



## Cleaning Up Toxic Substances and Restoring Degraded Areas of Concern

The Great Lakes suffer from a legacy of pollution that continues to poison fish, threaten drinking water and hamper waterfront development. Continuing sources of toxic substances include releases from contaminated sediments; industrial and municipal point sources; nonpoint sources including atmospheric deposition, agricultural and urban runoff, and contaminated groundwater; and cycling of these substances within the ecosystem. The most contaminated rivers, lakes and bays in the Great Lakes – the “Areas of Concern” designated under the Great Lakes Water Quality Agreement – are undergoing costly cleanups to remove toxic sediments and other pollution. Severe pollution in these “toxic hot spots” has caused beneficial use impairments, such as restrictions on drinking water and beach closures. The Great Lakes states, in collaboration with U.S. EPA and local communities, are implementing comprehensive cleanup plans to restore beneficial uses for local residents. Contaminated sediments are the most significant – and most costly – problem in the AOCs. In 2002, the Great Lakes Legacy Act (P.L. 107-303) was passed to provide a dedicated funding source for cleaning up contaminated sediments in the AOCs. This highly successful program has removed nearly one million cubic yards of toxic sediments from the AOCs and leveraged more than \$51 million in nonfederal funding. Despite this progress, it is estimated that total cleanup costs for these sites alone could range from \$1.5 billion to \$4.5 billion.



*Kalamazoo River, Plainwell Impoundment, Michigan, © U.S. EPA.*

In addition to well-known toxic pollutants like polychlorinated biphenyls (PCBs) and mercury, there are new chemicals of concern that have been detected in the Great Lakes in recent years that may threaten human and ecosystem health. Some of these chemicals are found in pharmaceuticals and personal care products for which very little environmental information is available. As past pollution is cleaned up, it is critical to also safeguard the Great Lakes against future threats. Doing so will require a greater understanding of the potential hazards from these chemicals, how humans and wildlife are exposed to them, and how to prevent their release into the environment.

**Request:** To address the threat of legacy and emerging toxic contaminants, the Great Lakes Commission asks Congress to maintain funding for the Great Lakes Restoration Initiative at the FY 2010 level of \$475 million. This includes funding to clean up toxic sediments under the Great Lakes Legacy Act.

### Action under the Great Lakes Restoration Initiative

The Great Lakes Restoration Initiative (GLRI) strategically targets urgent problems facing the Great Lakes in five key areas, including restoring degraded Areas of Concern and eliminating the continued release of toxic substances. The GLRI provides funding for a number of critical programs, including the Great Lakes Legacy Act, the primary federal program for cleaning up toxic sediments in the Great Lakes. The Initiative also supports the work of state and local agencies that are implementing comprehensive restoration plans for the AOCs. It supports programs to prevent the release of toxic substances; reduce exposure to toxics from contaminated sources; and prevent contamination of fish and wildlife in the Great Lakes. The GLRI is guided by a five-year action plan that establishes outcome-oriented performance goals and criteria for measuring progress. The specific objectives for restoring AOCs and cleaning up toxic substances include:

- Collecting or preventing the release of 50 million pounds of electronic waste, 50 million pills of unwanted medicines, and five million pounds of household hazardous waste;
- Cleaning up five Areas of Concern;
- Removing 80 Beneficial Use Impairments (BUIs) in the AOCs;
- Remediating 9.6 million cubic yards of contaminated sediments; and
- Maintaining at least a 5 percent average annual decline in average concentrations of PCBs in whole lake trout and walleye.

## Support for Core Federal Programs

In addition to the GLRI, the Great Lakes Commission urges Congress to provide funding for the following core programs that support the cleanup of toxic substances and restoration of degraded AOCs:

- **Great Lakes Legacy Act** which provides critical support for cleaning up contaminated sediments. In addition to funding for this program, the Commission is requesting that Congress reauthorize the act to increase its authorized funding level to \$150 million annually.
- **U.S. Army Corps of Engineers Great Lakes Remedial Action Plan Program** which provides engineering and planning assistance to prepare sites for Legacy Act cleanups and to address other pollution problems.
- **National Oceanic and Atmospheric Administration Great Lakes Habitat Restoration Program** that supports restoration of fish and wildlife resources in the AOCs.
- **Great Lakes Air Deposition Program** that advances state, tribal and regional efforts to track and halt the release of mercury and other toxic air pollutants.

## Progress to Date

**Cleaning up toxic sediments under the Great Lakes Legacy Act:** Six cleanup projects have been completed and five more are underway with a federal cost share of \$141 million and local funding of \$103 million. When completed, these 11 projects are projected to remove more than 1.6 million cubic yards of toxic sediments from the Great Lakes. Currently 10 additional projects are in development and are expected to lead to eventual cleanups that are projected to require more than \$160 million in federal funding under the Legacy Act.

**Restoring beneficial uses and “delisting” AOCs:** The first U.S. AOC – Oswego River in New York – was removed (or “de-listed”) from the list of AOCs in 2006. In addition, AOCs are also removing individual beneficial use impairments as environmental goals are met. The GLRI sets a goal of delisting five more AOCs and removing 80 beneficial use impairments by 2014. Continued funding for the GLRI over the next five years will be critical to achieving these restoration goals.

**Improving valuable fish and wildlife resources:** As contaminated sediment cleanups are completed, U.S. EPA, NOAA and other agencies are rehabilitating fish and wildlife resources. In 2009 NOAA received more than 100 proposals requesting over \$300 million for large-scale habitat restoration projects in the Great Lakes. With continued support, this “clean and restore” approach will ensure a clean and fully-functional ecosystem, while enhancing valuable fish and wildlife resources and improving recreational opportunities.

**Tracking and Eliminating Toxic Air Pollution:** Great Lakes states have made considerable progress in identifying potential sources of toxic substances and forming a comprehensive inventory of atmospheric sources. Progress has also been made in developing systems and programs to monitor the air, water and fish for these substances. Additional support is needed to promote systematic modeling that will link emissions information with environmental monitoring data and, ultimately, to human and ecological health and outcomes.

## Economic and Environmental Benefits

Cleaning up toxic pollution and restoring AOCs will safeguard public health, restore beneficial uses, increase property values and promote economic development. In AOCs, cleanup efforts address public health threats from toxic sediments, bacterial contamination and other pollution problems. Implementing effective strategies for decreasing toxic contaminants in the Great Lakes alleviates risks to human health and wildlife in the region from high concentrations of mercury and other dangerous toxic substances. Cleaning up the AOCs and reducing toxic contamination will also restore and enhance beneficial uses that are important to local communities, such as swimming beaches, fishing, and drinking water. In addition, the AOCs include valuable waterfront areas that are vital for economic development. Studies project that property values in areas near contaminated sites will increase by up to 25 percent after the sites are cleaned up, and The Brookings Institution has projected that cleaning up contaminated sediments in the AOCs will raise coastal property values by \$12 billion to \$19 billion.

## More Information

**Great Lakes Restoration Initiative:** [www.greatlakesrestoration.us](http://www.greatlakesrestoration.us)

**U.S. EPA Areas of Concern:** [www.epa.gov/glnpo/aoc](http://www.epa.gov/glnpo/aoc)

**Great Lakes Legacy Act:** [www.epa.gov/glnpo/sediment/legacy](http://www.epa.gov/glnpo/sediment/legacy)

**Great Lakes Air Deposition Program:** [www.glc.org/glad](http://www.glc.org/glad)