



# Wisconsin Lakesider

Great Lakes Area of Concern Newsletter

Volume 1, Issue 1

Spring/Summer 2015

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## Welcome to Wisconsin's AOC Newsletter

Welcome to the first edition of the *Wisconsin Lakesider*, the Wisconsin Department of Natural Resource's Great Lakes Area of Concern (AOC) newsletter. Through this semi-annual update, we hope to bring you some highlights of what's going on around the state at each of Wisconsin's 5 designated Great Lakes AOCs as well as keep you informed of upcoming events and volunteer opportunities. To learn more about the AOC program and the WDNR Office of the Great Lakes, visit us on our [website](#). To receive this newsletter by email as well as additional updates on events and volunteer opportunities, sign up [here](#) and select one or more of the AOCs that interest you. If you have articles or pictures to share or have questions or feedback we would be happy to hear from you.

Enjoy!

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EVAN DAVIES PHOTOGRAPHY

Evan Davies

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## AOC News & Events

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## Menominee River Dredging Complete!

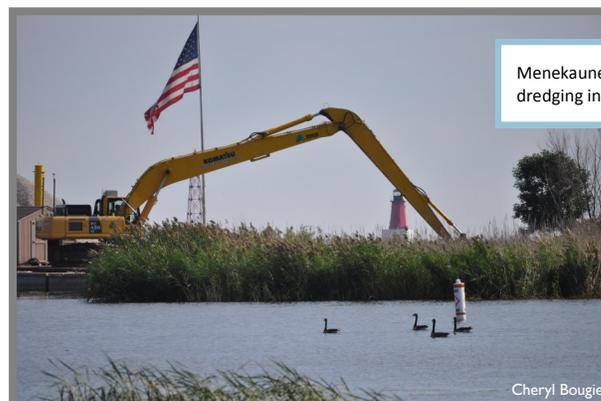
After years of planning and hard work, the bottom sediments of the Lower Menominee River have finally been cleaned up. Before modern environmental regulations, municipal and industrial wastes were commonly discharged directly to America's waterways. Over the decades, petroleum-based chemicals,

heavy metals, and other pollutants collected in the slow water areas of lakes and river bottoms, resulting in contaminated sediments. Years after the pollution sources were controlled, the lingering contaminants found in the sediments continue to be harmful to people and the environment. Over the last three

years, federal, state, and local partners along with industry have worked to address the problem of contaminated sediments in the Lower Menominee River.

The Ansul/Tyco environmental dredging project to remove arsenic-contaminated sediments resulting from legacy industrial practices began in 2012 and was completed in 2014 working with WDNR and EPA. Approximately 302,000 cubic yards of arsenic-contaminated sediments were removed from the site.

The Wisconsin Public Service Corporation (WPSC) conducted an environmental dredging project in late 2012, removing 14,800 cubic yards of sediments contaminated with coal (continued on page 3)



Menekaunee Harbor dredging in progress.

Cheryl Bougie

# St. Louis River



## What's Happening?

To learn more about St. Louis River AOC projects and events visit <http://dnr.wi.gov> search "[St. Louis AOC](#)"

**For more information, contact:**  
 Matt Steiger  
 St. Louis River AOC Coordinator  
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## NOW AVAILABLE

The 2014 Remedial Action Plan (RAP)  
 Visit the [AOC plans](#) page.

## New Stories and Science Website

Last fall, an interactive website was launched for the St. Louis River Estuary at: <http://www.stlouisriverestuary.org/>. A collaborative project involving Minnesota and Wisconsin Sea Grant developed this website with five subject areas: fishing, community, recreation, shipping and ricing. A restoration subject has been added thanks to the St.

Louis River Area of Concern funding and staff from Minnesota and Wisconsin. The Stories and Science website contains a user friendly mapping and geocaching aspect as well as interviews from local managers and users of the estuary, and information on current restoration projects in the estuary.

Wisconsin DNR is collaborating with University Wisconsin Sea Grant to update the restoration content and add some additional information on Area of Concern restoration projects in Wisconsin. Check back often this year to see updated restoration progress and a story map about Wisconsin Point.  
 –By Matt Steiger



## 5th Annual St. Louis River Summit

The 5th annual St. Louis River Summit was held in March 31, 2015. Around 250 natural resource managers, scientists, researchers, students and citizens attended this two day event in Superior, WI. This year's theme was the past, present, and future river. The summit hosted around 35 speakers and as many posters; including a poster highlighting Wisconsin land protection and restoration in the St. Louis River AOC, developed by Molly Wick of WDNR.

The two day event featured keynote speakers Dave Ullrich with the Great Lakes and St. Lawrence Cities Initiative and John Jensen with the University of Rhode Island. Dave of-

fered unique perspectives on Great Lakes Cities while John spoke about the cultural landscape of great lakes people and places throughout history. Look for the 6<sup>th</sup> annual Summit to be held in the spring of 2016!  
 - By Matt Steiger



# Lower Menominee River



Rich Gebbard

Restoration work is enhancing nesting sites for birds such as these egrets

## Island Rookery Habitat Restoration Underway

A project to improve habitat for island-nesting birds is currently underway in the Lower Menominee River Area of Concern. The goal of the project, which began in the fall of 2014, is to improve the plant communities at Strawberry, Blueberry, Little Blueberry, and Boom Islands (approximately 18 acres in total) to maintain habitat conducive to heron and egret nesting activity. This three-year project is focused on invasive plant species control and restoration plantings at these four islands. Strawberry Island is currently home to a large breeding colony of egrets and herons, while Little Blueberry Island, Blueberry Island, and Boom Island provide potential rookery habitat. This is a United States Army Corps of Engineers (USACE) Detroit

District project (funded by the Great Lakes Restoration Initiative) that includes the USACE Engineering Research and Development Center, Great Lakes National Program Office, USACE Buffalo District, and Ecology and Environment, Inc. (E & E). There will be ongoing collaboration with regional agencies and stakeholders.

In November of 2014, E & E scientists identified and mapped invasive plant species on the four islands in the project area. Invasive plant species of concern within the island vegetative communities include common buckthorn, glossy buckthorn, phragmites, bush honeysuckle, and riverbank grape. Common buckthorn, glossy buckthorn, and bush honeysuckle are the

most abundant invasive species across the islands. Although riverbank grape is native to this region, it is a concern on Strawberry Island, where nesting trees have lost crowns and branches due to the heavy vines. E & E is currently in the process of choosing the contractor(s) to perform the work on the islands. A representative from E & E spoke about the project at the April 16 meeting of the Chapee Rapids Audubon Society—see <http://craudubon.com/> for more information. For those interested, there will be opportunities to assist with monitoring of birds using the islands. Please contact AOC Coordinator Laurel Last at [laurel.last@wisconsin.gov](mailto:laurel.last@wisconsin.gov) or (920) 662-5103 to learn more.

- By Laurel Last

## What's Happening?

To learn more about the Lower Menominee River AOC projects and events visit <http://dnr.wi.gov> search "[Menominee River AOC](#)"

**For more information, contact:**  
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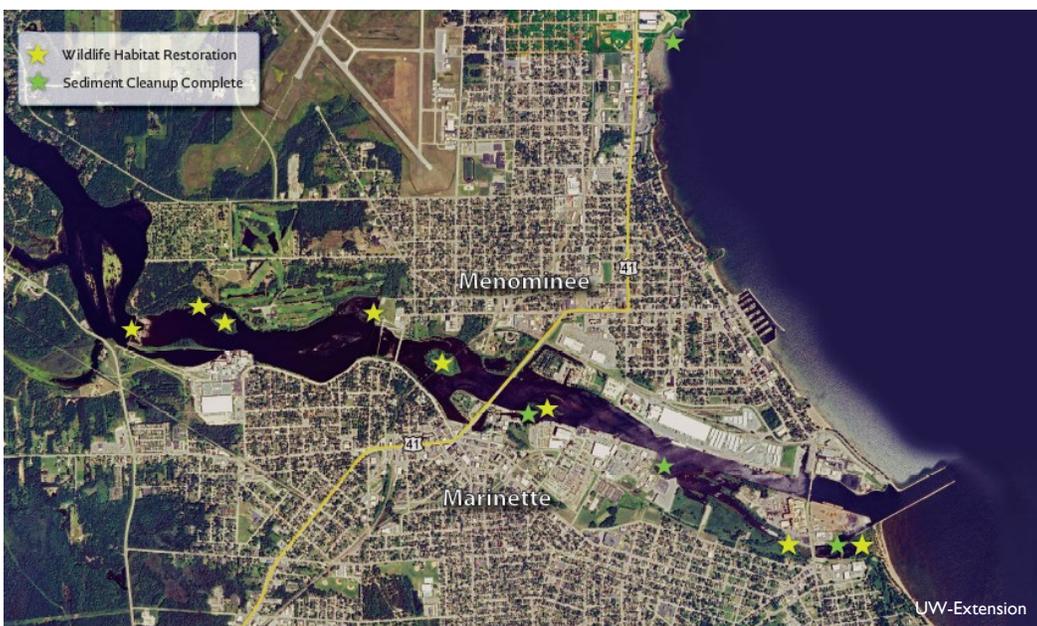
## COMING SOON

The 2014 Remedial Action Plan (RAP)  
Visit the [AOC plans](#) page.

## Dredging (Cont. from front)

tar, a byproduct of historical coal-gas production (coal gasification). With the help of Great Lakes Restoration Initiative funding, the City of Marinette, partnering with WDNR & EPA, began dredging in late summer 2014 at the Menekaunee Harbor near the river's mouth. By December 2014, 27,100 cubic yards of contaminated material had been removed, along with an additional 31,900 yards of uncontaminated sediment dredged for navigation purposes.

The completion of dredging of all known contaminated sediments is an important milestone for the Lower Menominee River AOC. Continued progress has only been possible with the help of many partners who have put a lot of effort into restoring the AOC. The focus is now shifting to habitat restoration projects. Consideration for the removal of associated Beneficial Use Impairments will begin in 2015, moving this AOC toward delisting. -By Laurel Last



Map of the restoration and dredging projects in the Lower Menominee River AOC.



# Lower Green Bay & Fox River

## Green Bay AOC Video In The Works

If you spend time on the lower Fox River you are probably used to seeing dredging and cleanup crews, but don't be surprised this summer if you see a camera crew! As remediation and restoration work progresses, it's important to step back and recognize the

efforts underway, why they are needed, and what a healthier river and bay will mean to the communities that surround it. In order to document this remarkable transformation and the partnerships that are making it possible, the Wisconsin DNR is planning to produce a

short informational video. The mini-documentary will be 3-4 minutes long and will be the latest in a set of videos on Wisconsin's Areas of Concern. Funding for the Green Bay video is being provided by the Great Lakes Restoration Initiative. -By Emily Punke

## What's Happening?

To learn more about Lower Green Bay & Fox River AOC projects and events visit <http://dnr.wi.gov> search "[Green Bay AOC](#)"

**For more information, contact:**  
Megan O'Shea, Lower Fox River & Green Bay AOC Coordinator, Wisconsin DNR, Green Bay, WI Phone: 715-395-6904 e-mail: [Megan.Oshea@wisconsin.gov](mailto:Megan.Oshea@wisconsin.gov)

Check out other AOC videos that have been produced:

- [Lower Menominee River: Changing Waters](#)
- [Sheboygan River: Fast Track to Recovery](#)
- [Milwaukee River Estuary AOC: A Community Returns to Its Rivers](#)

## NOW AVAILABLE

The 2014 Remedial Action Plan (RAP)  
Visit the [AOC plans](#) page.

## USGS Study Supports Lake Michigan AOCs

A study commissioned by WDNR and carried out by the US Geological Survey (USGS) will benefit Wisconsin's Lake Michigan AOCs. The study, which began in 2012, is looking to evaluate the health of benthic and plankton communities

at key sites around Lake Michigan. Benthos are the critters that live on or within the bed sediments of a lake or river and plankton are tiny organisms that live within the water column. These organisms play a critical role in the aquatic

food chain but are often especially susceptible to pollution and other biological stresses. The data collected in the study will provide information for the Degraded Benthos and Degraded Plankton impairments listed for some of the Lake Michigan AOCs and can be used to help determine if further actions are needed to restore them. To do this, USGS collected data at sites within each AOC as well as several non-AOC sites. This allows the WDNR and USGS to assess the status of benthic and plankton communities in AOCs compared to uncontaminated areas. Sampling for the study was completed in 2012 and again in 2014 and final results will be available



USGS performing sampling on the Fox River during the 2012 study year.



later this year. Support for this study was provided by Great Lakes Legacy Act funding from the US Environmental Protection Agency-Great Lakes National Program Office and the Great Lakes Restoration Initiative. For more information and 2012 sample results visit <http://pubs.er.usgs.gov/> and search "[Wisconsin Benthos](#)". - By Emily Punke

# Sheboygan River



Camille Bruhn

## Sheboygan Welcomes New AOC Coordinator!

### What's Happening?

To learn more about Sheboygan River AOC projects and events visit <http://dnr.wi.gov> search "[Sheboygan River AOC](#)"

**For more information, contact:**  
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### NOW AVAILABLE

The 2014 Remedial Action Plan (RAP)  
Visit the [AOC plans](#) page.

We are happy to welcome Camille Bruhn as the new WDNR Sheboygan River AOC Coordinator. She comes to Sheboygan with several years of valuable experience as the crew leader for the National Rivers and Streams Assessment project with the Wisconsin DNR. She also worked for the UW Center for Limnology performing lake research on Madison area lakes. She has a degree in Biology and Biological Aspects of Conservation as well as a Certificate in Environmental Studies from UW-Madison. Camille will be working on implementing AOC projects, coordinating outreach and citizen monitoring efforts, engaging technical experts in AOC decisions, and developing AOC planning and proposal documents as required by the EPA. She started her new role on February 25<sup>th</sup> at the Plymouth Service Center. - By Emily Punke

"I am very excited to continue my career with the DNR working on the Sheboygan River AOC."

-Camille

## Help Watch and Listen for Signs of Healing

Excerpt from *The Sheboygan River Explorer*:

The Spring edition of the *Sheboygan River Explorer* is devoted to helping you find a way to enjoy the river, help with restoration, and watch for signs that the river is healing. The WI Dept. of Natural Resources and U.S. Environmental Protection Agency are looking for evidence that the river is healing. Your help is needed! Read on for ways that you can get involved. Local partners—Sheboygan River Basin Partnership, Camp Y-Koda, and Glacial Lakes Conservancy, and UW-Extension have been working closely with each other to apply for grants and build the future for Sheboygan River programming and citizen engagement. Fund-



Amy Kretlow

ing priorities are changing and UW-Extension involvement in Sheboygan River AOC work will wrap up in June. As part of your local ecosystem, the future of the river really lies in your hands. Help it return to health. Volunteer to improve and maintain habitat, or help

fund-raise for projects. Always continue to learn, and let your values be known to public officials — local, state, and federal.

By Deb Beyer, UW-Extension Natural Resource Educator

Bird watchers enjoy "Warbler Wednesdays", a bird watching event led by Sheboygan County Audubon Society.

FOR MORE SHEBOYGAN RIVER NEWS AND EVENTS, CHECK OUT *THE SHEBOYGAN RIVER EXPLORER*

[HTTP://FYI.UWEX.EDU/AOCS/SHEBOYGAN/NEWSLETTERS/](http://fyi.uwex.edu/aocs/sheboygan/newsletters/)

# Milwaukee Estuary

## What's Happening?

To learn more about Milwaukee Estuary AOC projects and events visit <http://dnr.wi.gov> search "[Milwaukee AOC](#)"

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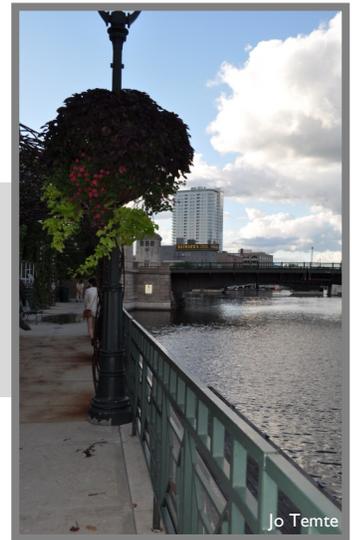
### NOW AVAILABLE

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## History of Milwaukee Estuary AOC Featured in Public Television Documentary

The efforts of the Milwaukee Estuary AOC program will reach an entirely new level of public awareness this month thanks to a new documentary airing on Milwaukee Public Television. *Milwaukee: A City Built On Water* features historian John Gurda and tells the story of water in the Milwaukee region, both past and present. The idea for the documentary stemmed from Gurda's 2013 lecture series titled "*Built On Water, A Visual Lecture Tour of the Milwaukee*

*Estuary Area of Concern.*" The series was a huge success, with over 1,000 people attending at several different venues around Milwaukee and promoted meaningful public engagement in AOC issues. The new one-hour-long documentary takes the story to a new level while still keeping true to the same underlying goals – raising community awareness, education and engagement in water-related issues in the AOC. The program began airing on Milwaukee Public



Jo Temte

Television on Earth Day, April 22<sup>nd</sup>. For more information and television schedules visit [www.mptv.org](http://www.mptv.org) [exit DNR] -By Emily Punke

FOR MORE MILWAUKEE ESTUARY NEWS, CHECK OUT *RIVERS REPORT*

[HTTP://SWWTWATER.COM/](http://SWWTWATER.COM/)

## Tree Swallow Study Expanded in Milwaukee

Tree swallows are a common sight in the summer months, nesting in tree cavities or nest boxes and munching on nearby insects. These characteristics make the species an ideal subject to study how environmental contamination is effecting birds and other animals within the AOC. The tree swallow's diet consists primarily of the type of critters that live within the contaminated sediments of the Milwaukee River Estuary. They have a habit of feeding in very close proximity to their nest location, which allows researchers to set up nest boxes in specific areas of inter-

est and collect data to determine how much contamination is transferred from the sediments up through the food chain. Currently, these birds are being studied to assess the state of the Bird or Animal Deformities or Reproductive Problems impairment. They can also provide information on how effective sediment remediation has been in improving the health of the area's birds and animals. The US Geological Survey (USGS) began collecting data in 2010 at two sites in the Milwaukee Estuary AOC, Lincoln Park and Lakeshore State Park. Those

results showed both contamination and genetic damage at elevated levels compared to other areas, which may suggest that the birds were exposed to relatively high concentrations of toxins associated with these effects. The findings indicated a need to study additional sites in the AOC to better understand the biological effects of contamination in the area, which can be quite complex. In 2014 the study was expanded with nest boxes located in the areas of Lincoln Park, Kinnickinnic River, Three Bridges Park and Cedarburg. These results will be combined



Christine M. Custer

with those from AOC locations across the Great Lakes as part of a larger study being conducted by USGS. For more information on this study visit [www.usgs.gov](http://www.usgs.gov) and search "[GLRI Project 80](#)". -By Emily Punke



### Wisconsin DNR Office of the Great Lakes

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608-267-7439

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Search: "[AOC](#)"