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# REVERSING THE LOSS

A Strategy to Protect, Restore and Explore Wisconsin Wetlands



REVERSING THE LOSS:  
A Strategy to Protect, Restore and Explore Wisconsin Wetlands  
Developed by the Wisconsin Wetland Team — June 2008

## Wisconsin Wetland Team



Ducks Unlimited  
Natural Resources Foundation of Wisconsin  
Southeastern Wisconsin Regional Planning Commission  
University of Wisconsin – Extension  
U.S. Department of the Army Corps of Engineers  
U.S. Environmental Protection Agency — supporting organization of team  
U.S. Fish & Wildlife Service  
USDA Natural Resources Conservation Service  
Wisconsin Coastal Management Program  
Wisconsin Department of Agriculture, Trade & Consumer Protection  
Wisconsin Department of Natural Resources  
Wisconsin Department of Transportation  
Wisconsin Waterfowl Association  
Wisconsin Wetlands Association — advisory organization of team  
Wisconsin Wildlife Federation  
Joy Zedler, Restoration Ecologist

## Strategy Supporters

Wisconsin Builders Association  
Wisconsin Realtors Association

*If you or your organization is interested in supporting this statewide strategy for Wisconsin wetlands, please contact the Wetland Team Leader at 608-266-7360.*

*A sincere thank you to all members of the Wisconsin Wetland Team for volunteering your time and effort to develop this statewide wetland strategy. Together and with others we will make great strides to Reverse the Loss of Wisconsin wetlands.*

*— Cherie Hagen, Wetland Team Leader*

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Cover: Avoca Prairie State Natural Area in Iowa County is the largest tall grass prairie east of the Mississippi River, and one of the highest quality wetlands of its type. Photo by Thomas Meyer

# REVERSING THE LOSS

A Strategy to Protect, Restore and Explore Wisconsin Wetlands



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“When we try to pick out anything by itself, we find it hitched to everything else in the universe.” — JOHN MUIR



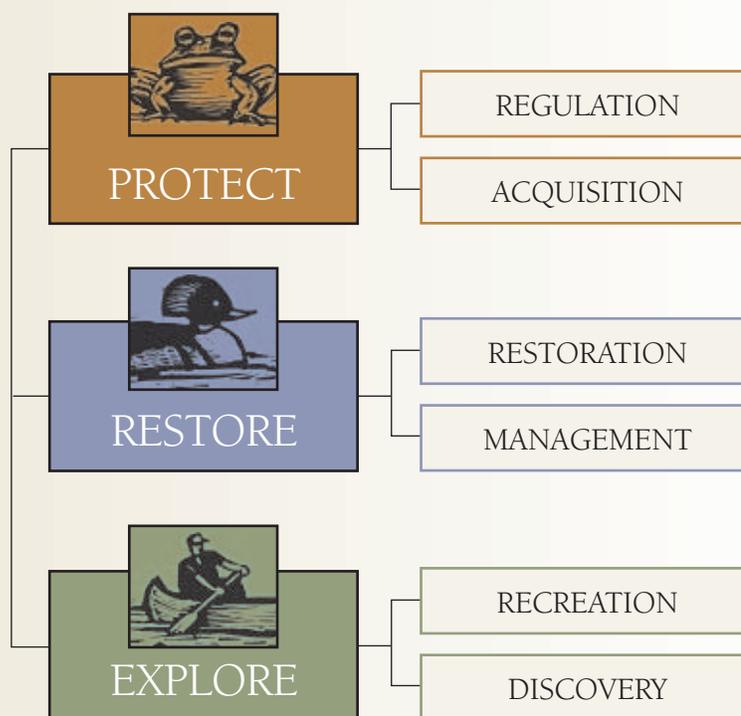
# Introduction and Overview

Residents and visitors treasure Wisconsin's diverse and abundant water resources. Wetlands are among the most valuable of these glacial gifts, a legacy laid down 12,000 to 14,000 years ago by melting glaciers. These natural resources have played a key role in shaping Wisconsin's history and culture. Wetlands are nurseries for fish and wildlife, purifiers for lakes, rivers, and groundwater, and storage for floodwaters. They're also a playground for birders, hikers, hunters and paddlers, and a storehouse for carbon, one of the greenhouse gases fueling climate change.

*Reversing the Loss* outlines a statewide strategy to protect, restore and explore these valuable natural resources. The title reflects the strategy's overarching goal and the collective vision of the 16 regional, state and federal agencies and conservation organizations that developed it. That goal is to reverse the loss of wetlands in Wisconsin, leaving for future generations an environmental balance sheet showing a net increase from today in wetlands quality and quantity.

## Wisconsin's Wetland Strategy

### Reversing the Loss



**The goal** — to reverse the loss of wetlands in Wisconsin, leaving for future generations an environmental balance sheet showing a net increase from today in wetlands quality and quantity.

We've made great gains in protecting these valuable natural resources to benefit people and wildlife. We've significantly slowed permitted wetland destruction, while speeding the environmental review process and increasing awareness of, and support for, wetlands. But pressure on wetlands is growing as the state's population grows, and as national and global forces shape local land use. A group of various agencies and organizations have come together to form the Wisconsin Wetland Team to address these pressures and develop a common statewide strategy for reversing the loss in the quantity and quality of Wisconsin wetlands.

## Wetland Accomplishments 2000–2007

The original *Reversing the Loss* strategy was developed by the Wisconsin Department of Natural Resources in 2000 to guide its activities. The initial strategy laid the groundwork for significant progress in protecting and restoring wetlands, including:

### ISOLATED WETLANDS PROTECTED:



Byrinda Hatch

Wisconsin, propelled by a coalition of lawmakers, wetland enthusiasts and DNR wetland staff, became the first state to pass legislation restoring protection to small, isolated wetlands. Such wetlands comprise about 20 percent, or 1 million acres, of Wisconsin's remaining wetlands and they were no longer under federal protection as a result of a 2001 U.S. Supreme Court decision commonly referred to as SWANCC.

### DNR ISSUES WETLAND PERMITS QUICKER AND PROTECTS MOST WETLANDS:



Shawn Jones

Recent data analysis shows that DNR's wetland permit program has improved to help landowners and developers get permits in an average of 30 days from receipt of a complete application, while protecting most wetlands. The permit program stresses avoiding and minimizing wetland losses - resulting in an average of 250 acres of wetland loss per year, including the Wisconsin Department of Transportation wetland fill projects. In 2002, DNR adopted rules that provide applicants with the option of offering wetland mitigation where in some circumstances wetlands may be restored to compensate for those filled. While compensatory wetland mitigation is a tool used by some applicants, more than 95% of state permits are approved without mitigation as a component.

### WETLAND RESTORATION PERMITTING STREAMLINED:



Joanne Kline

DNR worked with the Wisconsin Waterfowl Association, U.S. Fish & Wildlife Service, Natural Resources Conservation Service and other groups to develop administrative rules to make it easier and quicker for people to get permits for restoring and enhancing wetlands.

### PURPLE LOOSESTRIFE CONTROL PROGRESSES:



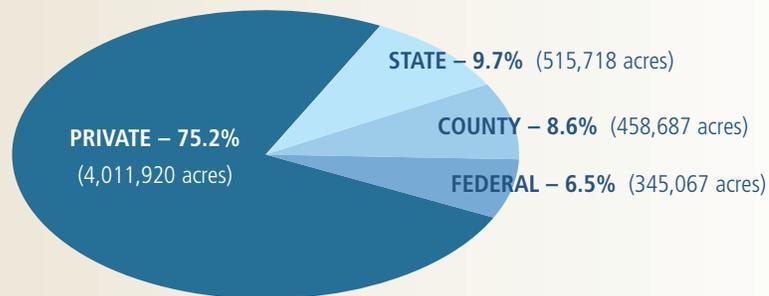
WDNR

A DNR-led effort is succeeding in using special purple loosestrife-eating beetles to reduce populations of this invasive plant in wetlands. Since DNR biologists began releasing the beetles in 1994, service groups and youth groups have largely taken over raising and releasing the beetles. Thanks to the efforts of all these groups, purple loosestrife is now in check in many Wisconsin wetlands.

This wetland strategy builds on the initial Reversing the Loss strategic plan developed by the Wisconsin Department of Natural Resources (DNR) to guide its own activities regarding wetlands. That 2000 plan was successful in helping guide the DNR in working with partners for significant progress in many areas. It became clear, however, that a plan directing a single agency could only be one piece of the puzzle. Fully 75 percent of remaining wetlands are in private hands and several dozen agencies and organizations play a large role in restoring wetlands and educating people about wetlands. DNR is just one of many players. This is why Reversing the Loss requires harnessing the collective resources and commitment of these private citizens, nonprofit organizations and public agencies and focusing them on a shared vision or destiny.

To create this statewide game plan, the Wisconsin Wetland Team was formed with representatives from regional, state and federal agencies and conservation organizations. These organizations will continue to pursue their own mission and strategies, but will work toward the common vision and mission of “reversing the loss.” This second edition represents the playbook of this larger group, a guide to keep wetland partners running in the same direction and to engage citizens to take part in wetland conservation activities and stewardship.

## Wisconsin Wetland Ownership





Jim Hoefler

Great Egrets at Crex Meadows Wildlife Area

**Our mission** — to promote, protect, restore, enhance and preserve the quantity, quality and diversity of Wisconsin’s wetlands as critical components of ecosystems essential to the health and quality of life for Wisconsin’s diverse citizenry, plants, animals, watersheds and landscapes.

We recognize it would be difficult to return Wisconsin to its original 10 million acres of wetlands present before statehood, which is why the goal is to avoid and minimize impacts to our remaining 5.3 million acres of wetlands and to continue restoring as many wetlands as possible. To achieve this overarching goal, the strategy calls for protecting, restoring, and exploring wetlands and identifies eight strategic goals to get there.

### Strategic Goals

1. **Strengthen and establish wetland partnerships.**
2. **Develop incentives for wetland conservation on private lands.**
3. **Advance public understanding and connection to Wisconsin wetlands.**
4. **Avoid and minimize wetland loss and degradation.**
5. **Restore lost wetlands and improve wetland health and functions.**
6. **Report and track the status of Wisconsin’s wetland resources.**
7. **Develop wetland science and address research needs.**
8. **Secure stable funding for wetland stewardship and conservation.**

Wetland team partners will implement the strategy by developing and carrying out two-year action plans outlining specific actions partners will take to achieve the eight strategic goals. Progress toward achieving the wetland vision will be reported biennially. We invite the public to view the two-year action plans and check our progress at [www.dnr.wi.gov/wetlands/strategy.html](http://www.dnr.wi.gov/wetlands/strategy.html).

Progress will be measured by:

- Regaining wetlands historically lost by acreage, type and function;
- Preserving and protecting remaining wetlands;
- Avoiding and minimizing new wetland loss; and
- Restoring biodiversity, health and function to degraded wetlands.

Wisconsin wetlands cannot be protected and managed without help from wetland partners, citizens and other organizations. Those who want to help accomplish this wetlands vision can focus their efforts on one or more of the eight strategic goals. Having everyone working toward a common goal will enable Wisconsin to reverse wetland loss.



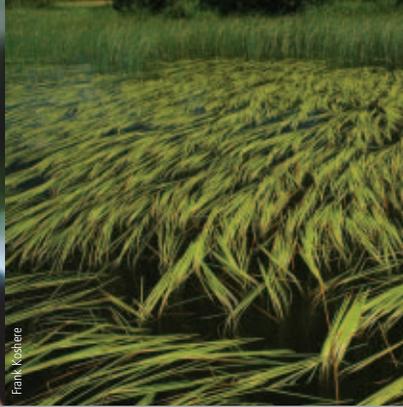
Amy Kowalski



Dave Menke, USFWS



Robert Queen



Frank Castore



Robert Korih

# What Challenges Face Wetlands?

Wisconsin's wetlands are important to the ecology and economy of our state, but they are also an imperiled resource. Nearly half of the 10 million acres present in the 1800s have been destroyed, drained or filled to make way for agriculture, roads, cities and other uses. Wetland loss has slowed significantly in the last half-century as many people have realized that wetlands are not wastelands but crucial natural resources. These changing attitudes and the new laws they spawned have cut wetland loss significantly in Wisconsin since 1991 when state wetland water quality standards were adopted. Wetlands are important for healthy families, businesses and communities in Wisconsin.

Despite this progress, Wisconsin's remaining 5.3 million acres of wetlands continue to face many challenges. Threats to wetlands are occurring on local, regional and global scales, and they include global climate change, environmentally unfriendly construction and agricultural practices, invasive species and overuse of groundwater aquifers.



USFWS

Reed canary grass, an invasive plant, is one of the most significant threats facing Wisconsin wetlands. It outcompetes native wetland plants, taking over the wetland, decreasing wetland health and biodiversity. Reed canary grass now dominates a half million acres, or about 10%, of Wisconsin wetlands.

The roots of these challenges often lie in the fact that wetlands aren't always obvious or well understood. Wisconsin has more than a dozen different kinds of wetlands, everything from floodplain forests along lakes and streams to meadows to prairies and shrub thickets. Many of these wetland types do not have the ducks, cattails and open water that many people envision when they hear or see the word "wetlands." Some wetlands are even dry for most of the year, with standing water or soggy soils only in the spring. They may be very small but these wetlands are highly productive in spring. They are the first areas to warm quickly producing food for developing frogs, reptiles and migrating birds, especially waterfowl.



PhotoDisc.com

## It Pays To Save Wetlands

Wetlands are a key to healthy economies as well as to healthy ecosystems.

- 90% of the fish recreational anglers catch nationally spend some part of their life in wetlands (source: EPA843-F-06-004). In Wisconsin, sport fishing generates \$2.7 billion in business and provides \$200 million in tax revenues for local and state government.
- Wetlands reduce flooding peaks by as much as 60% and EPA estimates that an acre of wetlands can store 1 – 1.5 million gallons of floodwaters (EPA843-F-06-001).
- Half of North American bird species nest or feed in wetlands (EPA843-06-004). In Wisconsin, bird-watchers and wildlife watchers spend \$271 million waiting for a glimpse of their favorites.
- Polluted runoff from cities, farms and construction sites is filtered by wetlands before entering lakes and rivers. Clean lakes and rivers are the backbone of Wisconsin's tourism industry, which generated \$12 billion in 2007.
- The filtering capability of wetlands cuts the cost of treating drinking water. Some wetlands can remove a quantity of pollutants from the watershed equivalent to that removed from a \$5 million treatment plant (Source: EPA832-R-93-005)

**The threats** — global climate change, environmentally unfriendly construction and agricultural practices, invasive species and overuse of groundwater aquifers.

## Wisconsin Wetlands Association Threats Analysis

Representing more than 1,500 wetland enthusiasts, Wisconsin Wetlands Association (WWA) is wrapping up work on their initiative to help develop a strategic response and to proactively work to address existing and emerging problems facing wetlands. WWA's Wisconsin Wetland Threats Analysis involves identifying and ranking threats to wetlands by wetland community type for each region of the state and involves the participation of many wetland professionals. When complete, a detailed strategic guide will be developed for use by conservation-focused organizations in Wisconsin.

For more information please visit their website at [www.wisconsinwetlands.org](http://www.wisconsinwetlands.org)

Lack of awareness about the ecological and economic values of wetlands means that wetlands, particularly small wetlands and wetland types that are not easily recognized by general citizens, continue to suffer degradation and destruction. When wetlands are destroyed or degraded, the flood control, water filtering and recreational services they provide to their surrounding communities are diminished or removed altogether. Surrounding lakes, rivers and streams suffer, as well as groundwater that maintains stream flows and provides drinking water supplies to many citizens. Water clarity may decrease and favorite plants and animals may dwindle or disappear entirely. Homes and businesses built on the wetlands may get flooded, and their foundations crack and shift as the soil shrinks and swells during drier and wetter times of the year.

The need to increase awareness of wetlands, their diversity and the benefits they deliver is growing. The state's expected population growth will increase demands on Wisconsin landscapes and natural resources, exacerbating longstanding and emerging challenges. Urban sprawl has resulted in significant public roadway systems often traversing many wetland complexes. Growing energy demand will mean potential wetland impacts from the construction and upgrading of electric transmission lines, natural gas pipelines, and other energy infrastructure. The focus on corn-based ethanol and other alternative energy sources may also put existing wetlands at risk. And demand for limited land in densely populated areas of the state may increase challenges to wetland protection regulations. With limited undeveloped uplands, wetlands are often targeted for building sites.

Addressing these challenges is an enormous task and requires balancing public rights with those of private landowners. This document charts a course for reversing the loss of Wisconsin wetlands using a set of approaches and tools to achieve eight key strategic goals. Decision makers at all levels of government, including the private sector and citizens, all have a stake and an important role to play.



Scott Patterson | Dreamstime.com

### Why Not To Build in Wetlands

- High water tables increase flooding potential, resulting in wet basements and damaged property
- Soils that shrink and swell result in cracked and failing foundations
- Violating wetland protection laws can result in the structure being moved and the wetland restored, both at considerable cost to the owner. It is best to know if a property contains wetlands before you buy or build so you can plan your project outside of the wetland.



Robert Korth



Frank Koschere



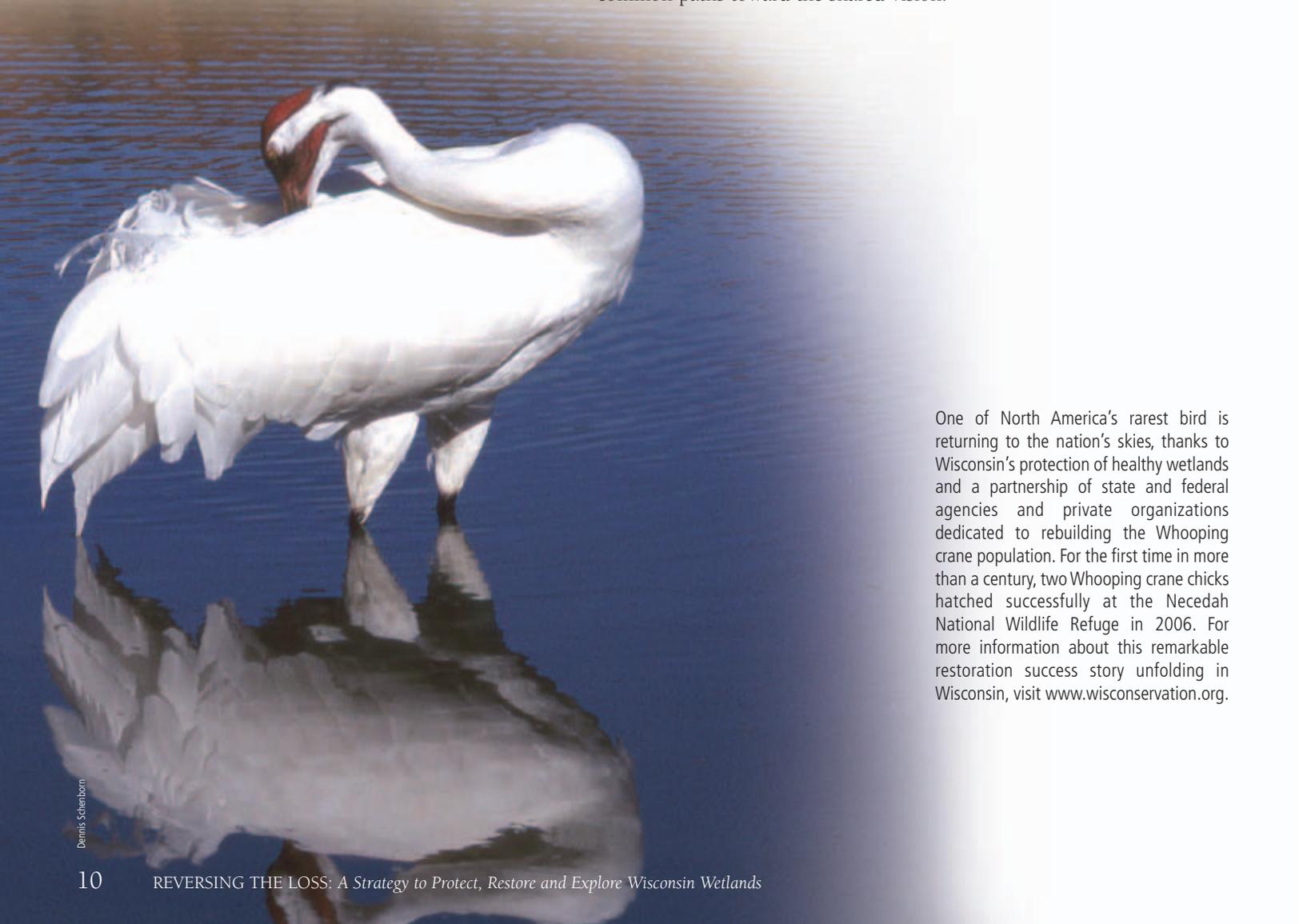
Frank Koschere



Robert Korth

# How Will We Reverse the Loss?

**How will Wisconsin Reverse the Loss?** The Wetland Team has identified three approaches the partners will take to guide their own activities and to engage wetland owners and other citizens: Protect, Restore and Explore wetlands. These approaches will each use two strategies, outlined as follows, and will employ a combination of tools that includes partnerships, incentives, outreach and education, science and modern technology and funding. Together, these approaches, strategies and tools form the framework for focusing wetland work to proceed along common paths toward the shared vision.



One of North America's rarest bird is returning to the nation's skies, thanks to Wisconsin's protection of healthy wetlands and a partnership of state and federal agencies and private organizations dedicated to rebuilding the Whooping crane population. For the first time in more than a century, two Whooping crane chicks hatched successfully at the Necedah National Wildlife Refuge in 2006. For more information about this remarkable restoration success story unfolding in Wisconsin, visit [www.wisconservation.org](http://www.wisconservation.org).

Dennis Schenborn



# PROTECT...

Protect Wisconsin wetlands through land use planning, acquisition and implementation of wetland protection laws.

Protecting and preserving Wisconsin's remaining wetlands is critical for Wisconsin's economy, environment, and way of life. Nearly half of Wisconsin's wetlands present in the 1800s have been destroyed and the results are evident in increased flooding and poor water quality in several of the rivers and streams. The Milwaukee Metropolitan Sewage District (MMSD) plans to spend \$466 million on flood management projects in the Milwaukee River watershed by 2020 and has begun an innovative flood management program called Greenseams. This program identifies and purchases undeveloped, privately owned properties in areas that are expected to have major growth in the next 20 years to include parcels of open space along streams, shorelines and wetlands that permanently protect key lands containing water absorbing soils. The MMSD program is a unique approach to flood management and is touted as a model land use technique involving many local community partners within their service area, as well as the U.S. Fish & Wildlife Service, Wisconsin Department of Natural Resources and Wisconsin Coastal Management Program.



MMSD

The Milwaukee Metropolitan Sewage District constructs wetlands to increase flood storage within the Milwaukee River watershed.

PROTECT Wisconsin wetlands through:

**Regulations:** Wisconsin has a complementary set of local, state and federal regulations that protects wetlands. Our goal is to have a comprehensive, well-coordinated wetland regulatory program that fully protects against wetland loss and degradation. The program will be strong and effective yet straight-forward and understandable to the public. Enforcement to stop illegal wetland activities and ensure compliance with wetland permit conditions are critical components.

## The State Wetlands Permit Program Works

The Wisconsin Department of Natural Resources annually evaluates their wetland permit program and identifies improvement areas. A review of the state's wetland permit program by the Legislative Audit Bureau confirms that Wisconsin's program works:

- > Permitted wetland loss has significantly decreased;
- > People are getting their permits much faster; and
- > Permit approval rates have increased.

**Acquisition:** Our goal is to permanently protect priority wetlands to maximize benefits to people and a healthy environment. These "priority" wetlands include unique, exceptionally high quality and rare wetland types along with their associated aquatic and terrestrial communities. Plans such as the Land Legacy Plan and the Wildlife Action Plan help identify priority wetlands to protect. Through the acquisition of land or easements by federal, state, local government or nonprofit conservation organizations we can ensure these wetlands systems are permanently protected for future generations.

The Mink River Estuary in northern Door County, one of the most pristine freshwater estuaries in the country, has been protected forever through an innovative acquisition partnership. Through partnership and grants from the U.S. Fish & Wildlife Service, the DNR's Stewardship Program, the Natural Resource Damage Assessment Program (NRDA) and private donations, The Nature Conservancy's Wisconsin chapter was able to acquire 1,675 acres of these valuable coastal wetlands. The property has since been designated a State Natural Area, recognizing its uniqueness and increasing rarity.



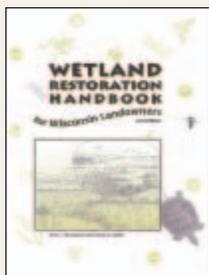
Eric Epstein



# RESTORE...

Restore Wisconsin wetlands by managing existing wetlands to improve wetland health and functions, and by re-establishing destroyed wetlands.

Improving the health of existing wetlands and restoring destroyed wetlands can benefit the individual property owner and the larger community. Several agencies and organizations have programs to help private landowners get started. The Wetlands Reserve Program run by the USDA Natural Resources Conservation Service, the Partners for Wildlife Program offered by the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources Private Lands program can provide technical and financial help. Conservation organizations such as Ducks Unlimited and the Wisconsin Waterfowl Association have a rich history of working with federal and state agencies and with private landowners to restore wetlands across Wisconsin's landscape.



Read the *Wetland Restoration Handbook for Landowners* to learn more about restoring wetlands. For downloading the book off the web and for order information please visit [www.dnr.wi.gov/wetlands/restoration.html](http://www.dnr.wi.gov/wetlands/restoration.html).



Landowners can get financial help to restore wetlands through the Partners for Wildlife Program offered by the U.S. Fish & Wildlife Service.

## RESTORE Wisconsin wetlands through:

**Restoration:** Wetland restoration projects should consider a range of ecological needs and functional values. These projects help recapture previously drained or filled wetlands and may result in a net gain of wetlands as measured by acreage, type, condition and function. Restoring rare or declining wetland types and communities, such as Great Lakes coastal wetlands and forested wetlands should also be considered, as well as restoring wetlands historically lost.

**Management:** Existing wetlands should be managed to restore their natural functions and enhance enjoyment by Wisconsin residents and visitors. Consideration should be given for managing wetlands for biodiversity and ecological integrity. In certain cases, wetlands may also be managed for specific functions, such as to provide habitat for migratory birds, decrease flooding and improve water quality. Managing rare or declining wetland types to maintain these unique communities is especially important since many of these wetlands are difficult or impossible to successfully restore if they are drained or filled.



Hikers, hunters and birders have gained an unparalleled playground in the Turtle Valley Wildlife Area in Walworth County after the completion of the largest individual wetland restoration project in Wisconsin. Nearly 1,800 acres of wetlands have been restored through a partnership between the USDA Wetland Reserve Program, the DNR, the U.S. Fish & Wildlife Service, Pheasants Forever and Walworth County Land Use & Resource Management Department. DNR now owns and operates this great recreational resource in one of the most populous areas of the state.



# EXPLORE...

Explore Wisconsin wetlands through recreational and educational opportunities to enhance understanding of wetlands and increase wetland stewardship.

Wisconsin has a wealth of wonderful wetland sites that are accessible to citizens who are interested in exploration of the state's tremendous diversity of wetland types, including marshes, swamps, bogs, fens and more – they are wonderlands just waiting to be discovered. Spring peepers call their mates as the weather warms. Baby fish emerge from their egg sacs. Cranes build their nests. And that's just for starters. The wetland's calendar year is filled with sights, sounds, sensations and activities for people of all ages. By exploring Wisconsin's wetlands, citizens create a connection with these natural resources that may encourage them to support and engage in activities to protect and restore Wisconsin wetlands.

This connection is vital because more than 75 percent of wetlands in Wisconsin are privately owned. It is essential to enlist wetland owners, conservation organizations and local governments in preserving and restoring wetlands on private property, and to build support among the general public for such efforts.

Partners already help people build that connection. The Wisconsin Wetlands Association, for example, provides guided tours and activities and is expanding its offerings to enable people to explore and learn about wetlands on their own time. The organization's *Wisconsin Wetland Gems List* – to be released later in 2008 – will feature 100 sites representing all wetland community types and all geographic regions of the state. This guide will provide a wonderful introduction to Wisconsin's wetland heritage and represents one example of the expanded efforts needed.

## EXPLORE Wisconsin wetlands through:

**Recreation:** Our goal is to provide and promote recreational opportunities in and near wetlands for wildlife watchers, hikers, anglers, hunters, trappers and paddlers while sustaining wetlands' health and integrity.



Canoeing and birdwatching are just two of the great ways to explore Wisconsin wetlands.

**Discovery:** Through public outreach and education programs citizens can discover the wonders of wetlands that can help build the understanding ultimately necessary to stop wetland destruction and gain support for wetland protection. Field trips, guided tours, and information about wetlands can help citizens learn about wetlands with others or on their own. Providing and promoting meaningful opportunities for citizens to get involved in wetland conservation also allows them to discover the roles they can play in helping wetlands, including sharing their wetland experiences with others.



Field trips offered by local natural centers and organizations such as the Wisconsin Wetlands Association and the Natural Resources Foundation of Wisconsin are another great way to discover wetlands.



Students at River Crossing Environmental Charter School in Portage learn about wetlands by taking a hands-on approach and getting their feet wet.



Willie Manalo | Dreamstime.com



Frank Koshare



Frank Koshare



Robert Korfh

# What Actions Will We Take?



Wetland Team partners have identified eight strategic goals to achieve the overarching vision of reversing wetland loss. A few of the specific actions partners will take for each of those goals are listed below. Citizens and organizations who want to get involved are invited and encouraged to focus their efforts on any of the strategic goals listed below.

## Goal 1 Strengthen and establish partnerships to maximize wetland stewardship and conservation opportunities



Natural Resources Foundation of Wisconsin

### Wetland Team Goals:

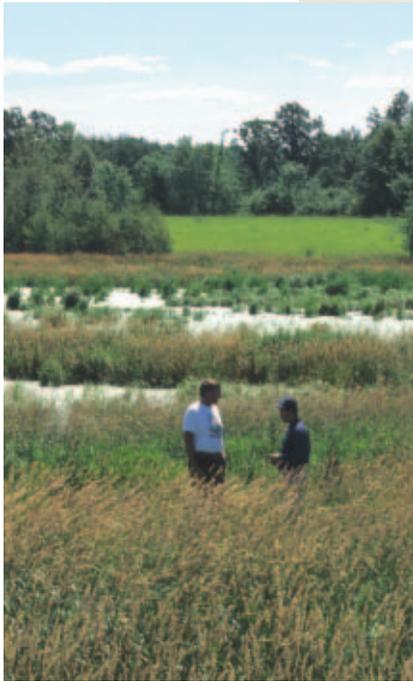
- 🦋 Broaden and blend partnerships with other organizations to strengthen outreach and education programs to advance wetland understanding and support.
- 🦋 Strengthen the Wisconsin Wetland Team partnership to ensure state, federal and local partnership and informed advocacy for wetland protection and restoration.
- 🦋 Identify and adopt a package of economic incentives for wetland landowners to restore and manage wetlands.

### Citizen Action Ideas:

- 🦋 Join a conservation organization that supports wetlands, such as the Wisconsin Wetlands Association, the Wisconsin Waterfowl Association, the Wisconsin Wildlife Federation or Ducks Unlimited.
- 🦋 Support public agencies and private organizations in wetland and watershed protection initiatives by attending public hearings and voicing your support or by participating or leading the initiative in your local community.
- 🦋 Get involved in local efforts to protect, restore and explore wetlands.

## Goal 2

# Strengthen and develop incentives for wetland conservation on private lands



WVDR

### Wetland Team Goals:

- 🦋 Identify and adopt a package of economic incentives for wetland landowners who restore and manage wetlands.
- 🦋 Seek to establish a “Wetland Protection and Restoration Grant Program”.
- 🦋 Encourage the Wisconsin Department of Revenue to work with wetland partners to revise state property tax policy to remove disincentives for wetland restoration and conservation on private lands.

### Citizen Action Ideas:

- 🦋 Contact your local, state and federal representatives to share your opinion about economic incentive programs and policies for private landowners and measures to remove the tax disincentives that now exist for protecting and restoring wetlands on private lands.
- 🦋 Take advantage of existing programs that offer funding to restore wetlands on your land, such as the USDA’s Wetlands Reserve Program, U.S. Fish & Wildlife Service’s Partners for Wildlife Program and DNR’s Private Lands Program.
- 🦋 Support or volunteer for conservation organizations that advocate for wetland incentives on private lands.

## Goal 3

# Advance public understanding and connection to Wisconsin wetlands



Laure England

### Wetland Team Goals:

- 🦋 Develop and promote a common wetland message.
- 🦋 Create awareness of wetland laws.
- 🦋 Increase public awareness of wetlands through outreach and public events.

### Citizen Action Ideas:

- 🦋 Get your feet wet and explore wetlands – visit a wetland in your area. A good place to start is at your local nature center or sign up for a field trip with Wisconsin Wetlands Association or the Natural Resources Foundation. Don’t forget to celebrate World Wetlands Day on February 2nd and throughout May for American Wetlands Month.
- 🦋 Learn more about the various types of wetlands found in Wisconsin and why they are important to society and nature.
- 🦋 Share your knowledge about wetlands with others and take them to visit your favorite ones so they can also discover the wonders of wetlands. Information on Wisconsin Wetland Gems can be found on the Wisconsin Wetlands Association Website at [www.wisconsinwetlands.org](http://www.wisconsinwetlands.org).

## Goal 4 Avoid and minimize wetland loss and degradation



Cherie Hagen

### Wetland Team Goals:

- 🦋 Ensure wetlands are protected at the local, state and federal level by assuring that standards, policies and guidance fully address threats to wetlands. Also, by reducing illegal wetland filling and increasing permit compliance.
- 🦋 Develop and implement wetland protection tools for use in local planning and development. For example, identification of potentially restorable wetland sites that could be incorporated into local zoning ordinances.
- 🦋 Acquire wetlands in an efficient manner to maximize limited funding, address identified needs, and benefit both the natural resource and Wisconsin residents.

### Citizen Action Ideas:

- 🦋 Plan projects to avoid negative impacts on wetlands.
- 🦋 Protect wetlands with a conservation easement, covenant or other deed restriction mechanism to ensure permanent protection of the wetlands.
- 🦋 Report suspected wetland violations to the Wisconsin Department of Natural Resources by calling their tip line at 1-800-TIP-WDNR or the U.S. Army Corps of Engineers.

## Goal 5 Restore lost wetlands and improve health and functions



Natural Resources Foundation of Wisconsin / Albrecht Elementary School

### Wetland Team Goals:

- 🦋 Restore and maintain wetlands in an efficient manner to maximize limited funding, address identified needs, values and services that will benefit both the natural resource and Wisconsin residents.
- 🦋 Develop landscape plans that effectively target wetland restoration activities.
- 🦋 Position Wisconsin to maximize federal and private investment in wetland conservation.

### Citizen Action Ideas:

- 🦋 Attend wetland restoration training opportunities and programs for landowners. Read the *Wisconsin Wetland Restoration Handbook* found on Wisconsin Wetlands Association website at [www.wisconsinwetlands.org](http://www.wisconsinwetlands.org) or the Department of Natural Resources website at [www.dnr.wi.gov/wetlands](http://www.dnr.wi.gov/wetlands).
- 🦋 Participate in restoring and managing wetlands.
- 🦋 Maintain a natural buffer around any wetlands on your property to help filter sediments from runoff and provide additional wildlife habitat. If you don't own a wetland you can support local laws requiring wetland buffers.

## Goal 6

# Report and track the status of Wisconsin wetlands



Frank Koshere

### Wetland Team Goals:

- 🦋 Establish and refine an integrated program for tracking wetland quantity and quality, including efforts to develop and promote wetland monitoring programs.
- 🦋 Increase the production, use and accessibility of the Wisconsin Wetland Inventory and related data using best available technology.
- 🦋 Develop better tools to evaluate wetland function at the watershed scale and site specific tools for assessing wetland function, condition and restoration success.

### Citizen Action Ideas:

- 🦋 Become a volunteer wetland monitor. Opportunities are listed at: [www.dnr.wisconsin.gov/wetlands/volunteer.html](http://www.dnr.wisconsin.gov/wetlands/volunteer.html).
- 🦋 Keep a journal of your favorite wetland and note the plants and animals you find during the different seasons and other changes you observe, such as water presence or absence.
- 🦋 Use the Department of Natural Resources web-based mapping tool, the Surface Water Data Viewer, to locate wetlands on your property. To access the mapping tool visit [www.dnr.wisconsin.gov/wetlands/locating.html](http://www.dnr.wisconsin.gov/wetlands/locating.html).

## Goal 7

# Develop wetland science and address research needs



WDNR

### Wetland Team Goals:

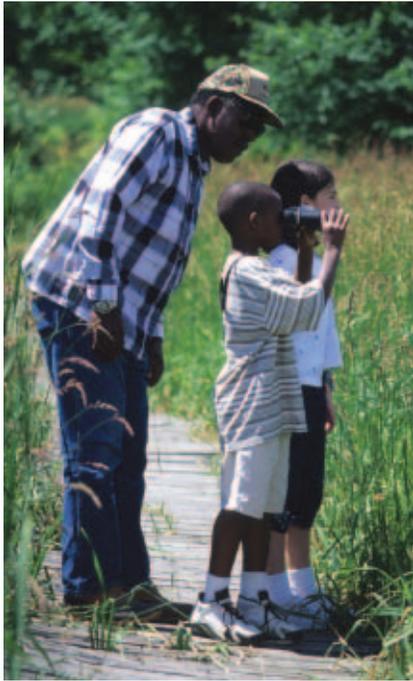
- 🦋 Develop a mechanism for making wetland research a priority within the Wetland Team and take full advantage of funding opportunities.
- 🦋 Develop research and monitoring for invasive species.
- 🦋 Identify and minimize hydrologic impacts to wetlands from various sources, such as high capacity well pumping and stormwater runoff.

### Citizen Action Ideas:

- 🦋 Be aware of the various threats to wetlands and support research to address the threats. To learn more about wetland threats read the Wisconsin Wetlands Association Threats Analysis when completed, which can be found on their website at [www.wisconsinwetlands.org](http://www.wisconsinwetlands.org).
- 🦋 Learn to identify common invasive species found in wetlands. Some of the common culprits are reed canary grass, phragmites, purple loosestrife and buckthorn. For information on invasive plants visit the Invasive Plants Association of Wisconsin at [www.ipaw.org](http://www.ipaw.org).
- 🦋 Use the latest science and research for controlling invasive plants species in your wetlands.

## Goal 8

# Secure stable funding for wetland conservation and stewardship



Bob Queen

### Wetland Team Goals:

- 🦋 Optimize financial investments for wetland conservation and education.
- 🦋 Expand resources for public interest work needed to build capacity for education, outreach and advocacy for wetland stewardship.
- 🦋 Seek full federal funding allocations for federal wetland conservation and environmental programs.

### Citizen Action Ideas

- 🦋 Contact your local, state and federal representatives to share your opinion about funding for proposed wetland initiatives, as well as for existing public programs. Initiatives could include a user tax to help support wetland acquisition and restoration.
- 🦋 Purchase federal and state duck stamps from your local post office to support wetland acquisition and restoration.
- 🦋 Contribute to the Natural Resources Foundation Fund to support wetland conservation and protection.

The Wisconsin Wetland Team will implement the wetland strategy by developing two-year action plans found at [www.dnr.wi.gov/wetlands/strategy.html](http://www.dnr.wi.gov/wetlands/strategy.html) that describe specific actions team members will take to accomplish the strategic goals. The team will evaluate progress toward achieving these goals and prepare biennial reports on two-year action plan accomplishments. The strategy will also be reviewed biennially and changes made if necessary.



Thomas Meyer

“Just as the creatures are always changing, always shifting, the land is constantly transforming. The wetland is continuously rearranging, altering from water to land to water and back again. In several thousand years, what will this place look like?”

“THIS TENDER PLACE” – The Story of a Wetland Year, written by Laurie Lawlor

Wisconsin wetlands cannot be protected and managed without help from wetland partners and citizens. Together, we can strive to *Reverse the Loss* of Wisconsin wetlands and leave for future generations these special places and the many benefits they bring.



Water level draw-downs on Pool 8 in the Upper Mississippi River helped restore a rich mosaic of critical wetland habitats, a boon for fish and wildlife and for the hunters, wildlife watchers and others who enjoy the area.

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