

# Ashtabula River Cleanup

## Ashtabula River Area of Concern

Ashtabula, Ohio

May 2008

### Great Lakes Legacy Act

Although toxic substances have been removed from the Great Lakes over the last 20 years, high concentrations of pollution remain in the bottom of some rivers and harbors.

The Great Lakes Legacy Act of 2002 authorizes \$270 million in funding over five years (2004 – 2008) for sediment cleanup in United States Areas of Concern. Congress appropriated \$9.9 million in 2004, \$22.3 million in 2005, \$29.3 million in 2006, \$30 million in 2007 and \$34.5 million in 2008 for Legacy Act projects. In addition to the federal funds, the Legacy Act requires state and local partners provide 35 percent of the project cost.

Completed Great Lakes Legacy Act sediment cleanup projects include Black Lagoon, Mich., Detroit River AOC; Hog Island Inlet, Wis., St. Louis River AOC; Ruddiman Creek, Mich., Muskegon Lake AOC; Tannery Bay, Mich., St. Marys River AOC; and Ashtabula River, Ohio, Ashtabula River AOC.

### On the Web

#### Ashtabula River:

[www.epa.gov/glla/ashtabula](http://www.epa.gov/glla/ashtabula)

#### Ashtabula River Area of Concern:

[www.epa.gov/glnpo/aoc/ashtabula.html](http://www.epa.gov/glnpo/aoc/ashtabula.html)

#### Great Lakes Legacy Act of 2002:

[www.epa.gov/glla](http://www.epa.gov/glla)



*The 2005-2007 Legacy Act cleanup of the Ashtabula River removed 500,000 cubic yards of sediment contaminated with 25,000 pounds of PCBs and other contaminants.*

For years, navigation in the Ashtabula River was restricted because of a build-up of contaminated sediment. Now the boats have returned – commercial craft as well as pleasure boats.

Using funds provided through The Great Lakes Legacy Act of 2002, U.S. Environmental Protection Agency – along with state partner Ohio EPA – oversaw removal of about 500,000 cubic yards of contaminated sediment from the Ashtabula River between the Turning Basin at the mouth of Fields Brook and the 5th Street Bridge. The project began in September 2006 and ended in October 2007. The U.S. Army Corps of Engineers is completing dredging the river north of the 5<sup>th</sup> Street lift bridge to Lake Erie. The sediment contains a variety of chemicals, including polychlorinated biphenyls – better known as PCBs – uranium, radium and thorium.

Workers used a hydraulic dredge to pump the sediment from the bottom of the river and pump it through a 2.5-mile pipeline to a sediment confinement facility in Ashtabula. There the slurry was pumped directly into high-density plastic bags 300 feet long and 30 feet in diameter. Called “geotextile tubes,” the bags separate contaminated mud from the slurry water. The mud stays in the tubes and the water flows through the bag’s woven material. It is treated and put back into the river through a second pipeline. Once all dredging is complete, the confinement facility will be covered with clean material and permanently closed, probably by summer 2009.

## Benefits of sediment cleanup

Removing contaminated sediment from the Ashtabula River has also reduced the flow of contaminants from the river into Lake Erie and provided a healthier habitat for fish and other aquatic life.

To further ensure an improved habitat and as a follow-up to the cleanup, a “Post Dredging Habitat Plan for the Ashtabula River” provides a blueprint to restore the various areas of the Ashtabula River Area of Concern.

## Project partnerships

The cleanup was a collaborative effort among EPA, Great Lakes National Program Office, Ashtabula City Port Authority, Ashtabula River Cooperation Group II, and Ohio EPA. Additional support was provided by the Buffalo District of the Corps of Engineers and the city of Ashtabula. GLNPO will continue to work with Ohio to monitor recovery and improvement of the river.

Total project cost of the cleanup was \$60 million. Great Lakes Legacy Act funds accounted for \$30 million, the Ashtabula River Cooperation Group II provided \$23 million and the state of Ohio provided \$7 million.

## Background

The Ashtabula River flows into Lake Erie’s central basin at Ashtabula. Draining an area of 137 square miles in Ohio and western Pennsylvania, the watershed is rural except for concentrated industrial development areas around the Fields Brook tributary and east of the mouth of the Ashtabula River. Part of the Ashtabula River basin is an AOC.

Since 1983, fish consumption advisories have been posted for the Ashtabula AOC due to PCBs. Although a

Superfund cleanup of contaminated sediments in the Fields Brook tributary was done in 2003, the Ashtabula River was contaminated until the Legacy Act project.

## The Ashtabula River AOC

From the 1940s through the late 1970s, unregulated discharges and mismanagement of hazardous waste caused sediment in the Ashtabula River to become contaminated and its aquatic life impaired. This prevented regular dredging and seriously impeded commercial and recreational navigation. The AOC is the lower two miles of the river and outer harbor.

When the Corps of Engineers completes its dredging of the navigational channel in the spring of 2008, most contaminated sediment in the AOC will have been removed, representing a significant improvement in the environmental quality of the river and AOC.



December 2005



August 2006



*The hydraulic dredge used in the Ashtabula River to pump the contaminated sediment via pipeline to a disposal facility 2.5 miles from the river.*

*Photos of the confined disposal facility before and after construction. The bottom photo shows workers laying down a rubber liner.*