Sediment Cleanup Designed for East Chicago Waterways



East Chicago

The East Chicago Waterway Management District (District) and its federal partner, U.S. Environmental Protection Agency, have designed a plan to clean up the pollution in some areas of the Grand Calumet River, Indiana Harbor Canal and Lake George Canal in Northwest Indiana. The Grand Calumet River flows 13 miles through the heavy industrial cities of Gary, East Chicago and Hammond. The river then drains into Lake Michigan through the Indiana Harbor Canal. Currently, most of the river's water is drainage from the city and nearby industries. The final cleanup options are designed to protect people and the environment long term, meet state and local laws and be cost-effective. The District and EPA held community and stakeholder meetings for feedback on the cleanup plan and considered the comments received in the final design.

Cleanup options

Containment, removal or a combination of both will be used to clean up the different areas of the river and canal. The cleanup option picked for each area is based on sediment (mud) testing in the waterways and environmental conditions in each of the areas.

May 2016

Containment



This photo shows the equipment used to contain the polluted mud in the river. A cover of one or more layers will be used depending on the specific conditions of the area. Sand and other materials, such as clay and activated carbon will create a barrier between remaining pollution and the river. A layer of gravel will be put on top to prevent erosion.

Removal



This photo shows the equipment used to remove the polluted mud. This process is called hydraulic dredging. The mud is removed from the river and pumped through a pipeline that sends it to a separate area to dry out.



Tubes made of special fabric are pumped full of the wet mud during dredging. These tubes trap the polluted mud and drain excess water to dry it out.

Once dry, the polluted dirt is put into trucks and then taken to an off-site, EPA-approved landfill.





Project funding

Funding planning and design

In December of 2013, the District signed a Project Agreement with EPA under the Great Lakes Legacy Act. The purpose was to study, propose options and select a cleanup design of polluted sections of the Grand Calumet River and Indiana Harbor Ship Canal.

Funding a cleanup

Moving forward, a new Project Agreement must be signed to fund the cleanup of the waterways. The project team is looking for partners. Anyone interested in entering into a partnership agreement should contact Fernando M. Treviño, ECWMD Executive Director, at 219-741-7714 (mobile), or fmtconsulting@aol.com or Brenda Jones, 312-886-7188, or jones.brenda@epa.gov.

Cleanup schedule

EPA and its project partners will decide on the cleanup schedule once funding for the project is available

At this time, the District and EPA will plan meetings to give more information about future activities.

Under the GLLA, EPA can provide up to 65 percent of the cost of sediment cleanup and restoration work. The rest comes from cities, states, businesses and other nonfederal partners. EPA's partners can provide funding as money or as allowable "in-kind" contributions. In-kind contributions are services or products provided by an organization, such as property access, water treatment or landfill space.

	East Chicago				Hammond	
	Grand Calumet River East	Grand Calumet River West	Indiana Harbor Canal	Lake George Canal East Section	Lake George Canal Middle Section	Lake George Canal West Section
Action	Containment	Removal (32,000 cubic yards) and Containment	Removal (30,000 cubic yards) and Containment	Removal (60,000 cubic yards)	Containment	Removal (122,000 cubic yards)
Cost	\$6.2 million	\$9.9 million	\$15 million	\$8.2 million	\$9.7 million	\$11.8 million

The table below summarizes the action for each section and the estimated cost.

For more information

Project-related documents are available on the Web: www.in.gov/ecwmd/

For more information on other sediment work in the Grand Calumet River visit www.greatlakesmud.org.