

## EPA, DNR oversee sixth year of sediment cleanup

By Susan Pastor, U.S. Environmental Protection Agency



PHOTO COURTESY OF THE BOLDT TEAM

*A technician labels a sediment sample.*

Nearly 552,000 cubic yards of PCB-contaminated sediment were dredged in the Green Bay area this season as year six of the cleanup came to an end in November.

According to reports submitted by NCR Corp., the paper company funding and conducting the cleanup, the total for work from Little Rapids to Green Bay is 8 million yards. U.S. Environmental Protection Agency Remedial Project Manager Jim Hahnenberg said the goals outlined in the project's design have been met almost every year. In 2014, however, he explained that this year's dredging goal of 673,000

cubic yards of sediment was not quite achieved.

"Overall, we've been pleased with the results so far, but this year we fell short of our goal," he stated. "This was partly because cleanup work was not completed where it was planned due to ongoing evaluations of shoreline stability and a concern that dredging could cause river banks to collapse."

As in years past, the sediment that was removed from the river was taken to a processing facility on State Street in Green Bay where it was treated before being loaded

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## EPA review shows there is still work to be done

By Susan Pastor, U.S. Environmental Protection Agency

Although dredging in the Lower Fox River from Appleton to Green Bay is still in progress, the U.S. Environmental Protection Agency recently reviewed the cleanup to see how "protective" it is.

This review, which is required by law every five years, showed the cleanup is not protecting people and the environment because PCB levels have not dropped to safe levels although levels are lower than before. Superfund projects where cleanup activities are ongoing or where some levels of contaminants were left behind must be regularly examined.

The purpose of these five-year reviews is to ensure that a site's conditions haven't substantially changed, that



PHOTO COURTESY OF THE BOLDT TEAM

*Pipeline transports sediment to the dewatering facility.*

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# DNR administrator brings environmental, financial experience to Lower Fox River team

By Ed Culhane, Wisconsin Department of Natural Resources

Russ Rasmussen earned a degree in botany before entering the workforce, but as a state budget analyst, he spent more time with his nose in spreadsheets than in flowers.



*Russ Rasmussen*

Earlier this year, Rasmussen was tapped to lead the Wisconsin Department of Natural Resources' water division. The challenges are momentous – including the largest PCB cleanup ever attempted anywhere. Six years of dredging PCB-contaminated sediment from the Lower Fox River from De Pere to Green Bay, with associated sand capping to isolate residual contaminants from the food chain, has already removed the most dangerous “hot spots.” Although legal and financial challenges remain, this historic cleanup is currently on track to be completed in 2017.

His approach is to get people with differing viewpoints around the table and to move forward in a respectful manner until a resolution is formed that everyone can support.

“I’m optimistic we will complete the project,” Rasmussen said. “We’ll continue to have a working river, but also a healthy river, a river that is safe and enjoyable for recreation.”

When he isn’t focusing on the Lower Fox River cleanup, Rasmussen and his team are working on other high-profile projects. For example, they are re-evaluating the Wisconsin DNR’s approach to permitting the high-capacity wells necessary for farming, mining, manufacturing and urban development. At issue is how the agency considers the “cumulative impacts” of drilling new wells into heavily plumbed aquifers.

“It’s a challenge,” Rasmussen said. “How do you address cumulative impacts while still allowing reasonable use?”

Rasmussen, who graduated from the University of Wisconsin-Madison in 1975, was hired by the state

Department of Administration’s bureau of procurement, commodities section, in 1991. For three years, he spent tens of millions of dollars supplying prisons and other state institutions.

Then, moving to the state budget office, he was assigned to analyze the Wisconsin DNR’s biennial spending plans. He went back to school on weekends and after five years of study earned a master’s degree in business administration from Edgewood College, Madison.

Rasmussen then joined the Wisconsin Department of Transportation as chief of environmental services. He worked with underground storage tanks, air and soil monitoring, and issues surrounding historic artifacts.

“I liked that job because there was a lot of variety,” he said, “but I didn’t love concrete.”

Rasmussen joined the Wisconsin DNR in 1998. He started with the bureau of solid waste, now called waste and materials management. “While I was at DOA, I was over here at DNR as much as I was at DOA,” Rasmussen said. “So it was sort of like coming home.”

By 2004, he was director of the bureau of watershed management, and in 2011 he became deputy administrator of the water division – a position he held until May when he was appointed to his current position as the division’s administrator.

In the meantime, there is much to celebrate. In addition to the Lower Fox River, major waterways like the Menominee River at nearby Marinette, are benefitting from major cleanups accomplished in partnership with the U.S. Environmental Protection Agency and dozens of other partners.

In the Menominee River, the Wisconsin DNR and the city of Marinette are restoring historic Menekaunee Harbor, removing contaminants, restoring habitat, and improving public access and recreational opportunities. Further upstream – with \$6 million in grants from the EPA and the National Fish and Wildlife Foundation and \$4 million from a

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onto trucks and taken to Hickory Meadows Landfill in Calumet County or Ridgeview Landfill in Manitowoc County. Both are licensed to accept this type of waste.

Ridgeview was awarded a state permit in 2012 to take higher levels of hazardous waste while Hickory Meadows continues to accept sediment with lower levels.

Nearly 15,000 truckloads took about 310,000 tons of processed sediment to the landfills for proper disposal. Crews also worked on covering areas downstream from the DePere Dam with sand. About 7 acres were covered with a layer of sand. Another layer of larger stones was spread over more than 55 acres. "We use sand and stone because they stay in place during large storms," Hahnenberg continued. "And, the cost is relatively low."

The only other work done this year was the removal of remaining underwater shipwreck debris near the processing plant. Most of the debris was pulled out of the water last year but work was suspended in December due to freezing temperatures. A display featuring the two tugboats is expected to be added to the Neville Public Museum of Brown County by summer 2015.

Over the winter, the design for next year's dredging, capping and covering will be modified, according to Hahnenberg. "Every year, we do a work plan for the following year to tweak the dredging to be done each season."



PHOTO COURTESY OF THE BOLDT TEAM

*Sediment is stored at the processing facility.*

When the cleanup resumes next spring, it will be centered in the city of Green Bay and move towards the mouth of the river. "We'll go 1,200 feet from the mouth of the river into the bay," Hahnenberg said. "That's where the higher levels of PCBs were dumped."

Even with the slight setback, the project is still on track to be done by 2017, according to Hahnenberg. "Every year, the volume of dredged sediment goes down because we have less work to do since we are almost done," he explained. "When the cleanup is completed in about three years, we will have met the ultimate goal of reducing the risk to people and the environment."



## 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. To request a speaker, please contact the agency directly or Susan Pastor, EPA Community Involvement Coordinator, at 312-353-1325 or 800-621-8431, Ext. 31325, or via email at [pastor.susan@epa.gov](mailto:pastor.susan@epa.gov).

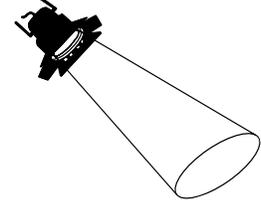
### September

- ◆ *Beth Olson and Gary Kincaid*, Wisconsin DNR: Clean Bay Backers boat tour, Green Bay; Lower Fox River general cleanup and area of concern.

*The Fox River Current is featuring Natural Resource Damage Assessment projects in and near the Lower Fox River.*

# Spotlight On:

## Trustee support of Lower Fox River/ Green Bay Area of Concern projects



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

Over the last decade, the Fox River/Green Bay Natural Resource Trustees and their partners have supported restoration projects within the Lower Fox River and Green Bay Area of Concern. The AOC designation was given to Lower Green Bay (out to Long Tail Point and Point Au Sable) and the Fox River below the De Pere Dam in 1980 by the International Joint Commission of Canada and the United States. Problems such as poor habitat for fish and wildlife, contaminated sediment and poor water quality were some of the reasons for this designation.

The Wisconsin Department of Natural Resources worked with community stakeholders to develop a “Remedial Action Plan” in 1988 to improve the AOC. Since that time, much work has been completed and significant progress has been made. Several updates to this plan have been completed over the years, most recently in 2013.

The trustees are playing a pivotal role for recovery of the Green Bay AOC and Lake Michigan by supporting restoration projects. Funds received from final and interim settlements with some of the parties responsible for releasing the PCBs have been used to implement these projects. Several projects within or adjacent to the Lower Fox River and Green Bay AOC supported by the trustees and their partners are described below:

### *Cat Island Chain Restoration*

Redevelopment of the 272-acre Cat Island Chain in Lower Green Bay will result in high-quality shallow water habitat for fish, waterfowl and other migrating birds. The reconstructed islands will also protect shallow aquatic and wetland habitat in the backwater area behind the islands. The trustees supported the design in the early phases of the project. Along with



PHOTO COURTESY OF BROWN COUNTY

*An aerial view shows the Cat Island Chain restoration.*

many other partners including Brown County Port and Resource Recovery, the U.S. Army Corps of Engineers and the Cat Island Advisory Committee, the trustees also contributed to the construction of the access road and islands. The project is an important step towards recovery of the AOC.

### *Duck Creek Fish Passage*

The Oneida Tribe of Indians of Wisconsin spearheaded a project to remove two dams on Duck Creek, a tributary to Lower Green Bay adjacent to the AOC. Removal of the dams opened 180 miles of fish passage within the waterway and its tributaries. Other benefits of the project improved and expanded fish habitat for feeding, spawning and nursery habitat. An additional dam located upstream on Duck Creek was also modified to prevent the migration of invasive species.

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PHOTO COURTESY OF ONEIDA TRIBE

*Dam removal on Duck Creek opens 180 miles of fish passage.*

***Sensiba Wildlife Area***

The Sensiba Wildlife Area on the west shore, adjacent to the AOC, is part of an important historical migration route for waterfowl, shorebirds and raptors. Restoration of 300 acres, led by the Wisconsin DNR, will improve habitat for migrating birds and spawning northern pike from Green Bay. The trustees and multiple partners, including Ducks Unlimited and The Nature Conservancy, supported project design, planning and construction.



PHOTO COURTESY OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

*Sensiba Wildlife Area sign welcomes visitors.*

***Point Au Sable Preservation and Restoration***

Through a partnership with the University of Wisconsin-Green Bay, the trustees supported efforts to preserve 62 acres of coastal wetlands that were added to the Point Au Sable Natural Area. Point Sable is located in the northeast corner of the AOC. The project benefits a diverse bird community, migrating northern pike and nursery habitat for yellow perch. Restoration of the natural area is currently in progress utilizing partnership funds. UWGB students and staff also conduct research at the site.



PHOTO COURTESY OF UNIVERSITY OF WISCONSIN-GREEN BAY

*An aerial view captures the Point Au Sable coastal wetlands.*

The natural resource trustees include the Wisconsin DNR, Oneida Tribe, Menominee Indian Tribe of Wisconsin, U.S. Fish and Wildlife Service, and National Oceanic and Atmospheric Administration.

For more information about the Lower Fox River and Green Bay AOC, go to the Wisconsin DNR Web page: <http://dnr.wi.gov/topic/greatlakes/greenbay.html>. For more information about Fox River/Green Bay NRDA projects, contact Betsy M. Galbraith, trustee council coordinator, at [betsy\\_galbraith@fws.gov](mailto:betsy_galbraith@fws.gov) or 920-866-1753.

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the original risk assumptions are still valid, and that the cleanup is safe and continues to protect people and the environment. Because the cleanup is not completed, solid conclusions can't be drawn at this time, according to EPA Remedial Project Manager Jim Hahnenberg.

"It comes as no surprise that the cleanup isn't keeping the public or the surrounding environment totally safe – yet," he said. "We finished our work in Little Lake Butte des Morts in 2009, but there is still plenty of work to be done in the river," he said. "Current levels of PCBs in fish tissue, sediment and surface water aren't low enough but they are lower now than before the cleanup."

While there are fish advisories in place and warning signs posted up and down the river, fishing has been observed. EPA, Wisconsin Department of Natural Resources and Wisconsin Department of Health believe some people are eating what they catch. "This means they are being exposed to PCBs that tend to accumulate in the fatty tissues of certain types of fish such as catfish," Hahnenberg continued. "The agencies also care about birds, plants and animals who live along the river. Right now, they are also being exposed to PCBs."

EPA expects to be able to report that people and the environment are being shielded from PCBs after the cleanup is completed in 2017. "It will take some time following the completion of the cleanup to see if the PCB levels have gone down," Hahnenberg added. "The Lower Fox River will continue to be evaluated for however long PCBs are not at safe levels, and until monitoring information shows contaminant levels have been reduced and that we can ensure the cleanup is functioning as it was intended."

Post cleanup evaluations will also measure PCB levels in dredged, or uncovered areas, to determine if sand and gravel caps and covers were properly installed in the sediment and maintained over the years. Boating activities in cap areas such as anchoring, salvaging, dragging, and establishing "no wake" areas will not be restricted since they are not expected to damage the caps.

"Federal and state laws, as well as various legal agreements already in place, must continue to be followed after the cleanup is completed," Hahnenberg concluded. "Someday we want to see our five-year review deem the final cleanup 'protective.'"

## Federal court files decrees, appeals in 2014

By Susan Pastor, U.S. Environmental Protection Agency

Five legal agreements were filed in federal court this year. First, three consent decrees, or settlements, totaling about \$55 million were lodged in federal court on March 26. Later, two appeals were filed in September. To read them online, go to:

- Appeal from the United States District Court for the Eastern District of Wisconsin, United States of America v. P. H. Glatfelter Co. and NCR Corp. (PDF), (38pp, 417K) September 2014.
- Appeal from the United States District Court for the Eastern District of Wisconsin, NCR Corp. et al. v. George A. Whiting Paper Co. et al. (PDF), (57pp, 392K) September 2014.
- 924: Notice of Lodging of Three Proposed Consent Decrees (PDF), (7pp, 41K), March 26, 2014.
- 924-1: Consent Decree with Cashout Settling Defendants and the State of Wisconsin (PDF), (59 pp, 980K), March 26, 2014.
- 924-2: Consent Decree with Kimberly Clark (PDF), (32 pp, 541K), March 26, 2014.
- 924-3: Consent Decree with Newpage Wisconsin Inc. (PDF), (30 pp, 617K), March 26, 2014.

Questions concerning these documents should be directed to Wyn Hornbuckle, U.S. Department of Justice, 202-514-2007 or at [hornbuckle.wyn@usdoj.gov](mailto:hornbuckle.wyn@usdoj.gov).

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private energy company – the Wisconsin DNR is developing safe and effective ways for lake sturgeon to bypass two hydroelectric dams and reach historic spawning grounds.

Rasmussen is confident. He has seen the numbers.

“As we develop our strategies, we will continue to show that you can have a healthy economy and a healthy environment,” he said. “In fact, the two are necessary for each other.”

## Wisconsin DNR updates Chinook salmon advisory

By Anke Hildebrandt, Wisconsin Department of Health

The Wisconsin Department of Natural Resources updated its consumption advisory for Chinook salmon in the Green Bay region this year.

Chinooks of all sizes are now “okay” for one meal per month versus only Chinooks under 30 inches. After the Wisconsin DNR sampled a variety of fish, only Chinook

had PCB concentrations low enough to warrant a change in the consumption advice.

To learn more about Wisconsin fish advisories, go to [www.dhs.wisconsin.gov/eh/fish](http://www.dhs.wisconsin.gov/eh/fish). For all information on all Wisconsin waterways, check <http://dnr.wi.gov/topic/fishing/consumption>.

### Information available at local libraries

The Fox River Intergovernmental Partnership invites 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 Wisconsin libraries listed below.

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

An Administrative Record, which contains detailed information upon which the selection of the cleanup plans was based, is available at:



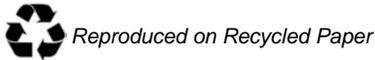
#### *Check out these websites:*

<http://www.epa.gov/region5/cleanup/foxriver>  
<http://dnr.wi.gov/topic/greatlakes/greenbay.html>  
<http://contaminants.fws.gov/issues/restoration.cfm>  
<http://www.fws.gov/midwest/es/ec/nrda/index.html>  
<http://www.foxrivernrda.org>

- **Wisconsin DNR**, Northeast Regional Office, 2984 Shawano Ave., Green Bay
- **Wisconsin DNR**, Bureau of Watershed Management, 101 S. Webster St., 3<sup>rd</sup> Floor, Madison
- **Appleton Public Library**, 225 N. Oneida St., Appleton
- **Brown County Library**, 515 Pine St., Green Bay
- **EPA Record Center**, 77 W. Jackson Blvd., 7<sup>th</sup> Floor, Chicago



Region 5  
 Superfund Division (SI-7J)  
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 Chicago, IL 60604-3590



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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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