

EPA, Army Corps Agree on Dredging Plan

By Susan Pastor, U.S. Environmental Protection Agency

After several weeks of discussions, U.S. Environmental Protection Agency and U.S. Army Corps of Engineers have agreed on a plan to monitor and dredge PCB-contaminated sediment in the Lower Fox River this year.

At press time, a document referred to as an interagency agreement had been signed by EPA and sent to the Corps for acceptance and signature. It includes details on the budget as well as the type of equipment to be used and the monitoring to be done. Under the agreement, the Corps will dredge Green Bay's Georgia-Pacific and East River turning basins and possibly the bay itself near the mouth of the Lower Fox River.

Remedial Project Manager Jim Hahnenberg, who will continue to oversee the project for EPA, said the dredging can begin soon. "According to the agreement, work can begin this spring," he added.

The Corps, which periodically dredges area navigational channels, has the technical knowledge as well as experienced staff stationed in the area, according to the agreement. With both agencies



PHOTO COURTESY OF THE BOLDT TEAM

The Corps will begin using an environmental cable arm dredge (or similar) in the Lower Fox River this spring.

scheduled to dredge in the same places this year, it was determined that it would be more efficient to use the Corps to support EPA's work, rather than a government contractor.

Hahnenberg said both agencies will benefit from the arrangement. "Although the Corps is used to doing navigational dredging, we have agreed on specific equipment and methods," he explained. "Their equipment will be consistent with typical environmental dredges."

That equipment will include a production mechanical closed bucket dredge with "baffles and seals." A baffle is a device that slows down movement of the water and mud. The intent of the seal, similar to

The Current Gets a Makeover

This is the first full-color issue of the Current. We've changed the paper and gone to full color while maintaining our commitment to sustainable printing practices. We hope you enjoy the new look!

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Sediment Removal from Appleton to Green Bay Continues

By Susan Pastor, U.S. Environmental Protection Agency

Off-shore dredging in the Lower Fox River began in Green Bay at the dewatering facility on State Street near the Georgia-Pacific plant on Monday, April 5.

Three dredges are already working 24 hours per day, five days a week, according to EPA Remedial Project Manager Jim Hahnenberg. He said the cleanup goals are similar to last year's.

"About 3,500 cubic yards of sediment will be removed each day," he explained. "This year, we will again have one 12-inch and two 8-inch hydraulic dredges cleaning up PCB-contaminated sediment. There will be some minor fine tuning, but because everything went so well last year, we plan to follow the same course of action."

Hahnenberg added that a cubic yard of sediment is quite large. "It measures about three by three by three feet—about the size of a small refrigerator," he said.

After dredging is completed near the plant, the equipment will be moved upstream toward DePere. Mud



PHOTO COURTESY OF THE BOLDT TEAM

Barge used for sediment dredging from Appleton to Green Bay.

pulled from the river will be taken to the same disposal facilities as last year.

"Sediment with PCB levels over 50 parts per million is 'highly contaminated' and is being disposed of at a licensed facility near Detroit," Hahnenberg continued. "Since most of the sediment dredged this year will have PCB levels less than 50 ppm, it can be trucked to Veolia Hickory Meadows Landfill in Chilton."

Like last year, Appleton Papers Inc., Georgia-Pacific, and NCR Corp., the companies doing the cleanup, are coordinating truck traffic with the local communities. "Last year, much of the traffic was routed through Wrightstown and that will be the case again," Hahnenberg said.

Before the trucks began to roll in mid-April, company representatives met with Wrightstown and Hilbert school superintendents to go over the hauling schedule, summer school dates, and school zone traffic speeds. According to their contractor, special attention to safety will continue, which pleased the school officials. They said they are satisfied with this year's plans and have no concerns about the truck traffic. As an extra safety measure, the school districts will make sure their bus company is aware of the schedule.

All dredged sediment is still being pumped into the dewatering facility through a pipeline. Then, the water will be squeezed out by special equipment called a plate and frame press. The remaining dried sediment will be loaded on a truck so it can be properly disposed of.

It is expected that caps and sand covers, which were started last year, will also continue, however, the areas where this will take place are being refined. These techniques involve placement of a layer of sand or a layer of sand covered by a layer of stone.

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Work is expected to continue through mid-November, weather permitting.

“If we can meet our production goals like we did last year, we will clean up a large amount of the contaminated areas,” Hahnenberg concluded. “We are still on course to complete the entire project by 2017.”

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a rubber gasket, is to prevent contaminated water and mud from leaking. “They help contain the PCB-contaminated sediment during removal,” said Hahnenberg.

Unlike navigational dredges, this type of bucket dredge shouldn’t stir up the sediment which may cause PCB contamination to spread. “When we dredge, the idea is to remove contaminated sediment while releasing as little of the PCBs as possible,” Hahnenberg continued. “This reduces the potential for re-contamination outside the dredging area.”

In addition to dredging, the Corps will conduct up and downstream surface water “turbidity” monitoring at least twice daily to measure water clarity according to Wisconsin laws. Dredging operations can be modified so they can be slowed down or sped up depending on the monitoring results and visual inspections.

“Water with high turbidity looks like a milkshake while low turbidity would be perfectly clean,” Hahnenberg stated.

“The work will start as soon as possible,” Hahnenberg stated, “and will run from the Georgia-Pacific plant on State Street to the mouth of the river. This is in addition to the Corps’ regular dredging work in the bay.”

The agreement as well as other related documents will be available at the information repositories listed on page 7 and at www.epa.gov/sites/foxriver.



Out and About...

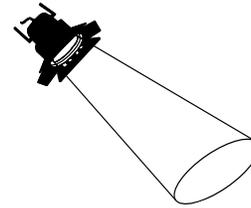
By Susan Pastor, U.S. Environmental Protection Agency

The Fox River Intergovernmental Partnership is made up of U.S. Environmental Protection Agency, Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Oneida Tribe of Indians of Wisconsin and Menominee Indian Tribe of Wisconsin. These partners, as well as other supporting agencies, regularly provide speakers to organizations in the Fox Valley area. The following people recently made presentations:

March

- ◆ *Jim Hahnenberg*, EPA: DePaul University Environmental Class, Chicago; general Lower Fox River cleanup and Superfund process.
- ◆ *Jim Hahnenberg, Susan Pastor and Kathy Clayton*, EPA: WPS Einstein Science Expo, Green Bay; Lower Fox River cleanup, Superfund emergency response and general ground water demonstration.

The Fox River Current is featuring natural resource damage assessment projects in and near the Lower Fox River.



Spotlight On:

Green Bay West Shore Habitat Preservation

By Betsy Galbraith, Fox River/Green Bay NRDA Trustee Council Coordinator

Water, water, everywhere. An early spring visit to the West Shore of Green Bay revealed ditches teeming with northern pike, goldeneyes and mergansers at the mouth of rivers and waterlogged forests.

What can all of this water be attributed to? The unique geologic history of Green Bay is responsible for this wonderful wet area and the creation of suitable habitat for many types of fish and wildlife. Due to this rich history, almost all wetlands directly connected to Green Bay are located on its west shore. The eastern shoreline consists primarily of high, steep banks of strong limestone that encompass the area known as the Niagara Escarpment. More porous and soluble limestone lies beneath the uniformly shallow lower bay that connects to the gradually sloping west shore.

The “west shore” is located in a corridor from the mouth of Duck Creek in Brown County to just north of the mouth of the Peshtigo River in Marinette County. It includes major tributaries to Green Bay such as the Little Suamico, Pensaukee, Oconto, and Peshtigo Rivers, along with their associated streams, creeks and wetlands. The Wisconsin Department of Natural Resources has designated this 42-mile stretch as the Green Bay West Shores Wildlife Area.



PHOTO COURTESY OF JOEL TRICK, US FISH AND WILDLIFE SERVICE

Goldeneyes and Scaups frolic in the west shore.

It lies within several of the geographic priority areas the Fox River/Green Bay Natural Resource Trustee Council has approved for restoration projects.

Natural resource damage assessment settlement funds have supported the preservation of over 1,100 acres of habitat to benefit fish and wildlife species damaged by PCBs on the west shore. These wetlands protect key spawning and rearing habitat for numerous fish species, offer habitat

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for waterfowl, protect water quality and regulate flows for the area.

“Someone visiting sites acquired using NRDA funds might be looking at a large sedge meadow or a backwater slough shaded by mature silver maples,” said John Huff, Wisconsin Department of Natural Resources wildlife biologist. “Regardless of the habitat type, they’ll be on a piece of land contributing to the healthy functioning of the wetland community. Preservation and protection of this land allows the bay to recover and provides a rich, vibrant wetland community for all to enjoy.”

Wetlands in this area are at high risk for development. Despite the abundance of water on the landscape, people have found some dry (and other not so dry) places to build homes and businesses on the west shore. Soil or “fill” has been placed in many wetlands to make the land suitable for building projects.

Wisconsin DNR estimates that almost 70 percent of the wetlands on the west shore have already been lost. “The West Shore of Green Bay is a vital part of the Great Lakes ecosystem and extremely important to the quality of life in the area,” continued Huff. “It’s part of what makes people want to live here.”

Restoration projects to improve existing habitat on the west shore have also been funded by the trustee council. Numerous projects to restore marshes and stream channels have especially benefited spawning northern pike and migrating waterfowl.

And not just fish and wildlife enjoy these lands purchased or restored with NRDA funds. They



PHOTO COURTESY OF TAMMIE PAOLI, WISCONSIN DNR

A young northern pike found in the west shore.

also offer excellent hunting opportunities. Many provide direct access to the bay for fishing and other recreation.

Matching funds to support these acquisitions and restoration projects were also supported by National Oceanic Atmospheric Administration coastal management grants as well as U.S. Fish and Wildlife Service sport fish restoration funds and coastal management grants.

The natural resource trustees are comprised of the Wisconsin DNR, FWS, Oneida Tribe of Indians of Wisconsin, Menominee Indian Tribe of Wisconsin and NOAA.

For further information on NRDA projects, contact Trustee Council Coordinator Betsy M. Galbraith, at betsy_galbraith@fws.gov or 920-866-1753.

Familiar Face Fills Trustee Council Coordinator Role

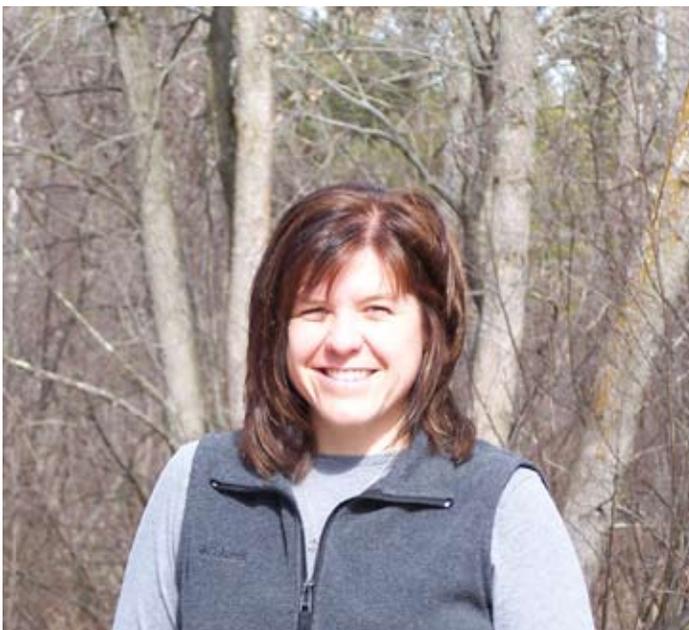
By Susan Pastor, U.S. Environmental Protection Agency

Walk into the New Franken office of U.S. Fish and Wildlife Service and you'll see a familiar face sitting at the trustee council coordinator's desk.

Betsy Galbraith, who served in a similar capacity for Oneida Tribe of Indians of Wisconsin, assumed the position in January to lead the Fox River/Green Bay natural resource damage assessment efforts. Her predecessor, Colette Charbonneau, accepted another position with Department of Interior in Denver.

Although new to her FWS job, she is not new to the federal government. She spent two years with the National Park Service as a plant ecologist at Zion National Park, Utah, where she started the park's first native plant nursery and education center.

In her first three months with FWS, Galbraith is starting to learn her new territory. "Oneida was 65,000 square miles and a more intimate government structure," she explained. "This job covers a larger area with many different governments."



Betsy Galbraith

Galbraith, 34, also acknowledges the similarities between her former and current positions. "I had to keep up to date on the progress of the Fox cleanup and NRDA, so I was up to speed with that when I got here," she continued. "I've been impressed with the legacy of the Fox River NRDA. All of the trustees and their partners put a lot of heart and soul into the restoration efforts."

She added that it works well because of the emphasis placed on agencies acting as partners. "Partnership building is really important for this job and I've worked with many different tribes, agencies and non-profits, so that's a really important skill that I bring to this job," she stated.

Another skill she brings is proposal writing. In her four years with the tribe, she helped obtain trustee council funding for eight restoration projects. "Using NRDA funds, we made great progress on improving several different watersheds that connect to the bay," she said. "Land acquisitions, stream improvements and wetland restorations were all part of the approach."

The Westfield, Wis. native also worked on a natural resources management plan for the Oneida reservation through a grant from the Bureau of Indian Affairs and is a little sad that she didn't get to see it to the end. "This job was a really great opportunity that presented some new challenges for me," she stated.

New challenges for the University of Wisconsin (Platteville and Stevens Point) alum will include getting more involved in Great Lakes issues. "This is an exciting time with Great Lakes Restoration Initiative money out there," she said. "Our partners within the Lake Michigan Basin have developed a

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lot of new project ideas and have submitted some innovative proposals.”

In anticipation of these proposals, the trustee council has directed Galbraith to work on a new process for accepting them. It should be completed by next fall. “We’re trying to streamline the process to make it easier for the applicants and the reviewers,” she continued. “I used to be on the other side submitting proposals, so I hope I can provide some valuable insight.”

When she isn’t working at her desk or in the community, she still finds time to use her horticulture experience in the garden at her Mishicot home. When she and her husband Allen and 3-year old son Spencer take camping trips in Wisconsin and around the upper peninsula, she admits that you can take her out of the office, but often mixes work with fun.

She concluded, “I think it’s exciting to visit completed restoration sites. Not only are they beautiful places, but we can see the results that are paying off for fish and wildlife.”

Information Available at Local Libraries

The Intergovernmental Partners invite the public to review technical reports, fact sheets, newsletters and other documents related to the Lower Fox River cleanup at information repositories set up in the reference sections of the local libraries listed below.

- **Appleton Public Library**, 225 N. Oneida St., Appleton, Wis.; 920-832-6170
- **Brown County Library**, 515 Pine St., Green Bay, Wis.; 920-448-4381, Ext. 394
- **Door County Library**, 107 S. Fourth Ave., Sturgeon Bay, Wis.; 920-743-6578
- **Oneida Community Library**, 201 Elm St., Oneida, Wis.; 920-869-2210
- **Oshkosh Public Library**, 106 Washington Ave., Oshkosh, Wis.; 920-236-5205

In addition, fact sheets and newsletters only are maintained at the public libraries in De Pere, Kaukauna, Little Chute, Neenah and Wrightstown.




Check out these Web sites:

<http://www.epa.gov/region5/sites/foxriver>

<http://dnr.wi.gov/org/water/wm/foxriver/index.html>

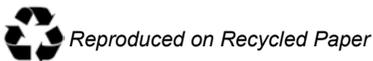
<http://contaminants.fws.gov/issues/restoration.cfm>

<http://www.fws.gov/midwest/nrda/index.html>

An administrative record, which contains detailed information upon which the selection of the final site cleanup plan was based, is also available for review at two DNR offices: 801 E. Walnut St., Green Bay, Wis. and 101 S. Webster St., 3rd Floor, Madison, Wis. An administrative record is also available at the EPA Record Center, 77 W. Jackson Blvd., 7th Floor, Chicago, Ill.



Region 5
 Superfund Division (SI-7J)
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Prepared by the Fox River Intergovernmental Partnership: Wisconsin Department of Natural Resources, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Menominee Indian Tribe of Wisconsin, Oneida Tribe of Indians of Wisconsin, and National Oceanic and Atmospheric Administration. Supporting agencies include Wisconsin Department of Health Services, U.S. Agency for Toxic Substances and Disease Registry, and U.S. Army Corps of Engineers.

Disclaimer: The opinions expressed in these articles are solely those of the authors and are not necessarily shared by all members of the Fox River Intergovernmental Partnership.

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