



U.S. Environmental Protection Agency Great Lakes National Program Office (GLNPO) Significant Activities Report

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Legacy Act Making A Difference: Two Cleanups Completed, Another Underway

Two sediment cleanup projects in Great Lakes Areas of Concern were completed in November using GLNPO's new Legacy Act authority and funding, and another project is well underway. The Great Lakes Legacy Act of 2002 authorized a special initiative to help clean up the 31 pollution hotspots (Areas of Concern) on the U.S. side of the Great Lakes. Contaminated sediment is one of the major reasons why many Great Lakes fish are not safe to eat in unlimited

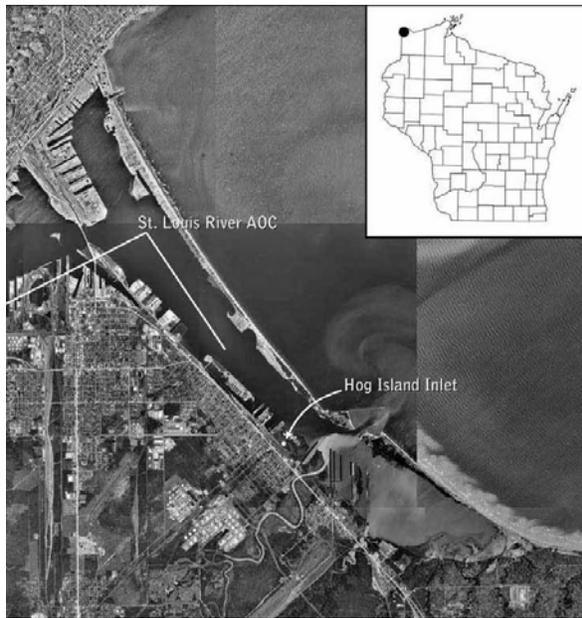
quantities. It also harms aquatic habitat and pollutes sources of drinking water. This has been a long-term and persistent problem throughout the entire Great Lakes basin. There are still millions of cubic yards of contaminated sediment to be removed from the Great Lakes. The Great Lakes Legacy Act authorizes \$270 million in funding over five years for cleanups of contaminated sediment hotspots. In 2004, the first year funds were available, Congress appropriated \$9.9 million. In 2005, Congress appropriated \$22.3 million and \$30 million will be available in 2006. More information on the Legacy Act is available on GLNPO's Web Site at: <http://www.epa.gov/glnpo/sediment/legacy/index.html>

Black Lagoon

The Black Lagoon cleanup in the Detroit River Area of Concern was the first project undertaken under the Legacy Act. A total of 115,000 cubic yards of sediment contaminated with PCBs, heavy metals, and oil and grease was removed from the Lagoon located in the Trenton Channel of the Detroit



A silt curtain surrounds the Black Lagoon cleanup area to keep re-suspended sediment from entering the river.



Location of Newton Creek/Hog Island Inlet Cleanup

River. All sediments were placed in a specially engineered cell at the Pointe Mouillee confined disposal facility. The project began in October 2004 and cost approximately \$9.3 million which was cost-shared between USEPA (65 percent) and Michigan DEQ (35 percent). A media event was held on site on November 16th to announce the completion of the project. Speakers at the event included: Tom Skinner, USEPA Great Lakes National Program Manager and Region 5 Regional Administrator; Steve Chester, Director of the Michigan Department of Environmental Quality; Lt. Colonel Lauzon of the U.S. Army Corps of Engineers; Dennis Schornack, U.S. Co-Chair of the International Joint Commission; and Trenton, Michigan Mayor Brown. The City of Trenton has received a USDA grant to conduct habitat restoration work at the Black Lagoon site beginning next spring. Additional information on the project is available on the Web at: <http://www.epa.gov/glnpo/sediment/legacy/blklagoon/index.html>

Earlier in the month, on November 2nd, GLNPO's *R/V Mudpuppy* collected confirmatory samples in the Black Lagoon to ensure that adequate amounts of cover material had been placed over the dredged area to achieve the project goals. The scientists collected approximately ten Ponar dredge samples for visual inspection as well as analysis of PCBs, oil & grease, and mercury. The analytical data confirmed that the residual cover was placed with adequate thickness, and that the surface sediments were now clean. The Michigan Department of Environmental Quality provided both field and analytical support.

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Newton Creek And Hog Island Inlet

At the other end of the Great Lakes, the second completed Legacy Act sediment cleanup was celebrated by USEPA and the State of Wisconsin at a ceremony at the Richard Bong World War II Heritage Center in Superior, Wisconsin on November 28th. The event marked the successful completion of remediation of contaminated sediments in Newton Creek and the Hog Island Inlet in Superior, Wisconsin in the St. Louis River Area of Concern. The creek and the inlet are part of the St. Louis River watershed, the largest tributary to Lake Superior. This was the first project completed under the Legacy Act in the State of Wisconsin and Lake Superior. The \$6.3 million project was completed in just four months and removed just over 60,000 tons of sediments contaminated predominantly with PAHs and lead. About 100 people attended the event, including many media representatives (television, radio and newspaper) attended as well. The Governor of Wisconsin (Jim

Doyle) as well as the Great Lakes National Program Director, Gary Gulezian, spoke at the event celebrating the success of the project. The highlight of the event was when Gary Gulezian and Governor Doyle handed the “no swimming” sign, that was previously posted at the Inlet, back to the county health department. The Legacy Act project was the final step in the cleanup of 3-mile-long Newton Creek and Hog Island Inlet. Murphy Oil Co., which owns a refinery in Superior, cleaned up the upper reaches of Newton Creek in the mid-1990s and WDNR cleaned up the middle stretches in 2003. According to Wisconsin Governor Jim Doyle, “This is an important and historic day for the City of Superior and to all those who use and enjoy Lake Superior. It shows that great things can be accomplished when government agencies and citizens groups pool their resources to achieve a common goal.” The cost of the Newton Creek and Hog Island Inlet cleanup was shared between EPA (65 percent) and WDNR (35 percent). For more information, go to <http://www.epa.gov/glla/hogisland>.

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Ruddiman Creek

Another Legacy Act cleanup is nearing completion on Ruddiman Creek in the Muskegon, Michigan Area of Concern. As of November 7th, the dry excavation of the uppermost portion of the creek leading to Ruddiman Pond has been completed. This stage of the project included rerouting the river, removal of several thousand cubic yards of contaminated sediments, re-sloping the creek bed and lining it with geofabric, sand and gravel to prevent re-exposure. The Creek also includes new flood control with the inclusion of an overflow area, wingdams and rock cover. Dredging of the pond is also proceeding with approximately 23,000 cubic



Following removal of the most contaminated sediments from Ruddiman Creek, a layer of clean sand is placed on top of the sediments to restore the depth of the creek and ensure clean surface sediments.

yards removed from the pond to date. Ruddiman Creek and pond is heavily contaminated with PCBs, PAHs, and heavy metals. Ruddiman Creek is the third sediment cleanup project being conducted under the Great Lakes Legacy Act. More information on the Ruddiman Creek cleanup can be found at: <http://www.epa.gov/glnpo/sediment/legacy/ruddiman/index.html>

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2004 Sediment Cleanup Figures

GLNPO has released the sediment cleanup statistics for 2004. Over 345,000 cubic yards of sediment were remediated in 2004 from eight U.S. sites and one Canadian site in the Great Lakes Basin. Six sites initiated work for the first time in 2004; two of those sites were the beginnings of large-scale cleanups that will have significant positive impacts to the Basin. Three sites completed their remedial actions in 2004; Dow Chemical Canada’s three-year cleanup was completed at the end of the year. The Moss-American and Pine River projects continued with their remedial actions. The Black Lagoon site was

the first sediment remediation project funded under the Great Lakes Legacy Act. More information is available on the Web at: <http://www.epa.gov/glnpo/glindicators/sediments/remediatea.html>, and <http://www.epa.gov/glnpo/glindicators/sediments/remediateb.html>.

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State Of Lake Michigan

A Lake Michigan State of the Lake Conference and the Great Lakes Beach Association meeting were held November 1st to 4th in Green Bay, Wisconsin. The meetings were held in conjunction with Lake Michigan Forum, (Lake Michigan) Technical Coordinating Committee, and Lake Michigan Monitoring Coordinating Council sessions.

Several GLNPO scientists participated and gave presentations. GLNPO's Beth Hinchey Malloy helped organize and chair a special session on "Monitoring, TMDLs and the Lake Michigan Mass Balance Study." This session featured presentations on Lake Michigan Mass Balance study results by GLNPO's Paul Horvatin and Glenn Warren; as well as USEPA Office of Research and Development scientists Russell Kreis, Kenneth Rygwelski, J. Val Klump, and



David Miller. GLNPO's David Rockwell presented a poster to answer the question "Are Beach Closings on the Rise due to Hazardous Bacterial Contamination?"

Marc Tuchman presented a paper on the Legacy Act, focusing on the status of the program, with an emphasis on the Ruddiman Creek cleanup currently underway in Muskegon, Michigan. Susan Boehme presented a Legacy Act poster as part of the poster session.

The estimated 250 attendees at this joint conference included scientists, resource managers, planners, officials, students, and interested citizens working together to improve and protect Lake Michigan, Green Bay and Great Lakes beaches. CDs of abstracts and presentations will be created and distributed.

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R/V Lake Guardian Gets Checkup

GLNPO's 180-foot research ship, the *R/V Lake Guardian* pulled into the Basic Marine, Inc. shipyard in Escanaba, Michigan on



The Lake Guardian's hull before (left) and after (right) hull cleaning and recoating.

November 1st for one of its regular checkups. The ship was floated into the facility's floating dry dock later in the week. Since the ship only sails in freshwater now, it is required by the American Bureau of Shipping to be dry docked for underwater hull inspection and hull recoating every five years. The machinery spaces are also inspected, major valves are rebuilt, and fuel and ballast tanks and areas like the anchor chain locker are repaired and preserved, as necessary. Sea chests are also cleaned and inspected. While in dry dock, the ship was fitted with a special stainless steel piping line in a sea chest for collection of special water samples. The sea chest modifications are designed to allow continuous sampling of near-surface water while underway. The ship's bottom was cleaned, sand blasted and the recoated. Before and after photos of the hull show the algae buildup and subsequent base coat of paint after sandblasting.

Other work done on the *Guardian* included a major engine overhaul, repair of the chain locker, and maintenance on the ship's potable water tanks and water system. The *Lake Guardian* left the dry dock on November 25th and returned to its home base at Milwaukee, Wisconsin. The ship underwent sea trials prior to departure to make sure everything was shipshape.

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Chemical Integrity Workshop

Several GLNPO scientists participated in a Chemical Integrity Workshop in Windsor, Ontario on November 29th and 30th. More than 70 people from U.S. and Canadian federal agencies and industry participated in discussions regarding Great Lakes naturally occurring and anthropogenic chemicals and their impacts to humans and the

environment. The workshop was a first step in gathering information for the November 2006 State of the Lakes Ecosystem Conference (SOLEC) to be held in Milwaukee, Wisconsin on November 1st to 3rd, 2006. The theme of SOLEC 2006 is "Chemical Integrity." Toxic chemicals are a major stressor to Great Lakes habitats. The work of the participants will help to identify appropriate indicators that will lead to better assessments of impacts.

For additional information on SOLEC, see: <http://epa.gov/greatlakes/solec/index.html>

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Upcoming Events**2005**

December 6th - 7th Great Lakes Binational Toxics Strategy Stakeholder Forum and Integration Workgroup, Chicago, Illinois

December 12th Great Lakes Regional Collaboration Summit II, Chicago, Illinois

2006

November 1-3 State of the Lakes Ecosystem Conference (SOLEC) 2006
Milwaukee, Wisconsin

We welcome your questions, comments or suggestions about this month's Significant Activities Report. To be added to or removed from the Email distribution of the Significant Activities Report, please contact Tony Kizlauskas, 312-353-8773, kizlauskas.anthony@epa.gov.