

Environmental Progress in Ohio's Black River

April 2004



Ohio EPA is dedicated to restoring and protecting all water bodies in the state, including Lake Erie and its tributary river systems. As part of an effort to clean up the most polluted areas impacting the Great Lakes, the United States and Canada are working with state and provincial governments to ensure that [Remedial Action Plans](#) (RAPs) are developed and implemented for all designated [Areas of Concern in the Great Lakes basin](#).



There are 43 water bodies in the Great Lakes designated as Areas of Concern by the [Commission](#) (IJC). IJC is an independent, that deals with boundary waters. The legacy of led four Ohio rivers (Ashtabula, Cuyahoga, be designated as Areas of Concern. The [Black River](#) is the only water system in Ohio where the entire watershed is designated as an Area of Concern. This means impairments to beneficial uses such as fish and wildlife consumption, public swimming beaches and habitat have been found throughout the watershed.

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Extensive progress is being made toward recovery in the lower five-mile area of the Black River. Thanks to a federal enforcement case, some of the most highly contaminated sediments were dredged from the river bottom in 1990. Since then, the fish tumors have dramatically decreased. In 1997, a fish consumption advisory for the area was revised, and steady improvement has continued. In February 2004, the RAP submitted an application to U.S. EPA to have the fish tumor status changed from "impaired" to "in recovery." U.S. EPA approved that request in April 2004.

Based on results from new testing, Ohio EPA and the Black River RAP also asked the Ohio Department of Health (ODH) to reassess the contact advisory that had been in effect for the lower Black River since 1983. After reviewing the new data, ODH lifted the nearly 21-year-old contact advisory in April 2004.

The History of the Black River



In the 1930s, American Shipbuilding made use of the Black River for trade.

Today, the area is home to the new Lorain Harbor Walk Development. Photo courtesy of the [Black River Historical Society](#).

Located in north-central Ohio, the Black River watershed is located primarily in Lorain and Medina counties, but also includes drainage from Cuyahoga, Ashland and Huron counties. The east and west branches of the Black River meet in Elyria's Cascade Park to form the main channel, which then flows 16 miles north into Lake Erie at the port of the city of Lorain.

The Black River is threatened by major impacts throughout the watershed. Historically, pollution from industrial and municipal wastewater discharges contributed extensively to water quality impairments. Contact and fish consumption advisories were issued for the lower five miles of the Black River in 1983. The contact advisory warned against wading, swimming and water skiing. Originally, the fish consumption advisory warned against eating any fish species from that part of the river. At that time, a high incidence of liver and lip cancers was noted in the fish population, particularly the brown bullhead. The tumors were linked to high concentrations of polynuclear aromatic hydrocarbons (PAHs) in river sediments.

Although pollution effects from industrial and municipal wastewater plants has lessened over the years, the Black River is still impacted by other pollution sources. A high residential growth rate, intensive agricultural practices and other land use

practices have directly contributed to pollution in the Black River. Within the watershed, 51 percent of the land is used for agriculture, while only one percent is industrial.

Soil erosion also has caused significant problems in the Black River watershed, with more than 17,000 acres eroding at excessive levels. In these areas of the watershed, cropland accounts for more than 82 percent of that figure. In addition, the natural riparian corridor – a buffer strip of natural vegetation along the river and stream banks – along many areas of the Black River has been disrupted, causing significant amounts of runoff to enter the river and its tributaries.



These two pictures show the Black River mouth before and after a rain event. They dramatically show a sediment plume entering Lake Erie. Sediment is one of the worst problems with the Black River watershed. Photos courtesy of OhioLINK Digital Media Center.

Without the riparian corridor to act as a buffer, chemical pollutants and sediment cannot be adequately filtered before reaching the water. These materials in the water can eliminate fish and macroinvertebrate habitat and reduce species diversity. It can even irritate and clog fish gills and block out the light needed for aquatic plants and algae to survive in the stream bottoms.

In addition, portions of the Black River watershed have been impacted by failing home sewage and semi-public sewage disposal systems. These overburdened and often aging and neglected systems have allowed pathogens and nutrients to enter into the watershed with minimal treatment. In some of Lorain County's older cities, rehabilitation of the sewer systems is necessary to reduce the amount of storm water flowing into local wastewater treatment plants.

Partners Commit to River Cleanup

In response to all of these concerns, the Black River RAP Coordinating Committee was appointed by the director of Ohio EPA in 1991. It includes more than 25 public and private entities as well as individuals. The group's task is to identify pollution problems and implement solutions throughout the watershed.

In the last decade, remarkable progress has been made in the restoration of all of Ohio's Areas of Concern. These improvements are largely due to the determination and hard work of the RAP Coordinating Committees. Although returning these areas to pristine conditions may not be realistic, the restoration of impairments to beneficial uses is both desirable and achievable.



Governor Taft, Director Jones and other participants watch from the boat in the background as Ohio EPA's Division of Surface Water collect fish from the Black River.

The Future of the Black River

These [milestones](#) are the first steps as the Black River progresses toward final and complete restoration. Although more work remains, these changes in the Black River are a sure sign that the river is recovering.

Through a unique, community-based public and private initiative, the RAP committee is focused on overcoming nonpoint source impacts (runoff) in the watershed. The RAP is also educating the public on riparian corridor restoration, precision farming techniques, home sewage disposal system maintenance and best management practices during construction.

The RAP will continue to address and implement solutions to restore the Black River watershed and has adopted the motto "Our River, Our Responsibility." For more information, contact Ted Conlin, Ohio EPA's Black River RAP Coordinator, at (330) 963-1131, or by e-mail at ted.conlin@epa.state.oh.us.

Additional information is available on the Web at:

- [Black River Reaches Two Milestones in Cleanup Journey](#) - Ohio EPA News Release
 - [Pictures of the Earth Day Celebration with Governor Bob Taft](#)
- [Black River Remedial Action Plan Home Page](#)
- [U.S. EPA's Black River Area of Concern Web Site](#)
- [Northeast Ohio Areawide Coordinating Agency \(NOACA\)](#)
- [Black River Sediment Assessment and Remediation Report](#)