# Portage County Lake Planning Process

Lake Leaders Kemp Field Station September 2010

Jen McNelly and Nancy Turyk Center for Watershed Science and Education UW-Stevens Point

# Types of Planning

- Emotional
- Crisis
- Quick action



- Non-emotional
- Information based
- Discussion



# Why Plan?

- Correct past problems, protect and improve current conditions, and provide for the future.
- Reduces conflicts
- Allows for proactive responses
- Opportunity for informed decision making
- Makes data actionable
- Sets a timeframe
- Makes someone responsible for actions



### Overview

- 30 Lakes
  - 21 Completed or in the planning process
  - Beginning 3<sup>rd</sup> year
- Over 300 Participants
- Primary support team
  - Facilitator
  - 2 technical resources
  - County Land Conservation employee
- Secondary support team
  - WDNR specialists
  - UWEX Lakes
  - County Parks
  - UWSP/UWEX Faculty
  - Golden Sands RC&D
  - WAL
  - Other experts

#### Goals of Portage County Planning Process

- Build a network of citizens that are able to make informed decisions.
- Establish a structure for effective communication between citizens, local and statewide professionals that can be continued into the future.
- Enhance the ability of Portage County departments and local municipalities to protect and improve the condition of Portage County lakes for natural ecosystem functions and human uses.

#### Steps of the Portage County Planning Process

- Representatives from the municipalities invited and County Board Supervisor notified
- Citizens invited through survey letter, newspapers, e-mail listserv
- Series of 4-5 informational meetings addressing specific topics
- Public Meeting for review/adoption of plan
- Plan sent to DNR for approval
- Disseminate plan



# Meeting 1

- Background information from the lake study and other studies
- Overview and description of the planning process
- Develop a vision for the lake
- Establish planning committee
- Determine decision making process
- Set meeting date, time, and topics
- Disseminate Binders



### Meetings 2-5

- Information on identified issues
  - Input from topic specialists
  - Check lake (and other) study and survey results
- Discussion
- Develop goals, objectives and action strategies

#### **Public Meeting**

- Plan is presented to town/village/city boards and/or lake association/district and any interested member of the public
- Audience members may provide feedback, comments, suggestions and/or changes
- Committee requests that the board adopt the plan



## Follow-Up

- Incorporate feedback from the public meeting
- Present plan to the WDNR
  Incorporate feedback from Buzz
- Post finalized plan on the County website
- Distribute final version to the committee members, municipal board, county, WDNR, and any other entities adopting the plan

### What Is In A Plan?

Each Plan Includes Chapters On:

- Background Information
- Water Quality/Quantity
- Shoreland and watershed management
- Aquatic Plants
  - In Lake
  - Near-Shore
  - Invasive Species/ Rapid Response Plan
- Fisheries and Recreation
- Communication
- Implementation of Plan

#### **Each Topic Includes:**

- Brief background/description of the topic
- Survey results
- Vision
- Goal
  - Objective
    - Actions
  - Lead Person/Group
  - Start/End Date
  - Resources

Spring Lake is host to a wide variety of plants, insects, fish, amphibians, and a variety of other animals that all depend on good water quality. Survey respondents indicated that water quality influenced their enjoyment of the lake and impacted their perceived value of Spring Lake. The majority of survey respondents felt that the water quality in Spring Lake was good. Citizens who were familiar with the lake felt that overall the water quality in Spring Lake has stayed the same over time. Data shows that water quality in Spring Lake is beginning to degrade and could use improvement. Spring Lake currently has high concentrations of both phosphorus and nitrogen which can fuel excess plant and algae growth in the lake. Groundwater is the major source of nitrogen entering the lake. The group recognizes that changes in land use practices in the surface and groundwater watershed are needed to improve the water quality in Spring Lake.

Vision: The Spring Lake Planning Committee envisions improving the water quality in Spring Lake.

Goal 6: Reduce phosphorus concentrations in Spring Lake to 36 ug/L with algae blooms (chlorophyll a concentrations 10 ug/L) occurring 39% of the summer. This will be accomplished by reducing nutrient inputs through the implementation of BMPs on 25% of the agriculture and developed land in the watershed. We will know that we have achieved this goal when monitoring indicates that median summer (5 samples/summer) total phosphorus levels are less than 35 ug/L for 3 consecutive years.

Objective 6.1: Reduce nutrients that are applied to the Spring Lake watershed (s) landscape by partnering with watershed landowners and agencies that can provide assistance/information to landowners in the implantation of water quality based best management practices.

Action	Lead person/group	Start/end dates	Resources
Encourage the county to assist landowners in the development of water quality based nutrient management plans in the watersheds. Utilize a watershed phosphorus index of what are the largest phosphorus contributors to Spring Lake.	Friends of Spring Lake	2010	Portage County Land Cons. Dept. NRCS
Encourage landowners to work with the county or NRCS on erosion control methods and vegetated waterways around Spring Lake and in the watershed.	Friends of Spring Lake	Ongoing	Portage County Land Cons. Dept. NRCS

#### Spring Lake Aquatic Invasive Species Rapid Response Plan 2009

#### 2. To Positively I.D. the species send or bring specimen and additional information

- Collection date & county
- Your name, address, phone, email
- Exact location (Latitude/Longitude or UTM preferred, or Township/Range/Section)
- Plant name (common or scientific)
- Land ownership (if known)
- Population description (estimate number of plants, area covered)
- Habitat type(s) where found (forest, field, prairie, wetland, open water)

Send or bring specimen to:

#### Portage County AIS Coordinator

Golden Sands RC& D 1462 Strongs Ave. Stevens Point, WI 54481 Phone: 715-343-6214 E-Mail : skawinsp@co.portage.wi.us

#### UW-Stevens Point Herbarium

301 Daniel O. Trainer Natural Resources Building Stevens Point, WI 54481 Phone: 715-346-4248 E-Mail: ejudziew@uwsp.edu

#### Wisconsin Dept. Natural Resources

Invasive Plant Education, Early Detection, and Mapping Specialist Brendon Panke WI Dept. of Natural Resources P.O. Box 7921 Madison, WI 53707-7921 Phone: (608) 267-7438 E-Mail: invasiveplants@mailplus.wisc.edu  Once the specimen is dropped off or sent for confirmation, make sure to contact: Portage County AIS Coordinator Golden Sands RC& D Contact: Paul Skawinski Address: 1462 Strongs Ave. Stevens Point, WI 54481 Phone: 715-343-6214

E-Mail : skawinsp@co.portage.wi.us

 If an invasive species is confirmed, Paul Skawinski will contact the following people along with the contact list of citizens.

#### Wisconsin Department of Natural Resources

Water Resources Management Specialist Scott Provost 473 Griffith Ave. Wisconsin Rapids, WI, 54494 Phone: 715-421-7881 E-Mail: <u>Scott.provost@wisconsin.gov</u> Who will contact them: Portage County AIS Coordinator

The town in which the waterbody is situated Town of: Lanark Contact: Theodore Marquardt - Chairperson Phone: 715-366-2283 Who will contact them: Portage County AIS Coordinator

Town of: Buena Vista Contact: Paul Cieslewicz - Chairperson Phone: 715-366-4812 or 715-498-7551 Who will contact them: <u>Portage County AIS Coordinator</u>

#### Spring Lake Aquatic Invasive Species Rapid Response Plan 2009

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University of Wisconsin-Stevens Point – Water Resource Scientist				
Contact: Nancy Turyk	Spring Lake Resident Contact Sheet			
Address: 216 TNR 800 Reserve St. Stevens point, WI				
54481	Name (First	Address	Phone	E-Mail
Telephone: 715-346-4155	Last)			
E-mail: pclakes@uwsp.edu				
Who will contact them: Portage County AIS Coordinator	Jerry &	8846 Spring lake Rd.	715-824-5188	Barbians2004@yaho
	Rose	Amherst, WI		o.com
Local Residents (See attached contact sheet)	Barbian			
Who will contact them: Portage County AIS Coordinator				
	Randy	9259 Spring Creek	715-824-2088	randyk@jay-mar.com
Other Contacts of Interest	Kwiatowksi	Rd. Amherst, WI		
	John	8840 Spring lake Rd.	715-498-5081	johndroske@charter.
Neuronanara	Droske	Amherst, WI	/13-458-5081	net
Newspapers Who will contact them: Portage County AIS Coordinator	DIOSKe	Annerst, wi		net
Amherst Community Spirit	Margaret	5620 Riveredge Rd.	608-850-5048	mimoore@TDS.net
Portage County Gazette	Moore	Waunakee, WI		or call 608-712-7628
Stevens Point Journal	NICOLC	53597		01 001 000 712 7020
		55557		
Post notice at the access points to the waterbody				

# Key Tools in Planning

- Informational Binder
- Lake Management Menu
- Survey Responses



• Recommendations from the Lake Study

### Helpful Hints

- Meeting time limit of about 2 hours
- Meeting noticed in local papers, email listserv, and postcard meeting reminders sent a week ahead of time
- Shape of tables in meeting room should facilitate discussion
- Posters with questions on what needs to be covered that evening
- More then one facilitator and/or a technical resource
- County not take the lead

#### Challenges - Process and Implementation

- Conflicting goals by resource professionals
- Professional not comfortable presenting to lay audience
- Incorporation of plans into day to day actions
  - Highway Departments
  - Municipal land use decisions
  - Board of Adjusters
  - Policies and Plans
- Changes in (trained) personnel
- Long term communication
- Plan collecting dust

### Common themes

- Build a sense of community
- Find ways to protect land long term
- Support change to County conservancy zoning
- Consider support or support WDNR CHDs
- Welcome packets
- Monitor, monitor, monitor!
  - Water levels, water quality, aquatic plants
- Invasive species

## Lake Helen Planning 2009

- 4 Meetings Informational and Planning
  - 144 Man hours
    - Helen Lake District
    - Watershed Residents and Non-riparian users
    - County Parks Department
    - County Land Conservation Department
    - Town of Alban
    - WDNR
    - Sporting Groups
- 1 Public Information Meeting

#### Information and Education

The Lake Helen planning committee is committed to providing information to the residents of Lake Helen in order to improve and protect Lake Helen.

**Goal:** Create informational and communication opportunities for Lake Helen landowners and users to develop interactions with others that are involved in decisions at affect lake Helen.

**Objective 1:** Provide information about lake stewardship to new and existing landowners and residents on Lake Helen

- Welcome packet for new property owners \*
- Informational Packet for property owners \*

# Informational Opportunities

**Objective 2:** Increase communications between all residents (part-time and full-time) on Lake Helen.

- Newsletters \*
- Website \*
- Wisconsin Lake Conference \*



Lake Management Plan



Lake Helen is a valuable resource. To maintain and improve the quality of this beautiful resource the Lake District, working with UWSP water scientist Nancy Turyk, developed a Lake Management Plan. This plan set goals dealing with the watershed and water quality, shorelands, aquatic plants, fisheries, recreation, informational opportunities, and updating and revising the plan. This plan was adopted at the annual meeting held in May, 2009, and will act as a guide for future activities and projects.

Many of the projects working toward these goals are highlighted on this website. Volunteers are needed to work on these projects. Please contact the Commissioners to help with these activities.

Read the Lake Management Plan (see download link below, file size is 1.2 mb)

A copy of the plan is available for each district member. Please contact one of the commissioners for your copy. You may download your own copy below. You may read the plan now on this site..

lake-helen-lake-management-plan-final-draft.pdf Download File

# Water Quality Measures in Lake Helen





#### Trophic Scorecard 2002-2003

	GOOD	FAIR	POOR
Total P (Spring Overturn)	On Average <30 ppb		During July 97 & 50 ppb
Inorganic N (spring overturn)			>0.3 ppm
Chlorophyll a (Summer)	<8 ppb		During July and Aug 7.1 to 12 ppb
Clarity		X	During July

## Watershed and Water Quality

**Goal:** Reduce phosphorus loading from residential areas and the watershed to reduce the frequency of algae blooms

#### **Objective 1:** Reduce average summer total phosphorus ug/L.

to 17

- Septic systems and holding tanks
- Monitor water in culverts
- Install rain gardens \*
- Native vegetation near the lake \*
- Best management practices in watershed
- **Objective 2:** Develop ownership/responsibility for management of runoff and the quality of Lake Helen for every landowner in the watersheds.
  - Landowners are responsible for runoff from their property.
  - List of green cleaning product
  - Explore other sources of possible contamination to Lake Helen. \*



Cover 1 - Tamarack/Black Spruce Cover 2 - Alder Shoreline Cover 3 - Narrow Wetland Shoreline Cover 4 - Vegetated Shoreline Cover 5 - Grasses/Shrubs Cover 6 - Low Disturbance Cover 7 - Moderate Disturbance Cover 8 - High Disturbance

### Shorelands

- **Goal:** Create, restore, and protect healthy, stable shoreland habitats near and around Lake Helen.
- **Objective 1:** All landowners are knowledgeable about the importance of shoreland habitat to Lake Helen's ecosystem.
  - Understand current rules for shoreland zoning.
  - Native vegetation near the lake \*



#### Shorelands

**Objective 2:** Protect existing primary amphibian areas indentified in the Portage County Lake Study and identify other important habitat.

- Habitat in the county park and public boat landing.
- Lake walk sensitive area and habitat areas\*
- Critical habitat designation DNR





HI, my name is Helena. Lake Helen has provided a great home to me and many of my friends and relatives for many generations. I was told that Lake Helen was



born when glaciers that covered much of Wisconsin melted. That was around 10,000 years ago. Although Lake Helen claims to be only 5,000 years old, we all know better. Rumor is Lake Helen was named after the Huntington family's daughter Helen. Helen reportedly drowned while swimming in the lake. All of us in the animal kingdom think that's sad, but a nice way to honor her memory, and I am proud to share her name.

> Join me for a hop around the lake and I'll show you some of the natural beauty Lake Helen provides and even some interesting historical points when you humans moved into the neighborhood. The entire hop is about 2 miles. You can walk or ride a bike if hopping is not your thing.

Look for my portrait painted on the road and the number on my back will match the story in the brochure. My body will point you in the direction of what to look at each stop. There is a small map on the back of each brochure to let you know where you are, along with some suggestions on how to make this journey safe and fun for everyone.



The first stop is right where you are standing. Just open the brochure and we'll get this adventure started.

 The Park and Boat Landing is our 1<sup>#</sup> Stop. Portage County purchased the land in 1949. The gentleman that sold the land was said to be quite the entrepreneur. He sold many things, from ice and marl to rented homemade boats. He also managed to move an old school house across the Lake to expand his business.

The big blue sign you see is a reminder to all boaters of the plants and animals that threaten Lake Helen. It offers information on what boaters can do to protect Lake Helen and all her neighbors. There are even human volunteers that inform boaters about the problem and assist to make sure they have no foreign hitchhikers. My family and friends thank them for helping to protect my home from these invaders. You will find my next portrait just below the information sign at the end of the park. So if you are ready, let's get this show on the road (sorry- COL- croaking out loud)

2. The area across the road is a very special area to me. You call it a wetland, but I call it home. It's where I grew up with many of my relatives. It's also home to may other animals (many of whom are trying to eat me- yikes!) and insects (Yum!) These wetlands also act as filters removing nutrients and pollutants so Lake Helen receives only nice clean water for you and me to swim in. I'm a great swimmer, but I only know one stroke, the frog paddle, you call it the breast stroke. \*Caution next stop- POISON IVY. Stay on the road.

 Those three leafed plants across the street are POISON IVY. Do not touch or even get too close. It can produce an itchy rash that will spread the more you scratch. Trust me; I will never hop in there again! Let's get out of here!

4. The 2-story house you can see through the trees is the original house of the Pliska/Gilmeister farmstead. It covered much of the east side of the Lake. One of the boys was an avid trapper of Muskrats and minks on the east and south end of the lake as well property to the north and south of the lake. I am sure glad my family doesn't have fur-whew!

5. This stop is one of my favorites. It's what I call my lake home. It is home to many plants, animals and insects. It can get very busy here but I don't mind sharing the land, except for those that want to eat me! Some of the residents are ducks, loons, geese, hawks, blue heron, muskrats, salamanders, snakes (Yikes!), turtles and dragon flies (Yum!)





## **Invasive Species**







### **Aquatic Plants**

**Objective 2:** Prevent the introduction of aquatic invasive species into Lake Helen

- Clean Boat-Clean Waters Program \*
- Monitor for invasive aquatic species \*
- Aquatic Invasive Species Rapid Response Plan \*
- Promote prevention of Aquatic Invasive Species \*



#### Recreation

What Recreational Activities do You Partake In



- **Goal:** Maintain and enhance low-impact activities on lake Helen that promote a sense of community and allow all users to enjoy the lake.
- **Objective 1:** Maintain and develop new activities on Lake Helen that promote a sense of community.
  - Lake picnic \*
    Lake walk \*



#### Update and Revisions

**Goal:** Keep the information and resources within the Lake Helen Lake Management Plan current and up to date.

 Annually review the Lake Helen lake Management plan and update\*







#### Implementation

**Goal 8:** Create communication strategies for citizens who are interested in Spring Lake

- Establish a Friends of Spring Lake Organization\*
- Work with other lake/river citizen organizations that have similar goals
- Send representatives to Lake Leaders Institute and/or State Lake Convention

#### Implementation

**Goal 9:** Incorporate goals, objectives, and actions outlined in the Spring Lake Management Plan into local land management and comprehensive plans.

- Incorporate the Spring Lake Management Plan into the Portage County Comprehensive Plan and the Portage County Land Management Plan
- Incorporate the Spring Lake Management Plan in to the Town of Lanark and Town of Buena Vista Comprehensive Plans

#### Shorelines

#### **Goal 3:** Protect and restore healthy stable shoreland habitats for water quality, habitat, and privacy near and around Spring Lake

Objective 3.1: Protect the healthy stable shorelands around Spring Lake

- Disseminate information on vegetative buffers and setbacks\*
- Protect steep shorelines through information and working with the county
- Explore conservation easements\*
- Pursue future shoreline protection strategies





### **Critical Habitat**

#### **Goal 4:** Protect the critical habitat areas on/near Spring Lake.

**Objective 4.1:** Protect the critical habitat areas near Spring Lake that were identified in the Wisconsin DNR Critical Habitat Report.

- Review and possibly endorse WDNR critical habitat designations
- Seek conservation easements/stewardship funds for agreeable landowners in critical habitat areas.
- Re-evaluate rules, ordinances, etc.









# Water Quality

#### Transitioning from mesotrophic to eutrophic

	GOOD	FAIR	POOR
Total P (Spring overturn)			44.3 ppb
Inorganic N (spring overturn)			2.81 ppm
Chlorophyll a (Summer)			11.8 ppm
Clarity		Avg. 10 ft.	





**Goal 6:** Reduce phosphorus concentrations in Spring Lake to 36 ug/L with algae blooms occurring 39% of the summer.

Accomplished by reducing nutrient inputs through the implementation of BMPs on 25% of the agriculture and developed land in the watershed.

We will know that we have achieved this goal when summer average total phosphorus concentrations are less than 36 ug/L for 3 consecutive years.





**Objective 6.1:** Reduce nutrients that are applied to the Spring Lake watershed(s) landscape by partnering with watershed landowners and agencies that can provide assistance/information to about water quality based BMPs.

- Ask county to assist with water quality based nutrient management plans\*
- Encourage landowners to work with NRCS on erosion control and sodded waterways \*
- Encourage limited use of fertilizers
- Work with UW Ag Extension to provide education about BMP's
- Support current restrictions on livestock grazing and manure spreading
- Discuss nitrate reduction options with T. of Buena Vista & T. of Lanark Groundwater Citizen Advisory Committee Reps.

**Objective 6.4:** Towns of Buena Vista and Lanark will make informed decisions about land use in Spring Lake watersheds.

 Presentation of build-out results and water quality to Town of Lanark and Buena Vista town boards and plan commissions.

**Objective 6.5:** Restore shorelands around Spring Lake that currently do not meet state/county shoreland zoning ordinances

- Information on native shoreline buffers
- Work to restore all shorelands to meet the county/state shoreland ordinance or better\*



#### Recreation

#### **Goal 7:** Provide recreational opportunities on Spring Lake that do not conflict with the scenic nature and peacefulness of Spring Lake.

**Objective 7.1:** Provide recreational opportunities that provide opportunities to enjoy Spring Lake while minimizing conflicts between users and protecting lake water quality and habitat.

- No-wake sign at boat landing\*
- Monitor no-wake rule\*
- Work to make south side access carry-in only
- Explore an electric motor only rule





- Park Commission
  - Management of 9 County Parks on lakes
  - Increased no mow zones
- Board of Adjustment
   Considering variances and special
  - exceptions to zoning ordinance





- Land Preservation Fund Committee
  - Considering property to purchase
    - Sunset, Ministry and possibly Wolf Lakes
  - Contributed to purchase of Conservancy Easement
- Planning and Zoning Committee
  - Considering subdivision and re-zoning requests
  - Shoreland zoning compliance required for new permits



- Planning and Zoning Department
  - County Comprehensive Plan
  - Providing planning assistance to municipalities
- Land Conservation Committee
  - Help target limited resources
  - Liaison with lake groups



#### Land Conservation Department

- Educate landowners on conservation BMP's
- Subdivision and non-metallic mine review
- Inform watershed residents about their connection to the lake via groundwater or surface
- Assist with riparian erosion control
- Answer citizen's questions
- Control invasive aquatic species



# Next Steps

- Complete Plans
- Implementation

Monitor and evaluate Implement Plan goals, objectives and action

Plan to Plan

- Meet with Portage County & affiliated organizations
  - Parks, Highway, Planning, Zoning, Land Conservation, Public Health, County Executive, UW-Extension, NRCS, RC&D
- Continue support of groups and conduct programs over the next year through recent DNR grant

#### Acknowledgements

Portage County Citizens Staff at: Wisconsin Department of Natural Resources Portage County Planning and Zoning Portage County Parks Department Portage County Gazette **Stevens Point Journal Community Spirit Rosholt Record** UW-Extension Wisconsin Association Lakes UWSP Faculty, Staff, Students Golden Sands RC&D