficial use impairments include restrictions on dredging, loss of fish and wildlife habitat and limiting activities such as fishing and boating. The Legacy Act was reauthorized in 2008 and includes new provisions that allow for habitat restoration in conjunction with a sediment remediation project and site survey at 100 percent federal expense.

Since 2004 six sediment cleanup projects have been completed under the Great Lakes Legacy Act. These projects have cleaned up more than 960,000 cubic yards of contaminated sediment at a cost of almost \$119 million. Some \$68 million in Legacy Act funds have leveraged \$51 million in non-federal dollars from state, local and private partners. This funding translated into the removal of nearly 1.6 million pounds of contaminants from Great Lakes waterways, reducing risks to human health and wildlife. The Kinnickinnic River is the second Legacy Act project in Wisconsin. In 2005 sediment removal was completed in Newton Creek and Hog Island Inlet in Superior.



Before and after photographs: As part of the Kinnickinnic River cleanup the project removed debris, river-choking mud flats and an abandoned boat.