The Cuyahoga River Area of Concern



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What is an Area of Concern?

reas of Concern, or AOCs, are places within the Great Lakes region where human activities have caused serious damage to the environment, to the point that fish populations and other aquatic species are harmed and traditional uses of the land and water are negatively affected or impossible. Within the Great Lakes, 43 AOCs have been designated and federal and state agencies, under the supervision of local advisory committees, are working to clean up the polluted sites.

Ohio Sea Grant

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Ohio Sea Grant, based at The Ohio State University, is one of 33 state programs in the National Sea Grant College Program of the National Oceanic and Atmospheric Administration (NOAA), Department of Commerce. Ohio Sea Grant is supported by the Ohio Board of Regents, Ohio State University Extension, other universities, industries, and associations.

Who determines if there is an Area of Concern?

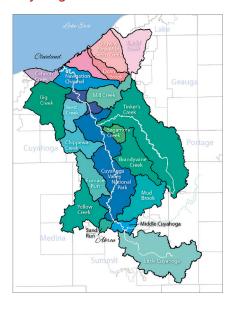
A binational agreement between the United States and Canada called the Great Lakes Water Quality Agreement (GLWQA) determines the locations of AOCs throughout the Great Lakes. According to the GLWQA, each of the AOCs must develop a Remedial Action Plan (RAP) that identifies all of the environmental problems (called Beneficial Use Impairments, or BUIs) and their causes. Local environmental protection agencies must then develop restoration strategies and implement them, monitor the effectiveness of the restoration projects and ultimately show that the area has been restored.





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Cuyahoga River AOC

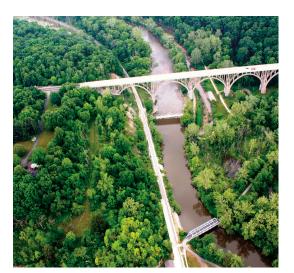


What are Beneficial Use Impairments (BUIs) and how many are along the Cuyahoga River?

Beneficial Use Impairments (BUIs) either restrict people's ability to use the river or lake, negatively impact fish and other aquatic communities, or degrade water quality. Examples might include not being able to swim at certain beaches, or healthy fish populations not surviving because the water is not clean enough. For the Cuyahoga River AOC, there are currently 10 BUIs that the RAP has targeted for restoration.

Beneficial Use Impairments

- Restrictions on Fish Consumption
- Beach Closings (recreational contact)
- Degradation of Fish Populations
- Public Access and Recreation Impairments
- ▶ Fish Tumors or Other Deformities
- Degradation of Aesthetics
- Degradation of Benthos (organisms that live on the river bottom)
- Eutrophication or Undesirable Algae (algal blooms)
- Restrictions on Navigational Dredging
- Loss of Fish Habitat



Is the entire Cuyahoga River an Area of Concern?

The lower 46.5 miles of the Cuyahoga River are included in the Area of Concern. So are all of the tributaries that drain into that section of the river and the shoreline adjacent to the river's mouth, including tributaries that flow directly into Lake Erie. The entire AOC covers an area that stretches from Big Creek on the western edge of Cuyahoga County to Euclid Creek in the east, and from the shore of Lake Erie south all the way to the City of Akron. In total, the area spans parts of Cuyahoga, Lake, Geauga, Portage, Summit, and Medina counties.

Why was the Cuyahoga River named an Area of Concern?

Contamination of the Cuyahoga River came from lots of different places. Municipal and industrial discharges played a role, as did commercial and

residential development, hazardous waste disposal sites, urban stormwater runoff, and combined sewer overflows (during heavy rains untreated stormwater and wastewater combine and discharge directly into the river). Pollution from these sources filled the river with oil, sewage, industrial waste, and floating debris. Incompatible development along the banks of the river also caused erosion that has led to problems with sedimentation. All of this contamination resulted in poor water quality, damage to wildlife habitats, and ultimately a major loss of biodiversity.

Who is working to clean up the river?

The Ohio Environmental Protection Agency (OEPA) is working with the Cuyahoga River Area of Concern Advisory Committee to lead restoration actions. The Advisory Committee is managed by the nonprofit organization Cuyahoga River Restoration, and is made up of representatives from Ohio Sea Grant and other nonprofit community groups, businesses, government agencies, and local residents concerned with cleaning up the Cuyahoga watershed.

What actions are taking place?

Some actions are very large in scale, such as diverting or removing dams, or installing green stormwater infrastructure and underground holding tanks to reduce combined sewer overflows. Other actions are smaller, like restoring riverbank vegetation, working with landowners to plant riparian buffers along streams, and developing fish habitat along barren stretches of the shipping channel close to the river's mouth. Much of the progress to delist BUIs comes thanks to education and outreach that informs the public about the problems facing the Cuyahoga River and encourages local residents to contribute to potential solutions such as preventing septic tank leaks and maintaining strips of native plants around drainage grates.

Where to find more information on Areas of Concern

- Ohio Sea Grant College Program ohioseagrant.osu.edu
- Ohio Environmental Protection Agency epa.ohio.gov
- Cuyahoga River AOC cuyahogaaoc.org