

For more information

If you would like more information on the Ruddiman Creek/Ruddiman Pond project, you may contact one these team members:

Marc Tuchman Project Manager EPA Great Lakes National Program Office (312) 353-1369 tuchman.marc@epa.gov

To reach EPA staff toll-free, call (800) 621-8431, 10 a.m. - 5:30 p.m., weekdays.

Mike Alexander Project Manager Michigan DEQ (517) 335-4189 alexandm@michigan.gov

To learn more about the Great Lakes Legacy Act, please visit epa.gov/glla/

Great Lakes Legacy Act Cleanup of Ruddiman Creek Finished on Schedule

Muskegon Lake Area of Concern Muskegon, Michigan

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Federal and state government officials say the \$13.5 million dredging and cleanup project for Ruddiman Creek and Ruddiman Pond finished on schedule this month and resulted in the removal of about 90,000 cubic yards of contaminated mud. U.S. Environmental Protection Agency's Great Lakes National Program Office and the Michigan Department of Environmental Quality oversaw the cleanup effort, which lasted about nine months.

Ruddiman Creek and Ruddiman Pond are part of the designated Muskegon Lake "area of concern" or AOC. Contaminants present in the creek and pond posed potential health risks to humans and wildlife exposed to the pollution. The cleanup project should help speed the lifting of fishing and recreation bans in effect on the main branch of Ruddiman Creek.

EPA and Michigan DEQ, in partnership with the citizen groups Muskegon Lake Public Advisory Council and the Ruddiman Creek Task Force, developed a contaminated sediment removal and site cleanup project for the creek and the pond. Local citizens worked for years advocating for the cleanup, which finally got moving thanks to the federal Great Lakes



This is an aerial view of the area where contaminated sediment was removed from Ruddiman Creek and Ruddiman Pond.

Legacy Act (see box last page for more details on the GLLA). Legacy Act funds paid for 65 percent, or about \$8.8 million, of the Ruddiman Creek project. The other 35 percent, or \$4.7 million, came from the state's Clean Michigan Initiative.

The Legacy Act strives to streamline the cleanup process while emphasizing collaboration among governments and community groups. EPA officials hailed the Ruddiman Creek project as successfully achieving these purposes.

Project details

The main contaminants of concern at Ruddiman Creek included lead, cadmium, chromium and polychorinated biphenyls, usually called PCBs. The project removed 126,000 pounds of lead, 2,800 pounds of cadmium, 204,000 pounds of chromium and 320 pounds of PCBs.

The sediment removal and cleanup project used different approaches for the creek and the pond. Creek sediment cleanup included road construction to get access to the water. The creek was diverted and temporary walls were constructed so the sediment could be removed under dry conditions. The only snag in the project occurred during the winter when a road turned out to be too soft to support equipment trying to reach the northern end of Ruddiman Creek. The problem was quickly solved by building a pontoon road and by using a special dredge mounted on floats.

The pond was dredged, and barriers called silt curtains held the material stirred up during the work. Contaminated sediment was hauled by truck to a licensed landfill near Muskegon, and sampling was done during and after the project to make sure contamination levels were reduced.

For the first time during an EPA dredging project, the Agency posted weekly updates and plotted the volume of sediment removed on an Agency Web site so people could follow the cleanup progress.

After dredging was completed, the creek and pond were reconstructed and water flow patterns restored. Workers are currently finishing up by replanting bare sections of the banks and construction roads with native species of flowers, trees and grasses. The public was given a walking tour of the area in April. The community will be responsible for follow-up care and monitoring of the restoration area. Local environmental activists say there are already reports of lake salmon returning to Ruddiman Creek. During the dredging, great blue herons perched on silt curtains to watch for fish.

About the Great Lakes Legacy Act

Although discharges of toxic substances into the Great Lakes have been reduced over the last 20 years, high concentrations of pollution remain in the bottom of some rivers and harbors. That poses a potential risk to people and wildlife. As a result, states have issued advisories in most locations around the Great Lakes against eating locally caught fish. The tributaries and harbors identified as having pollution problems are known as "areas of concern," or AOCs. There are 31 AOCs on the American side of the Great Lakes. Ruddiman Creek is part of the Muskegon Lake AOC.

Congress passed and the President signed the Great Lakes Legacy Act of 2002 to address the problem of contaminated sediment in these 31 areas. The Legacy Act authorizes \$270 million in funding over five years for cleanups. Fiscal Year 2004 was the first in which Legacy Act funds were available for projects, and Congress appropriated \$9.9 million. In 2005 Congress appropriated \$22.3 million, and \$29.6 million was appropriated in 2006 for Legacy Act cleanups. The President has requested \$49.6 million in the proposed 2007 budget. Ruddiman Creek joins the Black Lagoon near Detroit and Hog Island in Superior, Wis., as completed Legacy Act projects. The largest Legacy Act project to date in both cost (\$50 million) and volume (600,000 cubic yards of sediment) is currently underway in Ashtabula, Ohio.