

Dredging Stops, Capping Continues

By Susan Pastor, U.S. Environmental Protection Agency

Dredging in the Lower Fox River from Little Rapids to DePere came to a halt in late July.

According to two of the companies responsible for the river's PCB contamination, Appleton Papers, Inc. and NCR Corp., they met their planned goal of dredging 250,000 cubic yards of sediment. Capping and sand covering of the river bottom will keep going, however. That is expected to continue until November, 24 hours daily, Monday through Friday and stop for the weekend at 7 a.m. on Saturday. This schedule will be used until the work in this reach is completed. Next year, the remaining area needing cleanup will be from DePere to Green Bay.

At press time, U.S. Environmental Protection Agency Remedial Project Manager Jim Hahnenberg said, "We don't know what will happen next year, but if work progresses according to original plans, we should be done by 2017."

Appleton Papers and NCR had been funding the cleanup under a November 2007 EPA administrative order. The companies indicated earlier this year that they wanted to scale back the project and stop all work after 2011.



PHOTO COURTESY OF THE BOLDT TEAM

Sediment sampling boat between DePere and Green Bay.



PHOTO COURTESY OF THE BOLDT TEAM

Cleanup contractors process a sediment core sample.

According to a July 5 federal court ruling, this was possibly due to several unfavorable rulings they had previously received which had "dimmed their hopes of recouping the costs they were expending in the cleanup effort."

To keep the cleanup moving at a rate similar to the past two years, two motions were filed by the U.S. Department of Justice on behalf of EPA to compel the companies to continue full-scale dredging this year. A federal judge denied both of them in July.

The cleanup was being done under EPA's Superfund program, so EPA and the Wisconsin Department of Natural Resources shared oversight responsibilities. "Although the Lower Fox River isn't a full-fledged Superfund site, most studies and cleanup can happen while it is in the 'proposed' stage," Hahnenberg explained.

In three years, nearly 1.5 million cubic yards of contaminated sediment have been dredged and almost 800,000 tons of dried sediment trucked to the Hickory Meadows Landfill in nearby Chilton for disposal. About 150 acres of river bottom will have been covered with sand when that work ends this fall.

Wisconsin DNR Names New Project Liaison

By Susan Pastor, U.S. Environmental Protection Agency

The Lower Fox River team added a new member in April when Beth Olson was welcomed aboard.

Olson is the new Wisconsin Department of Natural Resources water program leader filling the vacant slot left after her predecessors, Greg Hill and Bruce Baker, retired. Stationed in the Water Division in the Green Bay office, Olson took over shortly after she was hired by the agency in December 2010. Although she is new to the Wisconsin DNR, the “Great Lakes” native is not new to water projects.

Olson comes to the Wisconsin DNR after nearly 30 years in the private sector. “I’ve worked and lived all over,” she explained. “That includes Lake Champlain in New York, Chesapeake Bay in Maryland, and once again the Great Lakes. I’ve worked on projects with the U.S. Environmental Protection Agency, U.S. Fish & Wildlife Service, state agencies and private corporations. I’m just on the other side of the table now.”

While living and working in Maryland and Washington, D.C., she said she saw some positive strides made in the Chesapeake. “The Chesapeake Bay has improved slightly but has a long way to go,” she continued. “It takes a long time to overcome the problems there and at the Fox, but that’s a big part of my motivation now to live here and keep at it.”



Beth Olson

Originally from Michigan, Olson holds a Bachelor of Science degree with a double major in chemistry and biomedical science from Western Michigan University, Kalamazoo, and a law degree with honors from Ohio’s University of Toledo. Over the years, they were put to use at several companies in the Midwest and the East Coast, where she served in different capacities including consultant, attorney, and chemist. “I began in chemistry and biomedical science before going into environmental law,” she stated. “I represented large and small ‘responsible parties’ as an environmental lawyer so I understand their perspective.”

When they didn’t understand, it was Olson’s job to advise her clients on federal environmental laws and policies such as the Clean Water and Air Acts, Superfund, and related state programs to help them comply as well as resolve any conflicts or disputes. She also negotiated their permits, cleanups, and habitat restoration and construction projects.

Another hat Olson wears is alternate trustee for the state’s Natural Resource Damage Assessment team. She said the Wisconsin DNR hired her for her technical and legal skills but she is not serving as an attorney. “I’ve worked on other Superfund cases in the Great Lakes, but I’m not an attorney for DNR on this project,” she said. “Even though I understand the legal issues, it’s nice to be able to call on our lawyers to handle those matters. We have a very strong team.”

Olson, who became familiar with the Lower Fox River’s PCB contamination while doing research on the project in the mid 1990s, is looking forward to seeing the cleanup to its completion. “Now that I’m here and have seen Little Lake Butte des Morts successfully cleaned up, I’d like to see full-scale dredging completed on time,” she said. “There is still much work to be done even though dredging has slowed for the time being.”

Coincidentally, Olson grew up in the same area of Michigan as EPA Remedial Project Manager Jim Hahnenberg. “We went to the same college in the 80s, but we didn’t know each other then,” she said. “Later, I knew

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of Jim through my research on PCB cleanups and NRDA, but it just took some time to cross paths. He is very knowledgeable and easy to work with, and I'm fortunate to work with him on this project."

So far, Hahnenberg has been impressed with her background which also includes some public relations work. He said this is a necessary skill to bring to the team since they are often required to explain technical information to citizens, local elected officials, and non-governmental organizations.

"Beth has a lot of experience in explaining analytical data to technical and non-technical audiences, so she was able to really hit the ground running," said Hahnenberg. "We've only been colleagues for a few months, but I have to say that Beth fit right in and works well with everyone."

Olson moved back to the Great Lakes region in 2007 to be closer to family and friends. "We have family in Wisconsin and have vacationed here often," she said. "My husband, Rob, is a licensed boat captain. We grew up on the Detroit River and have always lived near the water."

Living near water enables them to regularly enjoy boating and fishing. Thanks to her mother and late father, Olson's love of the outdoors came early in life. Together since their teens, the Olsons have done their share of water activities. "We like sailing, fishing and ice boating," she stated. "We've done several Mackinac races and have also raced in Chicago, Detroit, Toledo, Annapolis, and in the ocean. We recently sailed from Lake Erie to Green Bay and found the water quality in northern Green Bay to be remarkably good. Good water quality is important to quality of life."

Today, they call the Green Bay area "home" and continue their outdoor adventures whenever possible. "Green Bay is a gorgeous place for boating and wildlife," she added.

A Packers fan since she was "a little kid," life in Green Bay will enable Olson to keep an eye on her favorite football team as well as on progress being made along the Lower Fox River. She concluded, "With Little Lake Butte des Mort dredged and fish consumption advisories relaxed, we're headed in the right direction."



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 & 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:

May

- ◆ *Jim Hahnenberg*, EPA: National Association of Remedial Project Managers Annual Meeting, Kansas City, Missouri; long-term monitoring plan and upper river results.
- ◆ *Jessica Maloney*, Wisconsin Department of Health Services: Nelson Institute for Environmental Studies Paper Discovery Center, Appleton, Wisconsin; Lower Fox River outreach and education.

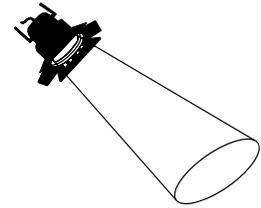
June

- ◆ *Jim Hahnenberg*, EPA: Kalamazoo River Protection Association, Allegan, Michigan; general Lower Fox River cleanup.

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

Spotlight On:

Point au Sable



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

The Point au Sable Nature Reserve, owned by the University of Wisconsin-Green Bay, is the largest intact coastal wetland along the eastern shore of Green Bay. Recently, 61 acres were added to the reserve to adjoin two existing tracts. Lower Green Bay/Fox River Natural Resource Damage Assessment settlement funds supported the land acquisition.

The reserve is home to a unique complex of Great Lakes coastal wetlands, several bald eagle nests, and more than 200 species of birds. Wequiock Creek, a stream flowing to the bay through the southeast portion of Point au Sable, provides breeding habitat for fish, including northern pike, bass, and perch.

Each spring and fall, thousands of waterfowl, gulls, terns, shorebirds, and passerines pass through Point au Sable. The reserve serves as an important resting site and provides a valuable food source for the weary travelers.

“Some say the top three features of a commercial business are location, location, and location, and I think the same applies to natural areas,” stated UW-Green Bay Professor Bob Howe. “Point au Sable is a prominent oasis of green space along the east shore of Green Bay. Consequently, migratory birds traveling along the shore or over the water see it easily when their overnight trip ends in the morning.”



PHOTO COURTESY OF U.S. FISH & WILDLIFE SERVICE

Professor Bob Howe discusses the importance of Point au Sable for birds at a recent dedication ceremony.

Bald eagles have nested at Point au Sable since at least 2007, and are known to hunt in the waters within and adjacent to the nature reserve. Peregrines, which nest at the mouth of the Fox River approximately eight miles away, have been observed hunting there on many occasions. Some notable breeding birds that reside in the site’s wetlands and forests are the black-crowned night heron, American white pelican, Forster’s Tern, and red-headed woodpecker.

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Although several attempts were made to develop the area for residential use or tourism during the last century, Point au Sable remained intact. One previous owner planned to develop the peninsula as “Wisconsin’s Venice” by dredging a network of canals.

“Duck hunting might be identified as the single most important reason why we still have this relatively intact wetland complex,” Howe continued. “The private landowners saw the value in protecting the area for recreation.”

Another reason Point au Sable may have been spared from development is the challenging conditions for development. Water levels at Point au Sable fluctuate daily, seasonally, and annually and are closely tied to changing water levels in Green Bay and Lake Michigan.

High water levels in the 1970s left the peninsula almost completely inundated. Low water levels in recent decades have left the interior marshes much drier and choked with unwanted invasive species. Water level fluctuations result in shifting vegetation which ultimately changes the abundance of food and habitat for fish and wildlife.

The reserve is open to the public for recreational opportunities. It also serves as an important site for research and learning by UW-Green Bay students, faculty, and staff. “It’s only four miles from campus, but Point au Sable is a dynamic and biologically diverse place that will always provide challenges for ecological study,” Howe continued. “It’s an ‘outdoor laboratory’ in the truest sense.”

Future restoration projects are planned for the reserve. One restoration goal is to remove invasive species, such as the troublesome giant reed grass, from wetlands and waterways.

Other project ideas include management of water levels in wetlands and improvement of habitat along Wequiock Creek for fish spawning.

Matching funds for the acquisition were provided through a University of Wisconsin Foundation account managed by UW-Green Bay’s Cofrin Center for Biodiversity.

The natural resource trustees are comprised of the Wisconsin Department of Natural Resources, Oneida Tribe of Indians of Wisconsin, Menominee Indian Tribe of Wisconsin, U.S. Fish & Wildlife Service, and National Oceanic and Atmospheric Administration.

For more information about Fox River/Green Bay NRDA projects, contact Betsy M. Galbraith, trustee council coordinator, at betsy_galbraith@fws.gov or 920-866-1753.



PHOTO COURTESY OF U.S. FISH & WILDLIFE SERVICE

UW-Green Bay graduate students Erin Gnass and Nick Walton present their Point au Sable research findings at a recent dedication ceremony for the new parcel.

State Agencies Relax Consumption Advice for Some Fish

By Candy Shrank and Sonya Rowe, Wisconsin Department of Natural Resources and Jessica Maloney, Wisconsin Department of Health Services

Sediment cleanup appears to be paying off for wildlife and Wisconsin anglers who eat fish from the Lower Fox River.

Earlier this year, the state relaxed the PCB advisory for smallmouth bass from Little Lake Butte des Morts to the DePere Dam. That decision was based in part on information collected after cleanup in Little Lake Butte des Morts was completed in this first and most-upstream segment of the river.

State officials also modified advisories for other species from the dam to the mouth and for Green Bay where cleanup is planned or underway, but not completed. Advice varies by location, species, and size.

Information collected over the past 40 years by the Wisconsin Department of Natural Resources shows general improvements in mercury and PCB levels in many locations throughout the state. The Wisconsin DNR has monitored contaminants in fish since the 1970s, including 1,118 fillet samples from the Lower Fox River reaches and 1,241 fillet samples from Green Bay. The samples came from more than 20 species of fish popular with anglers. Wisconsin DNR and Wisconsin Department of Health Services jointly determine consumption advice based on contaminant levels in fish.

The main reason for the Lower Fox River advisories is PCB-contaminated mud at the bottom of the river commonly referred to as sediment. Wisconsin and the federal government continue to work with local companies to clean up PCBs from areas contaminated by wastewater discharges from paper mills and other operations that used or recycled PCBs.

The state provides advice on eating PCB-affected fish from 44 waterways. There are also advisories due to

high levels of mercury, dioxins, and perfluorinated chemicals (used to make materials stain and stick resistant such as Teflon and Scotchgard). All of the state's waters have a general mercury advisory because the chemical is found in all fish.

Consumption advisories continue for all stretches of the Lower Fox River. Advice ranges from "do not eat" to "one meal per week," depending on the species and the location in the river or bay. Advice for the lower part of the river, downstream of the DePere Dam to the mouth, remains at "do not eat" for several species (bigmouth buffalo, channel catfish, common carp, white bass, larger sheepshead, and walleye). Many species from this reach remain at "no more than one meal per month."

PCBs are man-made chemicals once used in manufacturing. They were banned in the United States in 1979 but remain in river and harbor sediment where they accumulate in fish and other organisms. They can cause developmental problems in children born to women exposed to PCBs. They can also increase the risk of cancer and affect the nervous, immune, circulatory, and hormonal systems.

PCB discharges from manufacturing and recycling of carbonless copy paper began in the 1950s. They were discovered in the Lower Fox River about 20 years later. Fish consumption advisories were first issued in 1976 because PCB levels were higher than the U.S. Food and Drug Administration's standard for interstate sale of fish.

For more information on Wisconsin's fish consumption advice, visit: <http://dnr.wi.gov/fish/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.



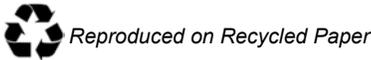
Check out these websites:
<http://www.epa.gov/region5/cleanup/foxriver>
<http://dnr.wi.gov/org/water/wm/foxriver/index.html>
<http://contaminants.fws.gov/issues/restoration.cfm>
<http://www.fws.gov/midwest/nrda/index.html>

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

- **Wisconsin DNR**, Northeast Regional Office, 2984 Shawano Ave., Green Bay
- **Wisconsin DNR**, Bureau of Watershed Management, 101 S. Webster St., 3rd 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., 7th Floor, Chicago



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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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