Cleanup Activities to Begin in the Lower Rouge River – Old Channel

Lower Rouge River – Old Channel

Great Lakes Legacy Act Project

Detroit, Michigan Spring 2018

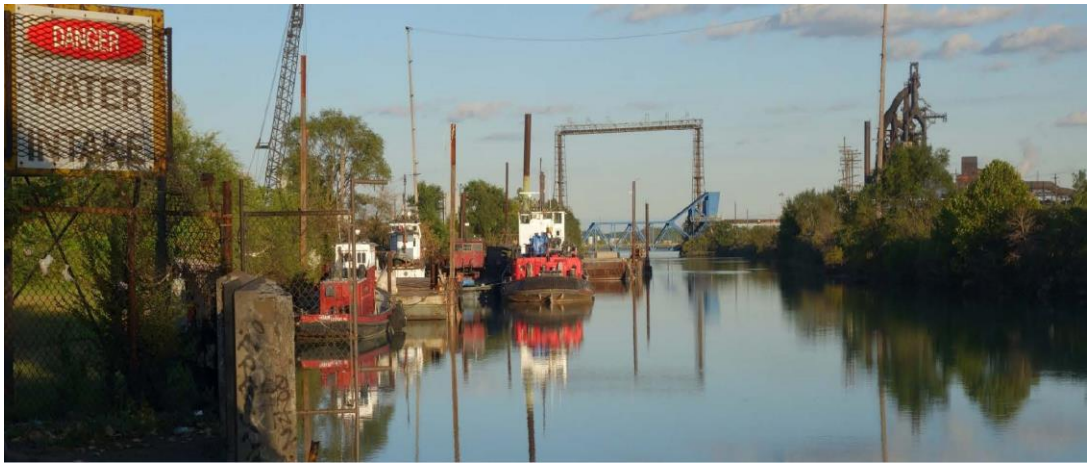

Figure 1. Lower Rouge River – Old Channel.

The U.S. Environmental Protection Agency's (EPA's) Great Lakes National Program Office is working with its non-federal sponsor, Honeywell, Inc. (Honeywell), to clean up a 0.75-mile stretch of the Lower Rouge River – Old Channel (LRROC), Detroit, Michigan.

This project will include construction of a permanent bulkhead wall along part of the Old Channel and removal of 70,000 cubic yards of sediment from the bottom of the river that is polluted with coal tar and other petroleum products. The project will also involve removal of large debris like metal, wood, tires, and cars that have been discarded in the river. The project is expected to begin this spring and be completed in 2019.

Project Overview

The shoreline and channel slide slopes of the LRROC are steep and unstable in many areas. To safely remove sediment, Phase I of the project involves the construction of a permanent sheetpile bulkhead wall along 2,500 feet of the shoreline. The permanent wall will be kept in place by a smaller anchor wall buried behind it and connected by steel rods called tie-backs.

Phase II will include the sediment cleanup phase. During Phase II, other places along the shoreline will need stabilization; in those cases, temporary sheetpile walls will be used. After dredging these areas, the channel slide slopes will be reconstructed with clean backfill and the temporary sheetpile will be removed and reused in another area.

Great Lakes Restoration Initiative (GLRI)
The GLRI is the largest investment in the Great Lakes in two decades. Sixteen federal departments or agencies are working together on five priorities:

- Cleaning up toxics and Areas of Concern
- Combating invasive species
- Protecting the lakes from polluted runoff
- Restoring wetlands and other habitats
- Raising public awareness, tracking progress, and working with partners.

GLRI's Legacy Act
The Great Lakes Legacy Act can provide up to 65 percent of the cost of sediment cleanup and restoration work in an Area of Concern. The rest comes from cities, states, and businesses. Since 2002, Legacy Act partnerships have cleaned up 21 sites in 6 Great Lakes states and remediated about 4.1 million cubic yards of contaminated sediment.

Completed cleanups have been a springboard for communities to build a foundation for future growth by transforming former toxic hot spots into attractive locations. Areas that were obstacles to economic growth are now valuable waterfront assets.

Contact EPA
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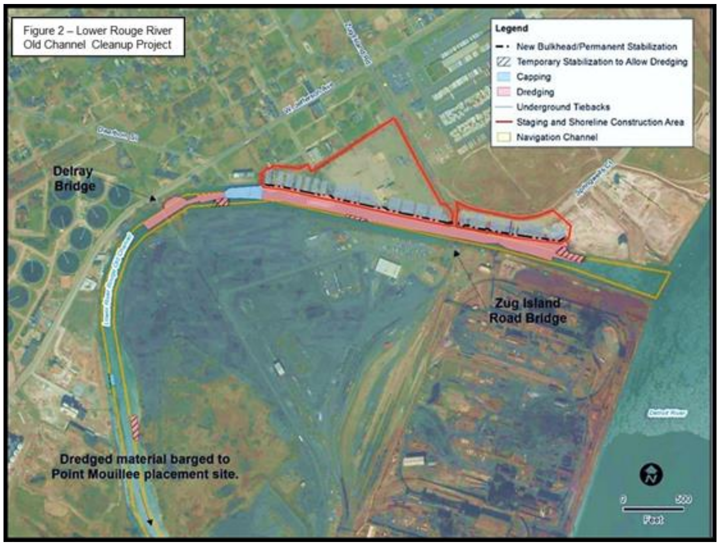

Figure 2. This aerial photo shows the project area and plans for the Lower Rouge River – Old Channel sediment cleanup.

Phase I – Wall Construction Activities

Several things need to happen to make sure everything is in place before the actual cleanup begins. The first component will be construction of the permanent bulkhead wall. This activity includes:

- Preparing the former Detroit Tar site for wall construction staging, storage, waste handling, and site operations
- Installing soil erosion and sediment controls
- Monitoring water quality during construction
- Trenching and debris removal along the shoreline where the permanent wall will be installed, and the upland area where the anchor wall and tie-backs will be installed
- Installing a 2,500-foot-long permanent wall along Ferriss Marine and the former Detroit Tar and Coke sites, with gaps for active utilities and the Zug Island bridge footings
- Installing the anchor wall and tie-backs about 70-130 feet from the permanent wall
- Restoring the areas where the wall is installed.

There will be waste generated during construction of the wall consisting of contaminated soil, debris, and water. Water will be treated at the treatment plant on the Detroit Tar site. The other waste will be handled onsite and disposed of at a landfill.

Phase II - Sediment Dredging, and Capping

The cleanup phase, Phase II, will involve dredging of approximately 70,000 cubic yards of sediment from 10 acres within the LRROC. The sediment will be transported offsite by barge and disposed of at the U.S. Army Corps of Engineers Pt. Mouillee Confined Disposal Facility in Monroe, Michigan.

Specially designed barriers (silt curtains) will be placed in the water around the dredging to limit the movement of suspended sediment from the site. The Michigan Department of Environmental Quality has established water quality requirements for the amount of suspended sediment allowable from the dredging and water quality will be continuously monitored to make sure the requirements are met.

After dredging, clay and rock will be placed over about 1 acre of the bottom of the river to isolate and cap sediment that cannot be removed safely.

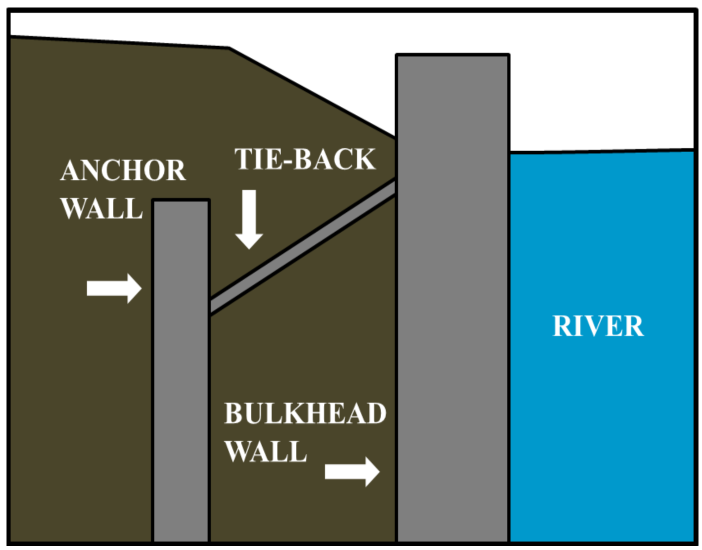

Figure 3. Example of bulkhead and anchor wall.

The dredging will involve installation of temporary walls for bank support, dredging, transportation and disposal, water treatment, monitoring, capping, and restoration. Activities include:

- Installing soil erosion and sediment controls
- Preparing the former Detroit Tar site to serve as a staging area for storage, water treatment, debris handling, and site operations
- Building a water treatment area for washwater and stormwater
- Removing and disposing of/recycling debris and in-water obstacles

- Treating water
- Installing temporary sheetpile for river bank support during dredging
- Monitoring water quality
- Installing “silt curtains” to reduce the amount of suspended sediment from the dredging and protect a water intake
- Removing 70,000 cubic yards of polluted sediment with a sealed clamshell bucket followed by shipment by barge to Pt. Mouillee in Monroe, Michigan
- Capping the bottom of the river with clay and rock where sediment cannot be safely removed
- Replacing key in-water structures
- Restoring the staging area and other disturbed areas.

Short-Term Local Impacts

During the project, there may be more traffic than usual in the area for workers, delivery of material, and disposal of debris.

Installation of the anchor wall for the permanent wall requires construction at the end of Springwells Court. During construction, the last 800 feet of the road will be closed. The rest of Springwells Court will not be affected.

Construction of the anchor wall also requires temporary closure of the last 50 feet of Medina Street and the eastern half of Medina Street for another 50 feet. The construction will involve removing pavement, installing tie-backs, and restoring the road. A barricade and signs will be posted at the intersection of Medina Street and Cary Street allowing through traffic only for residents and businesses.

Schedule

Permanent bulkhead wall construction is expected to begin in the spring of 2018 and take approximately 13 months. Dredging and capping is expected to begin in early 2019, following completion of the sheetpile wall, and will take about 9 months to complete.

Partners

Honeywell

US Army Corps of Engineers®

DEQ Department of Environmental Quality

MOGL Michigan Office of the Great Lakes

EA Engineering, Science, and Technology, Inc., PBC

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