

2008 Annual Report

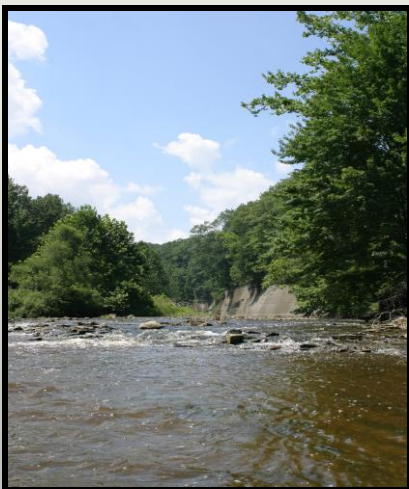
Ashtabula River Remedial Action Plan



The purpose of this Annual Report is to inform the watershed community on the progress made by the Ashtabula River RAP in its efforts to restore impairments to beneficial uses in the Ashtabula River Area of Concern.

The Annual Report provides background information on many of the projects being undertaken by the RAP and its members.

If you would like more information on any of the topics covered in this Annual Report or would like to join the effort to restore the Ashtabula River, please contact any of the Ashtabula River RAP Coordinating Committee members that are referenced at the end of this report.



The Ashtabula River



The Lower Ashtabula River

Beneficial Use Impairments (BUIs)

The Great Lakes Water Quality Agreement, as amended, calls for remedial action plans (RAPs) to be developed to restore and protect any of 14 beneficial uses in Areas of Concern (AOC). An impaired beneficial use means that degradation in the chemical, physical or biological integrity of the AOC is sufficient to cause any of the following:

- 1. Restrictions on fish and wildlife consumption ***
2. Tainting of fish and wildlife flavor
- 3. Degradation of fish or wildlife populations***
- 4. Fish tumors or other deformities**
5. Bird or animal deformities or reproductive problems
- 6. Degradation of benthos**
- 7. Restrictions on dredging activities**
8. Eutrophication or undesirable algae
9. Restrictions of drinking water consumption, or taste and odor problems
10. Beach closings (recreational use)
11. Degradation of aesthetics
12. Added costs to agriculture or industry
13. Degradation of Phytoplankton or zooplankton populations
- 14. Loss of fish and wildlife habitat ***

Bold = Impaired in the Ashtabula River AOC

***** = Impaired for fish criteria only



Ashtabula Harbor Light (Courtesy of USCG)



Early View of Ashtabula Harbor (Courtesy of OhioLink Digital Media Center)



Early View of Ashtabula Harbor (Courtesy of OhioLink Digital Media Center)

More on the Impaired Beneficial Uses in the Ashtabula River AOC:

- **Restrictions on fish consumption**
There is a Do Not Eat advisory for any fish caught from the Ashtabula River between US Route 20 to the river mouth at Lake Erie. This includes all of the Ashtabula River AOC.
- **Degradation of fish populations**
Most of the AOC displays fish community index scores significantly lower than the standard criteria for warm water habitat streams and rivers. The degradation of fish populations has been attributed to physical alterations of the river as well as the legacy of chemical contamination.
- **Fish tumors or other deformities**
Both external and internal (liver) deformities and tumors have been documented in the Ashtabula River fish populations. This impairment has been attributed to chemical contamination of the river sediments.
- **Degradation of benthos**
Some areas of the AOC display benthos community index scores significantly lower than the standard criteria for warm water habitat streams and rivers. This impairment to benthos has been attributed to physical alterations of the river as well as the legacy of chemical contamination.
- **Restrictions on dredging activities**
Prior to the recent dredging operations, river sediments had been classified as highly polluted and toxic due to concentrations of heavy metals, PCBs and other organic compounds.
- **Loss of fish habitat**
Most areas within the Area of Concern display fish habitat index scores significantly lower than the standard criteria for warm water habitat streams and rivers. This impairment has been attributed to physical alterations of the river as well as the legacy of chemical contamination.

A BRIEF HISTORY OF THE AREA

Although the earliest people to live around the Ashtabula River were the mound-builder Native Americans, it is the Iroquois and Algonquin Nations who are assumed as the first settlers of the basin. The Ashtabula area was a dividing line between these two great Native American nations and it was the Iroquois who are credited with the naming of the river. The Iroquois called it “Hash-tah-buh-lah” which has been translated as ‘river of many fish.’ Over the years, the river has also been called Ashtibula River, Riviere Auscubalu and Riviere Oscubolu.



A Map of the Western Reserve

“European” settlement began in 1801 when Thomas Hamilton constructed a log cabin at the river mouth. He was one of the first of an increasing number of pioneers who came to this portion of the Connecticut Western Reserve to carve out a new life. As with the Native Americans, the land was found to be full of game and the rivers to be full of fish.

As settlement progressed, the repeated shoaling across the river mouth became troublesome and it was a constant task to keep it open to Lake Erie. By 1837, the river and harbor had been improved enabling use by steamboats, some of which were built on the riverbanks. Progress really blossomed when the Lake Shore and Michigan Southern Railroad was built in 1852 and the Pittsburg, Youngstown and Ashtabula Railroad laid rail to the harbor in 1873. Ashtabula harbor was becoming very busy as a major supplier of iron ore and coal to regional steel mills.

On Dec. 29, 1876, tragedy occurred when a bridge over the river collapsed while a Lake Shore and Michigan Southern train was crossing. The Ashtabula Horror, as it was called, claimed the lives of 92 people and injured 64 more.

The river and lake shore became important stops of the Underground Railroad but tolerance was not always in fashion. In the late 19th and early 20th centuries, many immigrants came to the blossoming area from Ireland, Finland, Sweden and Italy. Ethnic rivalries among these groups were a major influence on daily life.

Preceding and during the Civil War, many towns located along Lake Erie became integral to the Underground Railroad system. Escaping slaves would hide in the basements of local houses, like the Hubbard House, which is now an Underground Railroad museum, and wait their turn for safe passage to Canada.

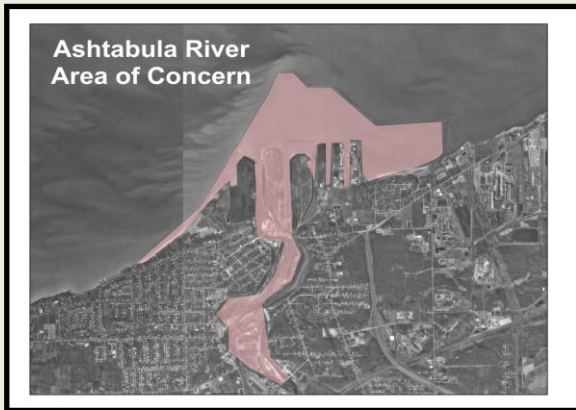
In the 1950s the area grew due to increased harbor activity and an expanding chemical industry. It was here that Rockwell International made brakes for the Space Shuttle and RMI extruded depleted and enriched uranium. At one time the RMI plant and the Ashtabula area were listed by FEMA as expected primary nuclear targets for the Soviet Union.

But with all the new industries and expansion came environmental degradation. Through the times of rapid expansion and ‘progress’ the Ashtabula River was forced to accept unregulated discharges and mismanagement of hazardous waste. This caused the river’s sediments to become seriously contaminated which degraded biological communities. Major pollutants of concern are mercury, chromium, lead, zinc, and numerous chlorinated organic compounds, particularly PCBs, PAHs and low level radionuclides. Regular channel dredging was prevented due to the contaminated sediments, seriously impeding both commercial and recreational navigation. The lower river was listed as a Great Lakes Area of Concern 1985.

CHAIRMEN'S CORNER

Submitted by Matthew Smith and Fred Leitert, Co-chairs, Ashtabula River RAP Advisory Council

For well over a century, shipping, manufacturing and other activities conducted on the lower Ashtabula River resulted in a highly polluted watershed, as was the case for many other rivers throughout the Great Lakes. With the implementation of the Clean Water Act in the early-'70's, the waters of the Ashtabula River and its tributaries were returned to a clean status; however, the river's sediments contained high levels of hazardous pollutants, namely PCB's, PAH's and certain heavy metals.



In 1985 the lower Ashtabula River watershed was designated an “**Area of Concern**” (“**AOC**”) by the International Joint Commission (“**IJC**”), a commission formed by the governments of Canada and the United States. Thus, the lower Ashtabula River was added to the list of watersheds, which totaled 43, throughout the Great Lakes that required environmental remediation. The formation of the **Ashtabula River Remedial Action Plan (“RAP”) Advisory Council** was led by the Ohio EPA in 1988.

The key goals of the RAP were to identify impairments to the watershed, and lead the process of delisting as an AOC. In 1991 the IJC approved the Stage I report of the Ashtabula River RAP; however, progress toward delisting was weighed down by the considerable volume of contaminated sediments, and the seemingly over whelming effort required to remove these sediments.

An overview of the process that led to the removal of these contaminated sediments follows:

- **1993** Ashtabula River Investigation Study completed;
- **1994** U.S.EPA & a Congressional Representative introduce the “**Partnership**” concept as alternative to Superfund;
- **1994 Ashtabula River Partnership** is formed with over 50 partners/stakeholders including U.S.EPA, OEPA, USFWS, U.S. Army Corps of Engineers, Local Governments, Ashtabula City Port Authority (“**PA**”) and the Ashtabula River Cooperation Group II (“**ARCG II**”).
- **2001 Final Comprehensive Management Plan (“CMP”) is issued**, which documents the investigation & feasibility study including risk analyses, alternative evaluations, environmental impact statement, value engineering, community support and remedy selection.
- **2004** Applied for funding from U.S.EPA under the **Great Lakes Legacy Act (GLLA)**.
- **2005** Stephen Johnson, Administrator of U.S. EPA approves project funding under the GLLA.
- **2005** Contracts executed between the PA and U.S.EPA; PA and OEPA; PA and ARCG II; and, PA and ARCG and the State of Ohio.
- Construction of the consolidation facility completed during the summer of '06, Environmental Dredging initiated September '06 and completed October '07.
- Obtained WRDA funding in FY '08 Budget for U.S. ARMY CORPS OF ENGINEERS to conduct Operation & Maintenance dredging of Lower River, which was completed in June 2008.

The Coordinating Committee met in October and agreed that the goals of the Partnership had

been met, namely, the removal of 630,000 cubic yards of contaminated sediments from the River, and the safe disposal in a consolidation facility. Thus, the Partnership was discontinued with emphasis returned to delisting of the Ashtabula River as an AOC through the efforts of the RAP.

The RAP Advisory Council meets quarterly and is seeking interested parties to become participants in the process of delisting the lower Ashtabula River as a Great Lakes Area of Concern.

ASHTABULA RIVER RAP WELCOMES A NEW U.S. EPA RAP LIAISON

Submitted by Danielle Green, U.S.EPA, Great Lakes National Program Office

As I step into the federal RAP liaison position for the Ashtabula Area of Concern, I am impressed with how much progress has been made. Under the Legacy Act, an investment of \$60 million removed over 500,000 cubic yards of contaminated sediments from the Ashtabula River. An additional investment by the U.S. Army Corps of Engineers allowed for the removal of another 130,000 cubic yards of contaminated sediments. Currently, an ecological restoration plan is being developed to restore the habitat that was disturbed during the dredging activities.

Under the Natural Resource Damage Assessment (NRDA) in the Ashtabula River and Harbor, injuries to natural resources that have occurred due to the release of hazardous substances are being assessed along with a determination whether compensation is due to the public. Compensation will be used to restore, rehabilitate, replace or acquire the equivalent of the injured natural resources and the services they provide.

RAP groups, by design, are well positioned to develop community-based solutions for the AOC. It is in line with this spirit that I introduce myself to the reconvened RAP committee. Partnering among local, state and federal agencies and community stakeholders will continue the momentum of progress. Working together towards the common goal of improving the BUIs, we can look toward a future where Ashtabula is delisted as an Area of Concern: the fish thrive, biodiversity is restored, and the community regards the river with pride.

As the U.S. EPA liaison for the Ashtabula RAP, I will serve as a portal to U.S. EPA. I will advocate for the needs of the RAP within U.S. EPA and will provide (or find an expert who can provide) technical assistance and guidance on issues as they come up. I am humbled by the complexity of the environmental challenges, inspired by the successes and looking forward to being involved with a stakeholder group that keeps moving forward to tackle the needs of the watershed. Feel free to contact me at green.danielle@epa.gov, or 312-886-7594.

ASHTABULA RIVER ON THE ROAD TO RECOVERY

Submitted by Ken Podsiadlo, U.S. Army Corps of Engineers, Buffalo District

Ironically, while much of the watershed is pristine and still in its intact natural state, the lowest one-and-one-half miles of the Ashtabula River is among the most polluted bodies of water on the Great Lakes. Since construction of the first

Federal navigation improvements in 1826, the harbor and its transportation facilities have been principle features of the city.

Coincident with industrial growth during the 1940s through the late 1970s, unregulated discharges of wastes caused the river's sediments to become heavily contaminated. In the early 1960's, long before passage of the Clean Water Act and the National Environmental Policy Act, it was recognized that the sediments dredged from the river were unsuitable for disposal in the open waters of Lake Erie.

From the early 1970's through the mid 1990's, efforts to identify suitable sites for disposal of the sediments dredged from the river were unsuccessful. Because of this, much of the river has not been dredged since 1962. This lack of maintenance significantly impacted navigation, forcing closure of both commercial and recreational facilities, to the detriment of the local and regional economy. Due to the severely limited depths presently found in the river upstream of the 5th Street Bridge, less than 50% of the 1300 slips available for recreational vessels in 2005 were accessible. Operators of personal watercraft such as jet skis, who may be unfamiliar with the local conditions, have run aground in the center of the Federal navigation channel where the authorized channel depth was 18 feet.

In 1994, representatives of local government, state and Federal agencies, parties potentially responsible for remediation of the contaminants, local business, recreational groups, and other representatives of the community pledged their commitment to developing a plan for remediation of the Ashtabula River, and began working cooperatively under the charter of the Ashtabula River Partnership. The central objective of the Partnership was development and implementation of an environmentally sound and efficient plan for remediation of the river.

Under the lead of the Partnership, the Buffalo District US Army Corps of Engineers guided the completion of a feasibility study, and subsequent engineering and design of a plan for removal and disposal of nearly 700,000 cubic yards of contaminated sediment from the river. The project has removed an estimated 25,000 pounds of PCBs and other contaminants from the bottom of the river.

On December 14, 2005, the U.S. EPA announced their agreement with a group of area industries, the State of Ohio, and the Ashtabula Port Authority, to jointly fund the execution of the major portion of the plan under the Great Lakes Legacy Act. The Act, signed into law in 2002, provides funding for the implementation of plans for remediation of contaminated sediment in Areas of Concern located wholly or partially in the United States. The remaining portion of the plan would be funded under existing authorities for maintenance of the navigation channel by the US Army Corps of Engineers.



Dredging Operations in the Ashtabula River

June 5, 2006 was a bright day in Ashtabula, in more than one sense. Dignitaries gathered for a groundbreaking, to celebrate the dawn of a new age for the river, and herald the ceremonial start of the long awaited project. Ongoing construction of the Federally- licensed facility to contain the dredged sediments formed the backdrop for the ceremony.

Among those on hand were: U.S. EPA Administrator Stephen Johnson; then Ohio Governor Bob Taft; Congressman Steven LaTourette; Great Lakes and Ohio River Division Commander BG Bruce Berwick; Ohio EPA Director Joe Koncelik, Ashtabula City Manager Anthony Cantagalo, and Fred Leitert Co-Chair of the Ashtabula River Partnership Coordination Committee.



BG Bruce Berwick looks on as Congressman Steven LaTourette addresses river stakeholders

Stephen Johnson, U.S. Environmental Protection Agency administrator, led the dignitaries praising the project and the partnerships that made it happen. Congressman LaTourette passed his congratulations to the members of the Ashtabula River Partnership. Governor Taft noted that, without the partner's perseverance, no one would be here today. Ashtabula City Manager Anthony Cantagallo, who spent many years away from the area, looked forward to seeing the river restored to its former glory.

EPA Administrator Johnson assured the crowd the project will deliver swift and substantial results, restoring financial health to the area by reviving recreational opportunities and property values. Acknowledging the critical role that partnership played in bringing the project to this

point, and the need for U.S. Army Corps of Engineers to obtain funding for completion of its portion, BG Bruce Berwick remarked, "The river project is the first in Ohio to be funded through the Great Lakes Legacy Act...our partners have done their part. We must do ours."

U.S. Army Corps of Engineer's project encompasses 1,900 linear feet of channel in the lower river used by deep draft commercial navigation. With contaminant sources under control, once the one-time removal and disposal of the existing contaminated sediments is completed, future dredged sediments can be expected to be suitable for open lake disposal, at considerable savings in cost.

The channel dredging was completed in 2008. Now it is hoped that the Ashtabula will again be the river of many fish, and no longer suffer the stigma of listing as an area of concern.

In a recent speech before the Great Lakes Commission, Assistant Secretary of the Army for Civil Works, John Paul Woodley, Jr., cited the Ashtabula River as an example of collaboration between federal agencies and non-federal partners that benefits the Great Lakes. Mr. Woodley also stated his intent to come back to Ashtabula this summer for the ceremony marking the completion of this collaborative project.

As Winston Churchill said after a critical British victory in World War II, "Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning."

THE UPPER ASHTABULA RIVER RECEIVES PRESTIGIOUS SCENIC RIVER DESIGNATION

Submitted by Matthew Smith, Ashtabula RAP Co-Chair and Assistant Scenic River Manager, ODNR

If you mention the Ashtabula River many people will talk about the years of contamination of the river from industrial dischargers. But what those who live in the Ashtabula Watershed will tell you is that the river is one of the most beautiful rivers in Ohio. For years the Ashtabula Harbor has received all of the attention because of the

extremely polluted sediments in the harbors river bed. In 2007 after many years of hard work the environmental dredging was completed, and habitat restoration, conservation and protection can begin.

But local citizens and groups including; landowners, Ashtabula Township Park Commission, Ashtabula Metro Parks, Ashtabula City Parks, Sam Wharram Nature Club, Ashtabula Parks Foundation, Ashtabula Soil & Water Conservation District, Grand River Partners Inc., Cleveland Museum of Natural History, Ashtabula Remedial Action Plan (RAP) and state agencies decided that the rest of the river needed the attention that it deserved.



The Ashtabula Scenic River

On July 12th, 2006 the above mentioned groups came together to formally establish Ashtabula River Watershed Steering Committee. The steering committee Chairman, Mike Wayman, has been a key part in leading the committee, getting resolutions of support, talking to local citizens, and bringing partners to the table. Other committee members include Marc Hanneman (vice-chair), Nathan Paskey (Secretary), Betty Morrison, Theiry DeLorme, Bill Dingledine, Tom Swank, Jim Bissell, Phyllis Willis, Carl Anderson, and Bud Hill.

In August 2006 the Committee met with Scenic River staff. Discussions were initiated about the division conducting a designation study of the Ashtabula River. By December 2006 the study was started, with more than half of the local political subdivisions passing resolutions of support for the study. ODNr Scenic Rivers

received funding for completing both the Scenic River Designation Study and the watershed Action Plan through a NOAA grant through the ODNr Office of Coastal Management. By February 2007 100% of all local political subdivisions had passed resolutions supporting designation study. Local support has been the leading factor in conducting this study.

On October 30, 2008 after reviewing the designation study and conducting two public meetings ODNr Director Sean Logan officially designated 46.29 Ashtabula river miles as a State Scenic River.

The following is a description of the Ashtabula State Scenic River designated segments:

- The Ashtabula River – from the confluence of the East Branch and West Branch of the Ashtabula River at river mile 27.54, downstream to the East 24th Street Bridge crossing at river mile 2.3, is a designated as state scenic river for a total distance of 25.24 miles.
- The East Branch of the Ashtabula River – from Pennline Fen at river mile 12.0, downstream to the mouth of the East Branch at river mile 0.0, is designated as a state scenic river for a total distance of 12.0 miles.
- The West Branch of the Ashtabula River – from the North Richmond Road (County Road 302) bridge crossing at river mile 9.05, downstream to the mouth of the West Branch at river mile 0.0, is designated as a state scenic river for a total distance of 9.05 miles.

With the designation of the river the Ashtabula River achieved, the Ashtabula River Watershed Steering Committee is now working to develop a watershed action plan. This plan will address conservation initiatives to protect water quality in the Ashtabula River. Many partners will be brought to the table to complete this plan.

For those of you who know of the Ashtabula River but are not familiar with its beauty consider coming up to see it. You can enjoy steelhead and smallmouth bass fishing, tour the 6 covered bridges in the watershed, visit wineries, visit the

Olin's Covered Bridge Museum, The Ashtabula Maritime Museum, walk through Indian Trails Park, and enjoy spring time canoe trips in the gorge through which the Ashtabula River flows. The Ashtabula watershed has great biological diversity for birders, wildflower observers, and native fish enthusiasts.

While the Scenic River status does not include the Area of Concern, the fact that the upper basin of the Ashtabula River can achieve such a

prestigious designation will be an extremely important component to the restoration efforts of the lower river and harbor. Now that the contaminated sediments have been removed, the Ashtabula River Area of Concern can be expected to recover quickly, considering that the source waters for the AOC come from a high-quality natural system that includes an outstanding wooded riparian corridor and diverse populations of wildlife and plants.

THERE'S MORE WORK TO BE DONE, YOU CAN HELP!

The restoration of the Ashtabula River Area of Concern has come a long way but more work needs to be done and you can help. Some of the issues that the Ashtabula River RAP Council will start to focus on include:

- **Monitoring improvements**
The RAP Council will be closely monitoring the river's response and recovery to the recent environmental dredging operation.
- **Urban stormwater runoff**
Stormwater runoff is generated when precipitation from rain and snowmelt events flows over land or impervious surfaces and does not percolate into the ground. As the runoff flows over the land or impervious surfaces (paved streets, parking lots, and building rooftops), it accumulates debris, chemicals, sediment or other pollutants that could adversely affect water quality if the runoff is discharged untreated. The RAP will look to find cost effective and innovative means of dealing with urban stormwater runoff.

- **Outreach and Education**
The RAP Council will look to develop outreach and educational materials to broaden the awareness of living in a watershed.
- **Developing partnerships**
The RAP Council will look to partner with the Port Authority and other river stakeholders in an effort to secure the means of dredging shoaled areas of the lower river in an environmentally friendly manner. The RAP Council will also look to partner with the City and other river stakeholders in protecting natural areas, removing invasive species and providing habitat along armored riverbanks.

Your involvement and input are extremely important to the restoration of the river. If you would like to learn more about the Ashtabula River Area of Concern or if you are interested in helping restore and protect this river system, the Ashtabula River RAP would like to hear from you. You may contact any of the RAP Advisory Council members who are listed below.

Ashtabula River RAP Advisory Council Members

RAP Officials

Co-Chairs:

Fred Leitert, Ashtabula City Port Authority
Matthew Smith, ODNR Scenic Rivers

Secretary:

Frank Lichtkoppler, Ohio Sea Grant

Treasurer:

Xavier Turchetta

EPA RAP Liaison:

Danielle Green, U.S EPA

RAP Coordinator:

Ted Conlin, Ohio EPA

Local Jurisdictions

Ashtabula City Port Authority

Alicia McFarland

Ashtabula County Health Department

Raymond Saporito

Ashtabula Watershed Steering Committee

Mike Wayman

State/Federal Agencies

U.S. Army Corps of Engineers

Ken Podsiadlo

Ohio EPA

Sig Williams

Industry/Commercial

Representatives

Brockway Marine

Grant Brockway

Citizen Representatives

Carl Anderson

Mary Dube

Barrie Bottorf

Jim Bissell

John Higgins

John Caston

Bob Johnson

Doug Towner

Ashtabula River RAP Contacts

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US Army Corps of Engineers, Buffalo District

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Ohio Department of Natural Resources

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Ashtabula Scenic River – ODNR

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Ohio Environmental Protection Agency

Northeast District Office
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Ohio Sea Grant

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Ashtabula City Port Authority

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Ashtabula City Health Department

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