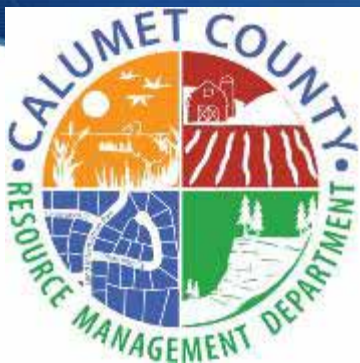


Collaborative Stewardship for the Lake Winnebago System

Large Lake, Large Watershed Challenges

2013 Wisconsin Lakes Partnership Convention



Dani Santry
Resource Management Department
Calumet County

Outline

- ◆ Challenges of managing a large lake system
- ◆ Previous efforts, current project formation and evolution
- ◆ New ways to engage on holistic Lake Winnebago region issues

- ◆ Acknowledgements:
 - ◆ Chad Cook
 - ◆ Mike Lizotte
 - ◆ Other Steering Team Members

Large Lake, Large Watershed

Challenges to effective stewardship



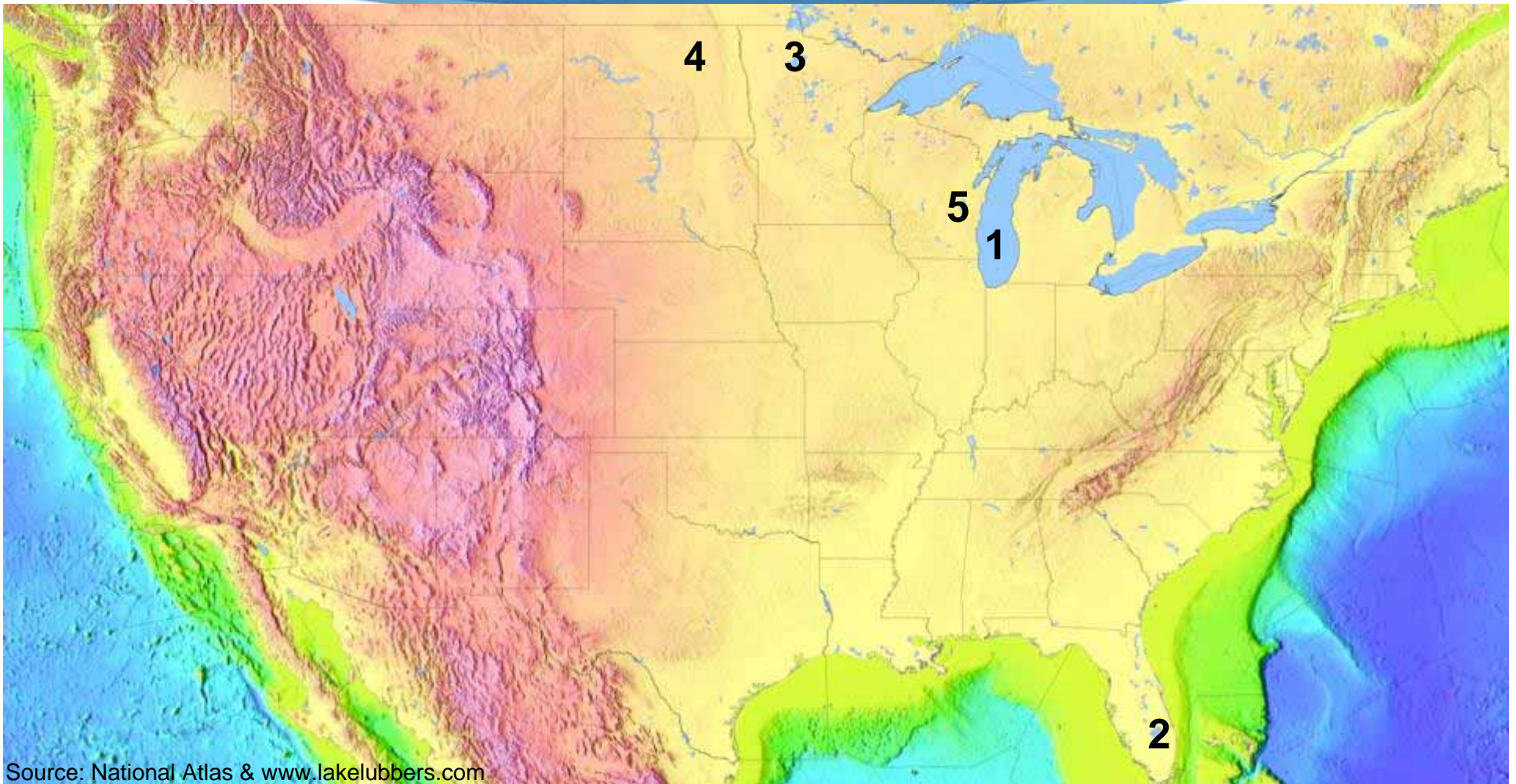
Visible From
Space



STS-010

Continental U.S. Size Rankings

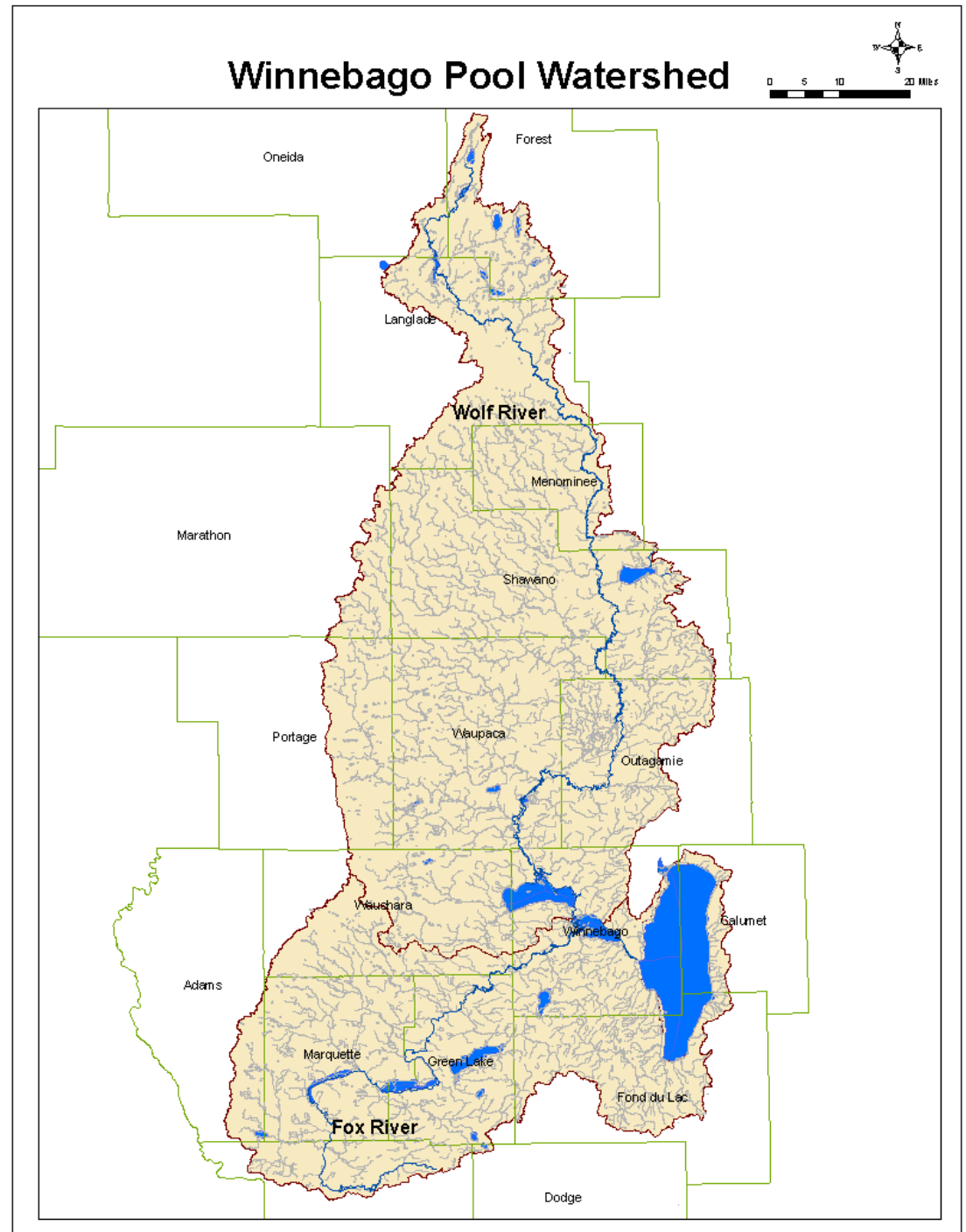
Natural, Freshwater Lakes



Source: National Atlas & www.lakelubbers.com

The Winnebago Pool

- 17% of the surface water in Wisconsin
- Watershed drains 12% of the state
- Over 2 million people live within 75 miles
- #1 inland boating destination
- Over 200 miles of shoreline



Watershed Land Cover

Pink = Urban

Yellow = Agriculture

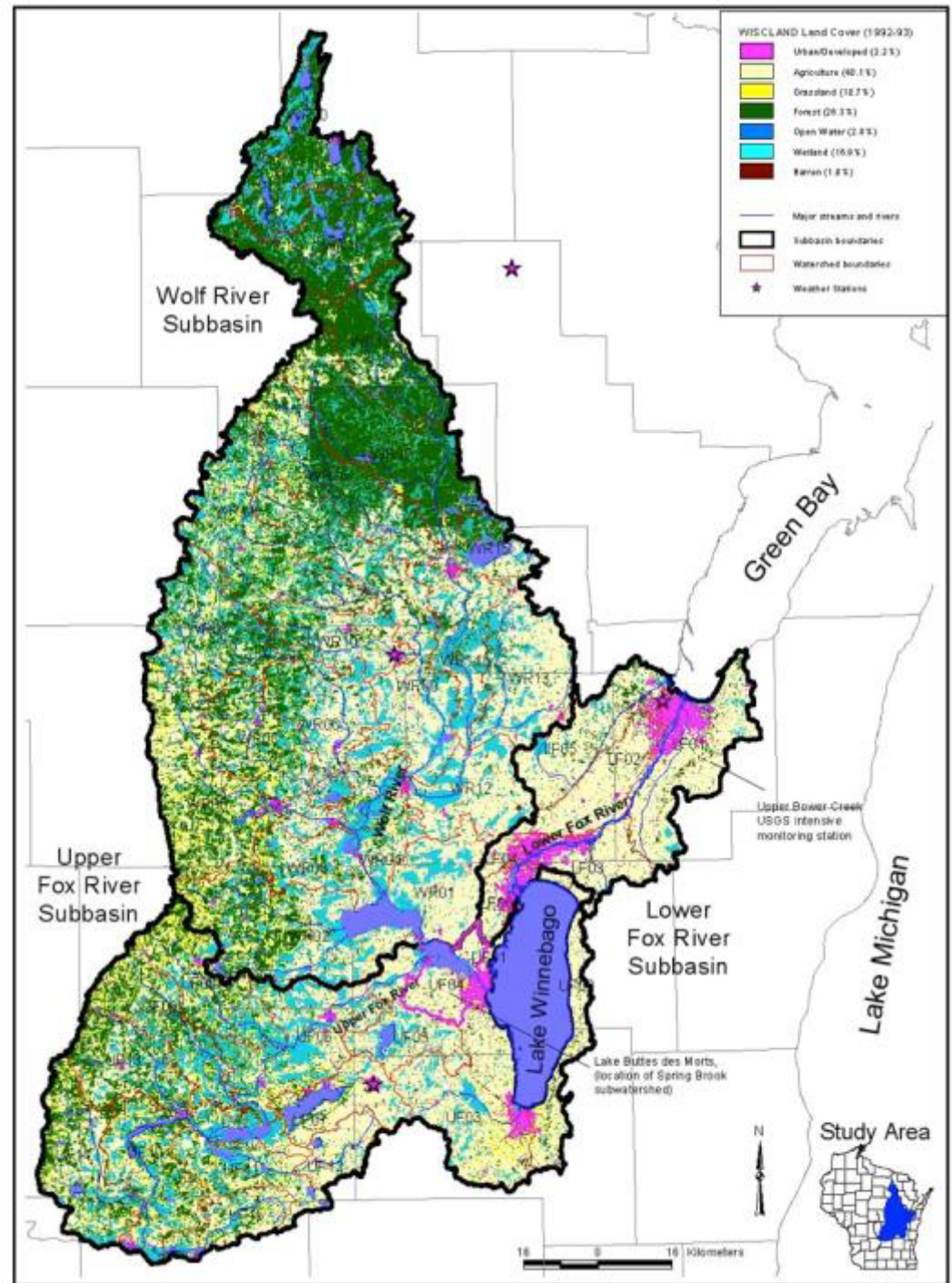
Dark green = Forest

Light blue = Wetland

UpperFox/Wolf TMDL – 2015?

L Fox TMDL -2012

Source: Kevin Fermanich, UW-Green Bay





Wolf River

Dam

Fox River

Political Patchwork

- ◆ 4 Counties
 - ◆ 5th – Drinking Water
- ◆ 4 Cities
- ◆ 4 Villages
- ◆ 20 Towns
- ◆ Many common mandates and programs
- ◆ Priorities and approaches vary



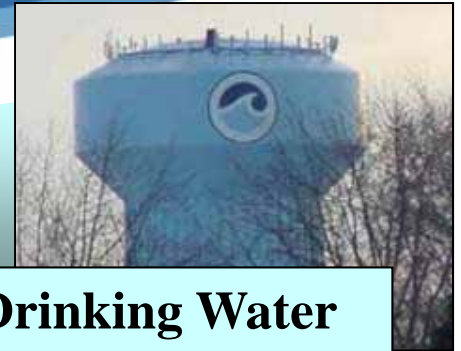
Tourism



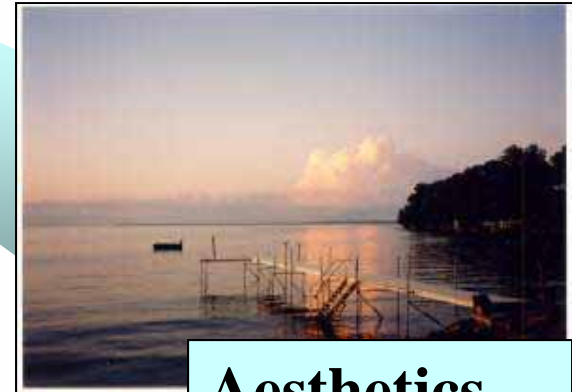
Habitat



Recreation



Drinking Water



Aesthetics



Local Business



Downtown revitalization

Economic *Value* of the Winnebago Pool

- ◆ Recreational Fishing:
 - ◆ > \$300 million per year (*published in 2008*)
 - ◆ > 60 tournaments per year
 - ◆ Largest lake sturgeon fishery in the world
 - ◆ \$3.5 million impact from spearing
- ◆ Tourism:
 - ◆ 2 million people live within day-trip distance of 75 miles
 - ◆ Walleye Weekend, Sawdust Days, EAA Air Venture



Economic *Value* of the Winnebago Pool

- ◆ Real Estate:
 - ◆ ~200 miles of shoreline, nearly all private
- ◆ Drinking Water:
 - ◆ ~ 250,000 people served
- ◆ Public Areas:
 - ◆ State, County, City, and Town parks
 - ◆ Downtown waterfronts



Economic Costs of the Winnebago Pool

Dry summer draws \$300,000 extra in water plant costs

Lake algae treatment to blame; higher use by residents offsets expense

7:00 PM, Oct 27, 2012 | 2 Comments

uhfrp p hgg

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uhfrp p hgg1

uhfrp p hgg

8 Tweet 0

0

A A



This year's hot, dry summer led to increased algae and dead carp along the shoreline of Lake Winnebago, making more work for the city's water plant. / Wm. Glasheen/The Post-Crescent

Written by
Nick Penzenstadler,
Post-Crescent staff writer

The Fox Valley's hot, dry summer led to more muck on Lake Winnebago.



Never
Stop
Playin'

Affinity
HEALTH

Orthopaedic
Sports Medicine

Economic *Costs* of the Winnebago Pool

💧 Water Quality

- 💧 Drinking water treatment plants
- 💧 Wastewater treatment plants
- 💧 Stormwater treatment
- 💧 Runoff from farms and residences...non-point source
- 💧 Clean Water Act goals of “fishable and swimmable”

💧 Invasive Species

- 💧 Zebra mussel damage to intake pipes; shell accumulations
- 💧 Aquatic plant control



Economic Costs of the Winnebago Pool

- Public Safety
 - Navigation aids (buoys, signs, lights)
 - Search and rescue
- Property Values
 - Shoreline erosion from water and ice
 - Harbor and channel dredging
 - Flood control
- Fishing and hunting
 - Law enforcement
 - Stocking and harvesting
 - Reef building and marsh protection

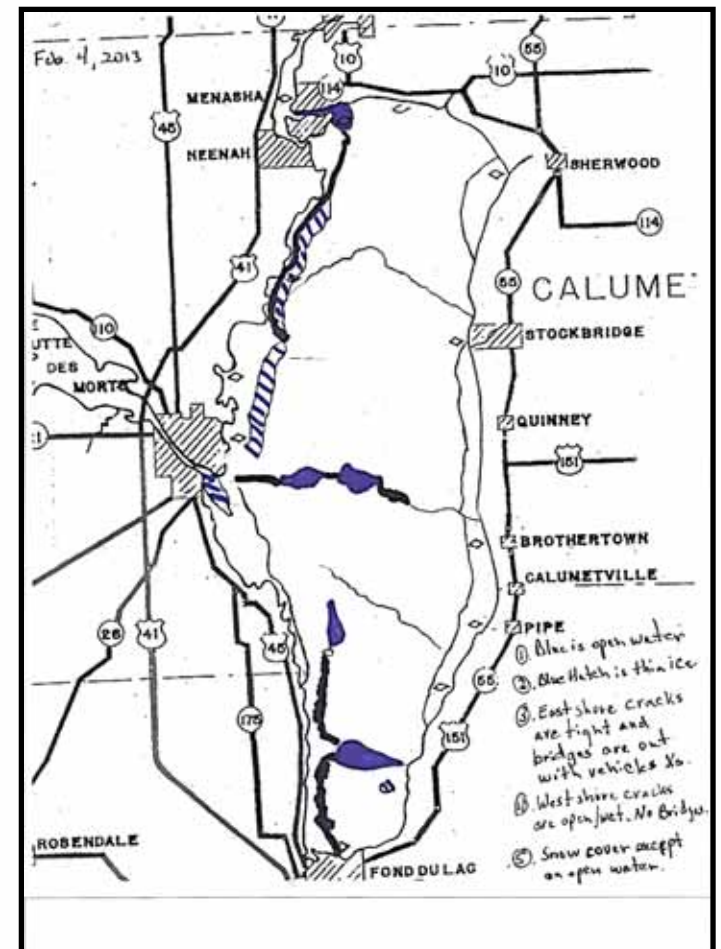




Photo Credit – Diane Schauer



Photo Credit – Diane Schauer

Who Manages?

State of Wisconsin

- ◆ Fisheries
- ◆ Wardens: fish, wildlife, boating
- ◆ Environmental permitting
 - ◆ Chapter 30, WPDES permits
- ◆ Clean Water Act implementation
 - ◆ Some Delegated (NR 151, MS4, Shoreline Zoning)

Federal Agencies

- ◆ U.S. Army Corps of Engineers
 - ◆ Water level control
- ◆ U.S. Coast Guard
 - ◆ Boating jurisdiction
- ◆ U.S. Geological Survey
 - ◆ Streamflow monitoring/flood warning system

Who Manages?

Cities, Counties, Towns

- ◆ County Land & Water Conservation Plans
- ◆ Boat Launches
- ◆ Navigational system
- ◆ Police and Sheriff departments
- ◆ Parks, beaches, harbors, trails
- ◆ Public health alerts (pathogens, toxic algae blooms)
- ◆ Planning – Smart Growth, Farmland Preservation
- ◆ Zoning and Local Ordinances (Shoreline, Noise, Speed limits)
- ◆ Permitting – Erosion Control, Stormwater Management



Coordinated Efforts

- Aquatic Invasive Species regional plan
- Project implementation partnerships by conservation groups
- Tourism promotion (Calumet and Winnebago Counties)
- Search and rescue (police, sheriff, DNR, Coast Guard, volunteer rescue squads)

Challenges & Opportunities

Outlined in January 2012 White Paper

- ◆ Providing for safe and convenient navigation
- ◆ Public health and safety issues
- ◆ Water resources management
- ◆ Economic development
- ◆ Ordinance assistance & recommendations
- ◆ Coordinate citizen action activities

Beginning Steps to Increased Stewardship



Taking the First Step

DNR Lake Planning Grant awarded to Calumet County

Ultimate Goal: Provide coordinated, long-term, comprehensive management to ensure the entire Lake Winnebago System continues to be a positive asset to local communities and economies.



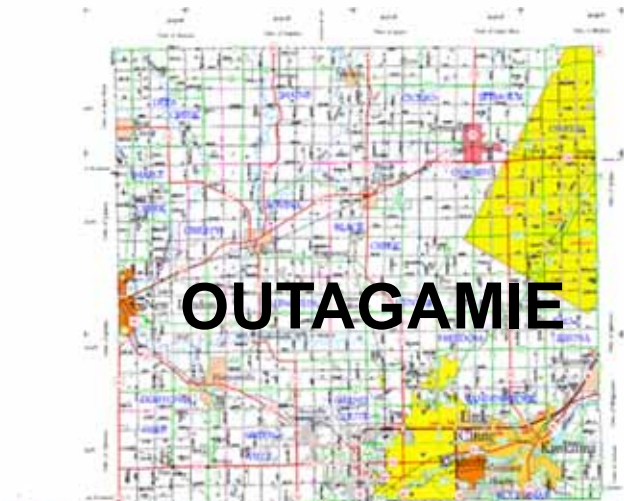
County Leadership

Lead:

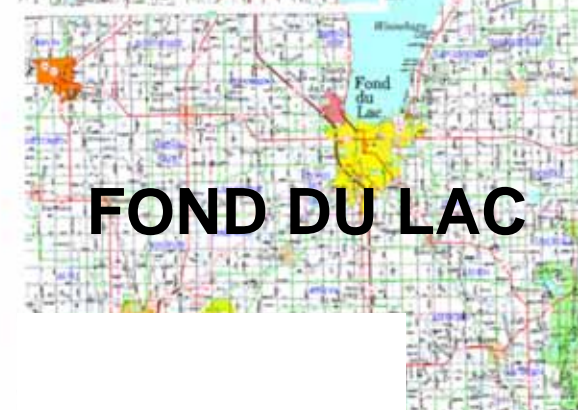
- Calumet Co.

Partners:

- Fond du Lac Co.
- Waushara Co.
- Outagamie Co.



WINNEBAGO



Diverse Support

State

- ◆ Fox River Navigational System Authority
- ◆ UW-Extension Lakes Program
- ◆ Dept. of Natural Resources
- ◆ UW Sea Grant
- ◆ Jessica King

Economic Development

- ◆ Fond du Lac Area EDC
- ◆ Fox Cities EDC
- ◆ International Trade, Business, & Economic Development Council (ITBEC)
- ◆ New North

Municipal

- ◆ City of Fond du Lac
- ◆ City of Neenah
- ◆ City of Menasha
- ◆ City of Oshkosh
- ◆ Calumet Co. Parks Dept.
- ◆ Calumet Co. Health Dept.
- ◆ Waushara Co. Land Conservation & Zoning Dept.
- ◆ Waushara Co. Parks Dept.

Non-Profit

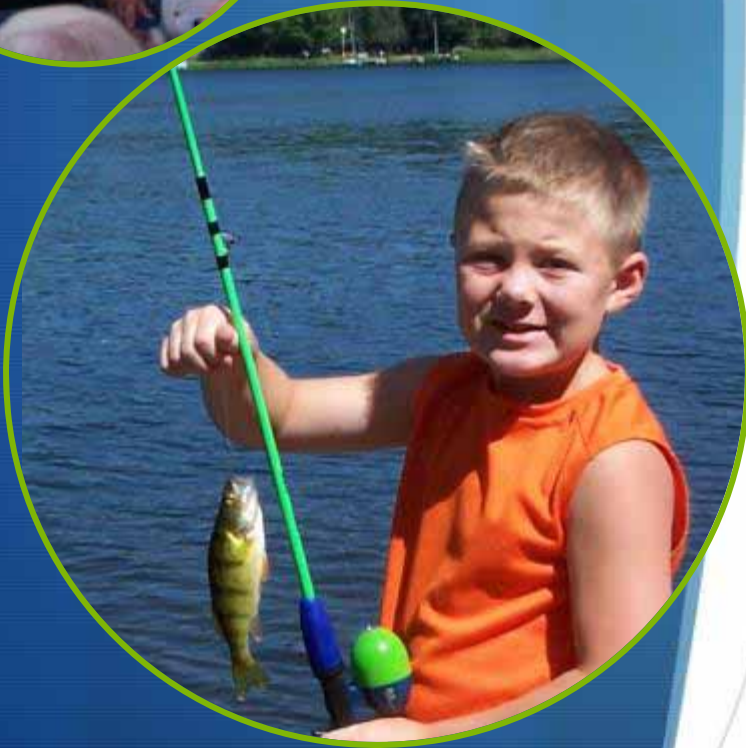
- ◆ Ducks Unlimited
- ◆ Fox Cities Greenways
- ◆ Fox Valley GIS Users Group
- ◆ Fox Wolf Watershed Alliance
- ◆ Fox-Wisconsin Heritage Parkway
- ◆ Tri-County Powerboat Alliance
- ◆ Trout Unlimited
- ◆ Winnebago Lakes Council
- ◆ Wisconsin Lakes Association
- ◆ Wisconsin Waterfowl Association

Tourism

- ◆ Fond du Lac Area CVB
- ◆ Fox Cities CVB
- ◆ Wisconsin Dept. of Tourism

Project Goals

- Analyze existing inventories and plans for completeness & coordination opportunities.
- Get stakeholder input and involvement in prioritizing a list of critical issues that could benefit from increased multi-jurisdictional coordination.



Community Engagement



*Public meeting series
Survey
Online community*

A white rectangular banner with a thin border. On the left side, there is a smaller white box containing the text 'weigh in on the WINNEBAGO WATERWAYS' in a mix of blue and black fonts. To the right of this box, the text 'HELP IMPROVE THE WINNEBAGO WATERWAYS ABOUT THE PROJECT' is written in large, bold, blue and black capital letters. Below this, in a smaller black font, is a paragraph of text: 'Welcome and thank you for your feedback! Weigh In on the Winnebago Waterways needs your input to help determine priority issues and opportunities for collaboration. These waters are yours, and we want to maintain them for you! So sign up and start contributing your ideas today!'

www.winnebagowaterways.com





weigh in on the
WINNEBAGO WATERWAYS

HELP IMPROVE THE WINNEBAGO WATERWAYS ABOUT THE PROJECT

Welcome and thank you for your feedback! Weigh in on the Winnebago Waterways needs your input to help determine priority issues and opportunities for collaboration. These waters are yours, and we want to maintain them for you! So sign up and start contributing your ideas today!

82 Likes
Send
7
Tweet
0
Share
8
+1
0
Email

Reviewed Ideas >

PROJECT DETAILS

- About the Project >
- How It Works >
- Who's Listening? >
- Rewards Store >

Select Language
Powered by Google Translate

CONTRIBUTORS

Weekly Active Users

Bringing in Business

Which types of businesses would you like to see more of in the region?

Choose up to 6

Shopping/retail	2 votes
Cultural amenities (museums, performing arts, etc.)	5 votes
Restaurants	10 votes
Recreation based businesses	10 votes
Water dependent industries (jet ski dealers, etc)	4 votes
Other (please explain in comments)	3 votes

Change Your Vote

82
Like
Send
7
Tweet
0
Share
8
+1
0
Email

1	Phyllis K1	470
2	Greg K13	448
3	Jack M9	446
4	Andrew K11	398
5	Michael L35	390
06	Catherine N	364
07	Paul K13	296
08	Erin G6	284
09	Jennifer S65	280
10	Jerome S2	266

Use your points to get Rewards →

Algae Blooms



Have you noticed any changes in the frequency or severity of algae blooms in your area?

355 121 7 Days Remaining

Take the Survey →

Where are the Ideas happening? See for yourself. [Launch the Idea Map](#)

TOPICS Sort By: NEWEST POPULAR Status: CURRENT ARCHIVED

Property Management Coming Soon
 39 0 4 Days Until Launch [Visit this Topic →](#)

Recreational Opportunities Coming Soon
 43 0 4 Days Until Launch [Visit this Topic →](#)

Playing in the Waterways Add your Ideas
 4 0 29 Days Remaining **EXCLUSIVE** [Visit this Topic →](#)



- 0
- Like
- Send
- 0
- Tweet
- 0
- Share
- 0
- Email

Reviewed Ideas [➤](#)

- PROJECT DETAILS**
- [About the Project](#) [➤](#)
 - [How It Works](#) [➤](#)
 - [Who's Listening?](#)
 - [Rewards Store](#) [➤](#)

Select Language

Powered by Google Translate

WHO'S LISTENING?



Jay Shambeau
Calumet County Administrator



Allen Buechel
Fond du Lac County Executive



Thomas Nelson
Outagamie County Executive



Mark A. Rohloff
City Manager, City of Oshkosh



Managing Healthy Waterways

Have you seen progress in recent years to improve water quality in the waterways?

Views	338
Interactions	90
Days Remaining	14

- 0
- Like
- Send
- 0
- Tweet
- 0
- Share
- 0
- +1
- 0
- Email

Add an Idea in this Topic

- TOPICS
- Managing Healthy Waterways
 - Playing in the Waterways >
 - Invasive Species >
 - Bringing in Business >
 - Algae Blooms >
 - Regional Cooperation >
 - Promoting the Winnebago Waterways >
 - Communicating With You >

Select Language
Powered by Google Translate



Have you noticed any improvements in the water quality in our region? Where have you seen changes made, and where else would you like to see progress? What indicates to you that progress has been made?

IDEAS Sort By: RANDOM POPULAR

Reducing comorant and pelican populations on system

MAR 30, 2013 Jon S21 22 15 1

[I Love it!](#) [I Like it!](#) [It's OK](#) [Neutral](#) [Share](#)

Algae Blooms

 **Have you noticed any changes in the frequency or severity of algae blooms in your area?**

Views	355
Interactions	121
Days Remaining	7

- Like
- Send
- 0
- Tweet
- 0
- Share
- 0
- +1
- 0
- Email

- TOPICS
- Managing Healthy Waterways
 - Playing in the Waterways
 - Invasive Species
 - Bringing in Business
 - Algae Blooms**
 - Regional Cooperation
 - Promoting the Winnebago Waterways
 - Communicating With You
- Select Language
- Powered by Google Translate

by Carol N2 I have property on Lake Winnebago and in the summer a boat couldn't be launched because of the weeds. There is a company in Minnesota that sells a product that can be used safely to get rid of weeds. Why won't the DNR ok some of these products that will not harm the environment so we can safely get back to using the water like it should be used? We pay a huge amount of taxes for property on the lake. I would sure like some of this money used to help us lake property owners.


Mar 28, 2013 at 10:03 AM Flag | REPLY

by Michael L35 Can you provide more details or a company name? There are a lot of claims for "safe" weed control that don't stand up to scrutiny. In general studies find that mechanical and chemical treatments cost about the same, which is tens of thousands of dollars per acre. So any treatment could only be used to treat a few acres out 166,000 acres of Winnebago Pool. For example, the City of Oshkosh only treated about 5 acres out of the 140-acre Miller's Bay to make a boat channel.

Apr 02, 2013 at 12:26 PM Flag

by Mark M43 I would agree that the Algae Blooms are variable based on many factors including weather patterns. It would be my opinion that phosphorus from non-point pollution/runoff (farm fertilizers) may be a large contributing factor.

Mar 27, 2013 at 1:03 PM Flag | REPLY

by David B86  In drought conditions there seems to be more weeds and algae floating on the water. When we have normal or heavy rain the lake flushes the algae down stream. The cleaner (clearer) the water has become over the last 10 to 15 years the more the algae blooms.

Mar 26, 2013 at 7:12 PM Flag | REPLY

by Michael L35 We usually get more plants or more weeds -- rarely more of both in the same place. If you see them together I would



2012: THE YEAR OF 456,827 PARTICIPANTS

[See the Infographic](#)



CREATE CONTRIBUTORS

The platform for creating community contributors.

[Learn More](#)

BUILD COMMUNITY

Identify and build a community of active contributors.

[Learn More](#)

SUSTAIN ENGAGEMENT

Maximize community input with interesting content.

[Learn More](#)

LET'S TALK COMMUNITY ENGAGEMENT

3,440 Topics **27,196** Ideas **65,609** Comments





TOTAL TRAFFIC

Visitors

 **1,208**

Page Views

 **10,533**

YOUR AVERAGE PARTICIPANT IS...

Male

52 Years Old

Living in these Postal Codes:
54935, 54901, 54952



SHARING

 42 Facebook	 1 Google+
 6 Twitter	 0 Email
 9 LinkedIn	Top Shared Item http://www.winnebago

Winnebago Waterways Stats: Screen Shot from morning of April 4, 2013



Public Direction

March

- Website Launch
- Public INPUT meetings

April

- Digest Input
- Develop Paper & Online Survey
- Public Meetings – Prioritize

May

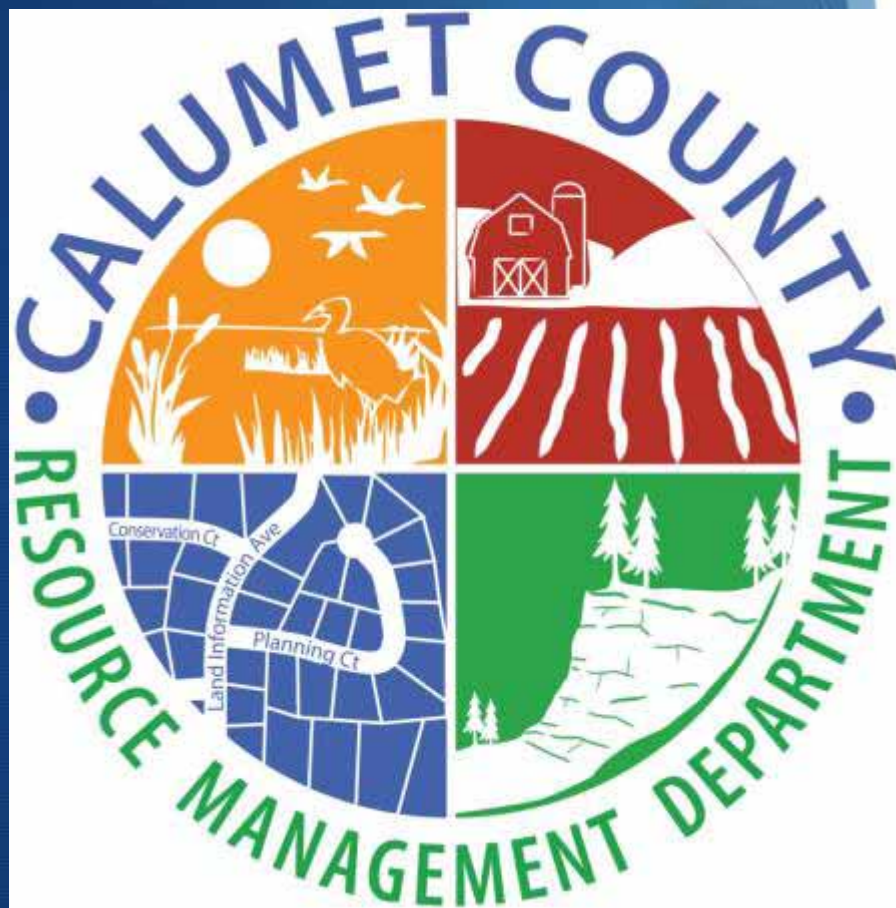
- Finalize Input
- Recommendations for Phase II



Phase 1 of ???

- Enhance knowledge and understanding of Lake Winnebago's fish, plant and aquatic life and their habitats.
- Gain a better understanding of the social, environmental and political factors that affect the holistic management of Lake Winnebago.
- Ensure maximum stakeholder involvement in inventory, plan development and management conversations, impaired water action plan discussions, and prioritization of lake issues.





Thank You!

Danielle Santry

Water Resource Specialist

Calumet County RMD

P: 920 849 1493 x241

Santry.danielle@co.calumet.wi.us