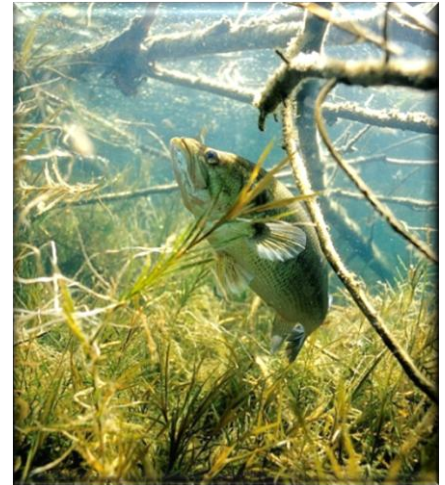




# 2010 Annual Review

## *A Fish Habitat Partnership*

The Midwest Glacial Lakes Partnership is focused on conserving aquatic habitats in naturally formed Midwestern lakes. With approximately 40,000 lakes, the region is known for its quality and quantity of lakes. Our partnership is developing a lake-based fish habitat condition assessment with a completion date of December 2011. The assessment will aid in prioritizing where conservation dollars should be invested and what threats or stressors must be addressed to ensure sustainable aquatic habitats in the future. Dollars have already come through the partnership for on the ground projects and partner organizations have a long track record of lake conservation. This partnership furthers lake conservation by serving to work across jurisdictional lines, sharing successes and learning from the experiences of our partners. Collective learning is perhaps our greatest asset.



© Engbretson Underwater Photography

The following pages highlight some of the lake conservation accomplishments by the Midwest Glacial Lakes Partnership and its partners in 2010. Note this is not an exhaustive list. Sharing this information is one way to learn from each other's strategies to ensure we have sustainable lake habitats in the future.

## THE MISSION

**of the Midwest Glacial Lakes Partnership** is to work together to protect, rehabilitate, and enhance sustainable fish habitats in glacial lakes of the Midwest for the use and enjoyment of current and future generations.

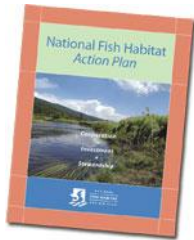


## GUIDING PRINCIPLES

- **Habitat protection is the most cost-effective long-term conservation strategy** The statement that it is “cheaper to protect than to restore” will guide our partnership to identify high-quality lakes and prioritize them for protection.
- **Healthy watersheds are fundamental to clean water and fish habitat.** Fish are indicators of ecosystem health of the lakes and streams in which they live. Therefore, improving watershed conditions and sustaining ecosystem services improves fish habitat and benefits a multitude of other aquatic and terrestrial organisms.
- **Good investments equal good returns.** Money spent on rehabilitation, if done correctly, is a wise investment that will have a positive return on that investment.
- **Partnerships are critical for improving aquatic habitat.** The experience, knowledge, and skills of all partners are needed to improve aquatic ecosystem management. The Midwest Glacial Lakes Partnership will be an effective partner with federal, tribal and state agencies, local governments, non-governmental organizations, sporting groups, lake associations, and others. These strong partnerships will facilitate the sharing of habitat protection and restoration programs and policies.

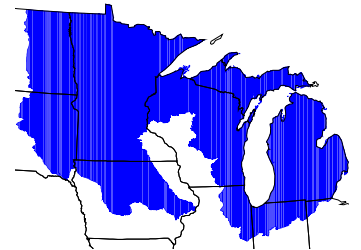
# BACKGROUND

The [National Fish Habitat Action Plan](#) (Action Plan) is an unprecedented attempt to address an unseen crisis for fish nationwide: loss and degradation of their watery homes. The plan was formed in 2001 when an ad hoc group supported by the Sport Fishing and Boating Partnership Council explored the notion of developing a partnership effort for fish on the scale of what was done for waterfowl in the 1980s through the North American Waterfowl Management Plan. The waterfowl plan has worked wonders during the past two decades to boost waterfowl populations by forming strong local and regional partnerships to protect key habitats.



As part of the Action Plan, Fish Habitat Partnerships (FHPs) are voluntarily forming across the country. Organized around a particular species, geographic area, or aquatic system type, FHPs include a group of state, federal, local, nonprofit, tribal, Alaskan Native or private individuals or entities that coordinate to implement the Action Plan at a regional level. Fish habitat conservation projects sponsored by these FHPs are eligible for funding as Action Plan projects.

Recognized as an FHP in 2009, the **Midwest Glacial Lakes Partnership** is working to conserve fish and aquatic habitats in naturally formed lakes. From small lakes that are important for wildlife as well as fish to the large lakes with miles of open water, lakes are a prominent feature on the Midwestern landscape. The partnership's geography includes approximately **1/3 of the nation's lakes and 24 percent of its freshwater anglers**. Recreational opportunities abound—fishing, swimming, boating and other forms of water recreation take place year round. Tourism on many lakes supports local economies. The region's freshwater fishing supports more than **115,000 jobs** and exceeds **\$7 billion in retail sales**. It is clear that healthy lakes lead to healthy economies.



A lake is more than a low point that collects water; it is a reflection of its watershed, from its shoreline to those distant points that drain to the lake. Watersheds and lakeshores that remain in a relatively undisturbed state tend to have lakes that support sustainable aquatic communities. Watersheds and lakeshores with altered land use tend to have compromised

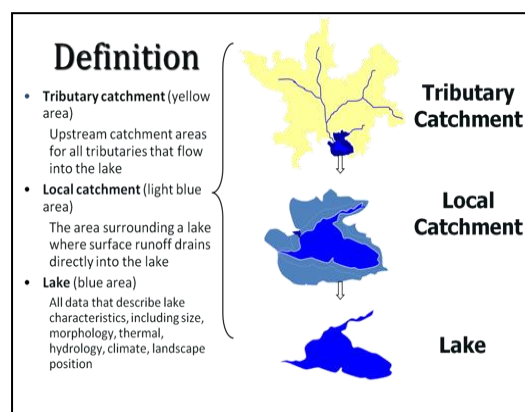


lakes. In the Midwest, lakes and their corresponding watersheds range from pristine (primarily in the north) to severely compromised (most common in the south). The Midwest Glacial Lakes Partnership is working with partners to **protect, restore and enhance fish habitats in lakes**. To do this, we work together to assess the status of lakes in this region and identify and address the root causes of habitat decline. The results are lake habitats that sustain fish and aquatic communities for the use and enjoyment of current and future generations.

# 2010 Partnership Highlights

## Lakeshed Layer Complete!

Watershed management: how can you do it without a detailed understanding of how impacts on land affect the receiving lakes and rivers? Most of the geographical extent of the partnership lacked a GIS lakeshed (i.e., local catchment or watershed for a given lake) layer at a scale that would be useful for individual lakes assessment and management. Partners completed lakeshed delineations of all lakes greater than 10 acres in surface area across the MGLP geography. This groundbreaking dataset will be used in the lakes assessment and other partner conservation actions (e.g., update the South Dakota State Wildlife Action Plan).



## Multi-state Conservation Grant Success

A group of five Midwest fish habitat partnerships, including the Midwest Glacial Lakes Partnership, was awarded a multi-state conservation grant in 2010. The grant provides nearly \$400,000 over two years for the partnerships, in part, to develop a "hub of support services" in science, GIS technology, planning, outreach and coordination. Other activities funded by the grant include unique aquatic habitat assessments for each partnership as well as a regional fish habitat partnership website. This collaborative approach is considered a model for other regions of the U.S. to meet the needs of fish habitat partnerships in a cost-effective manner.

## Other highlights include:

- MGLP received \$90,000 in 2010 NFHAP funds for habitat projects and submitted ten projects requesting \$750,000 with more than \$1 million in partner match to the U.S. Fish and Wildlife Service for funding consideration in 2011 and beyond.
- Two MGLP partner conservation projects were included in the National Fish Habitat Action Plan's "Ten Waters to Watch" list. The projects involve Diamond Lake, IA and Lake Vermilion, MN.
- Babe Winkelman Productions interviewed MGLP partners involved in large woody habitat restoration in Wisconsin. The program is scheduled for national airing in February, 2011.
- MN DNR staff and Sand Lake Assoc. (Cass Co., MN) members toured large woody habitat projects in Burnett Co. WI with WI DNR staff and Bony Lake Association members. Sand Lake Association has since developed a successful project proposal for similar work in Minnesota.



Photo: Large woody habitat. Michael Duval





## Illinois Highlights



**East and West Loon Lakes** A Conservation Plan was approved by the Illinois Department of Natural Resources (IDNR) for East and West Loon Lakes (Lake Co.). The lakes are natural glacial lakes in the Fox River watershed and are widely used for recreation. The two lakes have been extensively studied and surveyed over time by the Lakes Management Unit of the Lake County Health Department, by the IDNR and its predecessor agency the Department of Conservation, and by private consultants. The plan includes cooperative agreements between state, county and local entities and addresses invasive aquatic plant species, recreation interests, and ecological function.

The lakes provide habitat for several fish species that are listed as threatened or endangered by the IDNR and Illinois Endangered Species Protection Board (three species of shiner, banded killifish, starhead topminnow, and Iowa darter). The IDNR also has advised that the lakes could potentially host the mudpuppy (*Necturus maculosus*), which is an aquatic salamander and a newly state-listed (2009) amphibian species. The lakes historically harbored two state threatened and endangered plant species.

**De-icing Workshops** Several workshops were held in NE Illinois targeting public and private entities that are involved in snow and ice removal on roads, parking lots, and sidewalks. Various studies in NE IL have shown an increase in chloride concentrations in water bodies, with some ponds as high as a 2,700 mg/L. Funding for these workshops came from Illinois EPA, IL Lakes Management Association, and participating counties. Attendees were also given the opportunity to take a certification test.

**Sentinel Lake Program in Lake Co.** The Lake County Health Department identified seven lakes (Long, Third, Wooster, Countryside, Cranberry, Bangs, and Cedar) to be part of a sentinel lake program in 2006. These lakes are important lakes due to their watershed position or unique ecological value. Sentinel lakes have been monitored annually (water quality and aquatic plants surveys) since 2006.

**Invasive Species** In 2009, two ponds in Lake Co. were found to be infested by Brazilian Elodea. The ponds are owned by a municipality, who agreed to aggressively treat the ponds in 2010 and 2011. An aggressive media campaign was also launched to highlight the dangers of releasing exotic plant species.

**Illinois Lake Management Association** ILMA hosted its 25<sup>th</sup> annual conference in March in Naperville, IL. 2010 also marked the 30th anniversary of the IEPA's Volunteer Lake Monitoring Program.



© Engbretson Underwater Photography



## Indiana Highlights



**Using Data to Manage Lakes** The Indiana Department of Natural Resources (IDNR) now has 20 years of glacial lake fish survey data available in an electronic, searchable format, including species, lengths, weights, age & growth, and catch information. The agency completed hydroacoustic surveys to create accurate bathymetric and aquatic vegetation maps on 20 lakes. Purdue University summarized IDNR historical fish population data in Indiana's glacial lakes and is working to evaluate relationships between fish population characteristics, lake morphometrics, and land-use on surrounding catchments. Purdue and IDNR are using field surveys and simulation models to explore how nearshore habitat features (e.g., vegetation, shoreline structures) affect the distribution and growth of young game fish in Indiana's glacial lakes. Purdue University is also developing a series of process-based models to forecast how future land-use and climate change may impact lake thermal conditions, water quality and fish habitat.

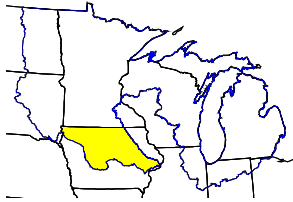
**A Watershed Approach to Clean Water and Healthy Habitats** IDNR Lake and River Enhancement Program (LARE) funded the installation of land treatment practices in the Ball Lake, Little Elkhart River (Emma Lake), Big and Little Turkey Lakes, and Pigeon Creek watersheds. Targeting land uses that impact water quality, these projects completed one waste management system, planted 38.5 acres of tree and 7,100 feet of grassed waterways, installed 5,117 feet of exclusionary fencing, 8.6 acres of pasture, 19.4 acres of cover crops, 3.2 acres of filter strips, 910 feet of streambank stabilization and one stream crossing.

Other highlights include:

- Clear Choices for Clean Water campaign is launched, to encourage water quality friendly lawn care ([www.clearchoicescleanwater.org](http://www.clearchoicescleanwater.org)).
- Steuben Co. Lakes Council conducted water quality monitoring on 50 stream sites flowing into glacial lakes, using funding from a federal 319 grant, county surveyor, and local MS-4.
- Two-stage ditches were constructed on Fish Creek and Pigeon Creek, upstream of Long and Hogback Lakes (Steuben Co.), using funding from county surveyor, The Nature Conservancy, and NRCS (EQIP).
- Pigeon Creek watershed – stabilized 300 feet of streambank upstream of Long Lake, installed 16 acres of filter strips, 5800 feet of grassed waterway, 8 structures, and 11 Water and Sediment Control Basins (WASCOB's) (319 funded).
- Ridinger Lake (Kosciusko Co.)– planted 400 feet of lakeshore with native plants to filter runoff and reduce erosion; regraded a gravel road to direct runoff to native plant buffer and bioswale.
- LARE funded management of emerging invasive aquatic plants (hydrilla, parrot feather, and starry stonewort) at five lakes for a total of \$472,095.
- IU/UI Center for Earth and Environmental Science completed a remote sensing study to map emergent and submersed vegetation in ten lakes in LaGrange and Noble counties (LARE funded).
- LARE staff completed a diagnostic study for Cedar Lake (LaGrange Co.) to assess water quality and make recommendations for practices to protect and improve high water quality.
- Blue Lake (Whitley Co.) – 1,200 feet of shoreline stabilized, rock swale and grade control structures in a ditch (LARE funded).
- Dewart Lake (Kosciusko Co.) – installed bioengineered shoreline stabilization at two sites on the lake (LARE funded).

Photo: Blue Lake shoreline stabilization. IN DNR LARE





## Iowa Highlights



**A Diamond in the Rough No More!** Diamond Lake (Dickinson Co.) is a 166 acre shallow natural lake in northwest Iowa. Historical records indicate this lake once had a thriving and diverse aquatic plant community, clear water, and a healthy aquatic ecosystem. For the past 80-100 years, however, the lake has exhibited poor water quality, excessive blue-green algal growth, and extremely limited fisheries and wildlife habitat. Conservation efforts focused on improving water quality by shifting the lake to a clear water state using water-level management to consolidate bottom sediments, re-establish aquatic plants, and control common carp populations. The construction and water level management phase



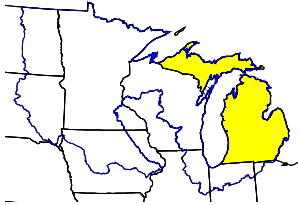
was completed between 2006-09, and fish were restocked in 2009-10. (yellow perch '09, reproduced in '10, northern pike fingerling stocked '10). To date, there has not been a re-infestation of rough fish (common carp) and lake water level has returned to normal. In spite of heavy summer rains, water quality is still great, with minor algae blooms. A diverse aquatic plant community remains and public use continues to increase. This project was highlighted on the National Fish Habitat Action Plan's "2010 Ten Waters to Watch" list.

Photo: Aerial view of Diamond Lake, northwestern Iowa. IA

**A Comprehensive Plan for Restoration** Lizard Lake (Pocahontas Co.) is a 272 acre natural lake that was selected as a shallow lakes project. Iowa State University completed a study that highlighted restoration alternatives and suggested shallow lakes management rather than dredging the lake bottom. Utilizing four public meetings and also forming a technical workgroup, a strategy was developed that will temporarily lower the lake to solidify the lake bottom, permit reconstruction of an adjustable outlet/fish barrier, eliminate the problem of a carp dominated fishery and allow for aquatic plant re-growth. Following two years of a drawdown the lake will be refilled to its current, long established water level and restocked with yellow perch and northern pike. Work also continues in the watershed to implement Best Management Practices (BMPs) to improve lake water quality.

**Return of a Lake** Lost Island Lake (Palo Alto Co.) is a 1,200 acre natural lake with an associated watershed that contains 1,000 acres of wetlands (25% of the watershed is in public ownership). Partners are under contract to significantly improve the system function, water quality, fish habitat and fish community. Phosphorus reduction goals have been established; wetland restoration and rough fish exclusion measures are under construction; subsidized roughfish removal is on-going; aggressive fish predator stocking continues. Lake homes are hooked up to a sanitary sewer system and additional agricultural BMPs have been identified and will be implemented. A contract for \$785,000 was approved for the construction of five combination fish barrier/water level control structures.

An additional 10 glacial lakes/wetland projects are in design and development phase.



## Michigan Highlights



**A Big Deal in the U.P.** Six years in the making, the Northern Great Lakes Forest Project was completed in 2010 and protects 247,806 acres of working forest lands in the lake and stream-rich Upper Peninsula of Michigan. This conservation easement guarantees the protection of some of the area's most pristine lakes, rivers, streams, wetlands, forests, and critical habitat, while supporting tourism, recreation, and timber industry jobs. With over \$27 million in funding (Michigan Natural Resources Trust Fund and U.S. Forest Service Legacy Program) and several partners (The Nature Conservancy, The Forestland Group, LLC., and other Michigan-based foundations), the conservation easement includes the protection of:

- Lakes: 69 natural lakes over 10 acres in size; 505 lakes and ponds less than 10 acres in size
- Rivers: 166 miles of trout streams and 286 miles of rivers/tributaries
- 2,484 total acres of waterbodies
- 7,226 acres of emergent wetlands

This project also ensures permanent public access for fishing, hunting, cross-country skiing, horseback riding, and other recreational non-motorized uses, with snowmobiling and off-road vehicle riding allowed on access corridors historically used for that purpose. The easement keeps the land open to sustainable forestry activities, while prohibiting other forms of industry or development.

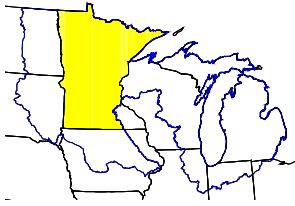
**Back to the Classroom** The Michigan Natural Shoreline Partnership (MNSP) launched its Certified Natural Shoreline Professional Training and Certification Program for waterfront contractors. The program trains and certifies professionals who work on inland lake shorelines in the areas of natural shoreline technologies and bioengineered erosion control. In 2010, 56 contractors from across Michigan attended the program; 44 were certified. Additional trainings for this program are scheduled for 2011. The MNSP website, [www.mishorelinepartnership.org](http://www.mishorelinepartnership.org), includes a list of certified contractors, program partners, and information for homeowners.



**Diverse Partners, Common Interest** The recently formed Michigan Inland Lakes Partnership (MILP) brought together a diverse group of state and local agencies, native American Nations, outreach institutions, NGO's, businesses, industries and citizens to promote collaboration to advance the stewardship of Michigan's inland lakes. MILP hosted two public open forums to gather input on the most pressing needs for the state's inland lakes and launched a website (<http://michiganlakes.msue.msu.edu>) that serves as a starting point for citizens and professionals interested in inland lakes stewardship, including information on lake ecology, water law, management options, invasive species, shoreline and habitat protection, leadership and conflict resolution skill development, and much more.







## Minnesota Highlights



**Upper Mississippi Forest Project** The Minnesota Department of Natural Resources (MN DNR) and Blandin Paper Company (UPM) have signed a binding agreement for the purchase of a working forest conservation easement to forever protect 187,277 acres of north woods forests, wetlands and shoreline currently owned by UPM in Itasca and other counties (northern MN). The agreement will provide public access and numerous land and water safeguards including sustainable forest practices, regardless of who may own the lands in the future. The Blandin Foundation and the Richard King Mellon Foundation also partnered on this project.

**A New State Park** The State of Minnesota acquired 3,000 acres of land in Cook County in northeastern Minnesota. The purchase includes five miles of lake shoreline on Lake Vermilion. The land is now Minnesota's newest state park. Plans are being developed for the park, which will include shore fishing opportunities for park visitors. This project was highlighted on the National Fish Habitat Action Plan's "2010 Ten Waters to Watch" list.



Photo: Lake Vermilion. MN DNR

**Protecting Lake Habitats** Cass County acquired donated conservation easements on three adjacent lakeshore properties on Wabedo Lake. The development value of the 68 acres and 0.81 miles of shoreline is \$720,000. Another donated conservation easement on Tamarack Lake protects 81 acres and 2,210 feet of lakeshore (donated value of \$136,000). The county is seeking additional donated conservation easements on lakeshore with high conservation potential.

**Pickeral Lake is Reclaimed** This 620-acre headwater lake (Freeborn Co.) suffered from poor water quality due to high carp and bullhead populations, with water clarity of less than one foot. After installation of a barrier to prevent future infestations, the lake's rough fish were removed. Water quality and aquatic plant growth have already seen positive changes. A fishery is developing for yellow perch and northern pike.

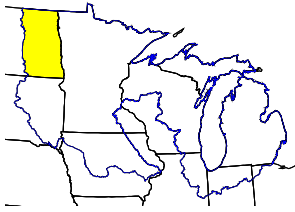


Photo: Wild celery and other submergent aquatic plants in Pickeral Lake after reclamation. MN DNR

Other highlights include:

- Chippewa National Forest staff are working with Itasca County and the MN DNR to remove fish passage barriers on the Prairie River downstream of Wabana, Little Trout and Bluewater Lakes.
- MN DNR received \$3.4 million in Lessard-Sams Outdoor Heritage Funds for acquisition, restoration & enhancement of lakes and rivers. In the next 3 years, this project aims to acquire 7.8 miles of shoreline, modify two dams to allow for aquatic organism passage and restore/enhance stream and lake shore.





## North Dakota Highlights



**Good for Cattle, Good for Water** A landowner signed an easement allowing public access to approximately 6,800 feet of Braddock Lake shoreline (Emmons Co.). The agreement limits livestock access to the lake in the easement area, allowing “flash grazing” each year for a limited duration. North Dakota Department of Game and Fish (NDGF) agreed to pay for and install fencing along the easement and installed two cattle guards. The cattle guards make it difficult for livestock to reach the lake and provide a barrier to keep them from reaching the nearby highway.

**Upstream Protection, Better Water Quality Downstream** \$40,000 in easements were purchased in partnership with the Ransom County Soil Conservation Districts 319 program on Dead Colt Creek (Ransom Co.). Over four miles of stream (both sides) upstream from the reservoir were buffered, providing protection to stream species and delivering better water quality to Dead Colt Creek Dam.

**Water Level Management to Benefit a Fishery** NDGF improved the efficiency of a water control structure on Cedar Lake (Slope Co.). This project, completed early winter 2010, allow the district fisheries biologist to more effectively control water levels to help manage the fishery.

**Keeping Common Carp from Becoming Common** Large and frequent water level fluctuations of 20-40 feet occur every few hundred years on Devils Lake (Ramsey Co.), a ,150,000 acre lake (+100,000 acres in past 18 years) located in NE North Dakota. Rising water levels threatened to connect the Devils Lake watershed with a watershed infested with common carp. A berm in between the Devils Lake and Pembina River drainages keeps common carp from entering the Devils Lake watershed. This project took 6 years to complete working with local landowners and county water resource boards.

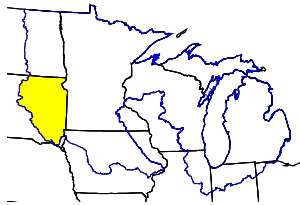
**Hooking Anglers with Urban Fisheries** Small lakes located in urban settings provide a unique opportunity for anglers to fish where they live, notably young anglers. NDGF has improved lakes in ten municipalities, providing fishing opportunities to those who don't have a fishery close by. Rehabilitation activities to improve angling success are important to attract and maintain new anglers.



Photo: Young anglers enjoy angling on New Rockford Pond. NDGF.

Other highlights include:

- Trees were planted to protect and stabilize Mt. Carmel & Nygren Dam (Morton Co.) shorelines.
- A weir (dry dam) was installed above Dickinson Dike (Stark Co.) to slow stormwater flows from city streets in order to keep silt, nutrients, garbage and other pollutants from entering the lake.
- Riparian buffers were established along Pipestem Creek to improve water quality entering Pipestone Dam. Easements were established in partnership with Stuttsman Co. SCD.
- Lake mapping data were collected, creating of highly accurate lake contour maps.
- A sediment dam on Lake Hoskins (McIntosh Co.) was repaired, improving water quality.
- Established angler access to 1,200 feet of East and West Arroda Lakes (Oliver Co.).



## South Dakota Highlights



**A Watershed Approach to Enhance Fisheries** The Lake Poinsett Watershed Implementation Project began in 1998 with a goal of restoring the beneficial uses of Lake Poinsett and Lake Albert (Hamlin and Brookings Counties) as recreational fisheries. Nutrient and sediment loading were identified as impacting the ability of these lakes to function from excessive algae blooms and turbidity. The presence of critical rooted aquatic macrophyte cover was nonexistent in the algae dominated system, while the erosion and suspension of clay shoreline soils impacted spawning of amphibian and fish species.

The first phase of the project assisted in stabilizing 18,000 ft of the housing developed Lake Poinsett shoreline. Elimination of 95% of livestock access to Lake Albert through USDA Conservation Reserve Programs and private management has stabilized and eliminated nutrient sources. Perennial vegetation has been established on 5,800 acres, grazing management plans on 2,500 acres, riparian protection to 25,000 feet of streams, cropland residue management plans on 2,200 acres and sediment dams to contain 400 acres have been successful in reducing the sediment load by an estimated 35,000 tons per year. Feedlot containment of animal nutrients completed at 17 facilities combined with the sediment reduction resulted in a reduction of phosphorous by 19,000 lbs per year.



In 2007 Lake Poinsett switched from a turbid, algae dominated state to a clear water state with extensive beds of native aquatic macrophytes, some documented for the first time. The fish populations have responded positively to the improved habitat conditions and the lake currently provides high angler use with very good catch rates.

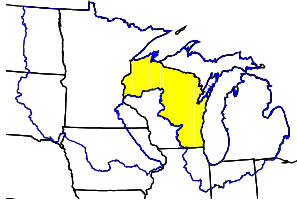
Photo: A state record smallmouth bass (6lb., 9 oz.) was recently caught in Lake Poinsett. SDGFP

Other highlights include:

- Completed one lakeshore restoration demonstration project with several others in the planning stage on heavily developed glacial lakes. This project was funded by NFHAP.
- The Nature Conservancy published "Identifying Lake Conservation Priorities for The Nature Conservancy in MN, ND, and SD Volume II: A Classification and Portfolio for ND and SD."
- Worked with many private lakeshore residents on shoreline stabilization and improvement projects throughout eastern South Dakota.
- Developed a newly acquired 28 ac. urban fishery in Sioux Falls including, access roads, floating fishing piers, shore fishing areas, rainbow trout stockings, parking areas, and restrooms.
- Worked with partners to develop shore fishing opportunities on numerous lakes (Mitchell, Enemy Swim, Rush, Kampeska, Pelican, Big Stone and Eureka).
- Major access roads that were damaged due to high water were repaired at Horseshoe Lake, Lake Cavour, and Twin Lakes.



Photo: New floating fishing pier at Enemy Swim Lake awaits eager anglers. SD GFP



## Wisconsin Highlights



**Fish Sticks, Served to Fish** The Eau Claire Chain of Lakes (~ 3, 330 acres) in Bayfield and Douglas Counties are high quality headwaters to the National Wild and Scenic St. Croix River. Historic logging followed by a slow progression of shoreland development eliminated much of the natural woody habitat in the lake system. Since 2006, local citizens and conservation groups, Wisconsin DNR (WI DNR), and Bayfield County Land and Water Conservation Department have turned back the clock and placed hundreds of trees, i.e., “Fish Sticks”, in the water's edge and anchored them to shore where they benefit fish, bugs, birds, turtles, frogs, and other critters, and of course people. Political, private property and conservation interests have synergized and are spreading the interest in Fish Sticks projects throughout the region.



Photo: Large woody habitat being installed. WI DNR.

**Wild Lakes Preservation** The Nature Conservancy (TNC), State of Wisconsin and the Chequamegon-Nicolet National Forest closed a multifaceted deal with Connor Timber Associates that will protect more than 19,000 acres of industrial forestland in northeast Wisconsin for forest jobs and timber products, recreation and wildlife habitat. The property includes 55 river miles and 15 lakes, including direct acquisition of 656 acres surrounding most of the shoreline of adjacent Wabikon (594 acres) and Riley (213 acres) lakes, two of the most significant undeveloped lakes left in Wisconsin. TNC will eventually transfer the land to the National Forest for long term stewardship.

**Identifying and Protecting Habitats** The WI DNR completed Critical Habitat Designations to protect important habitats and natural scenic beauty on 14 lakes and the St. Croix River in NW Wisconsin. WI



DNR staff mapped the critical habitat - native aquatic plant beds, spawning substrates, wetlands, and fallen trees- wrote reports and invited citizens to provide feedback, which was overwhelmingly positive. Local government and conservation planning efforts identified habitat protection as a need and these groups will use the designations in local decision-making.

Photo: WI DNR Critical Habitat Coordinator measures tree diameters in a woody habitat area. WI DNR.

**Watershed Management Works** After nearly 15 years of state, county and especially local citizen efforts to control nonpoint source pollution, phosphorus runoff into Polk County's Deer Lake (807 acres) was reduced by over 50% resulting in an increase in water clarity of nearly 5 feet; an almost unprecedented lake response to watershed improvements. Many of the improvements were spear-headed by the Deer Lake Conservancy which acquired and restored 168 acres of land, much of which was in a degraded state.



*A Fish Habitat Partnership*

[www.MidwestGlacialLakes.org](http://www.MidwestGlacialLakes.org)

## Contacts

### Project Coordinator/Minnesota

Pat Rivers, MN DNR  
Tel: 218/327-4306  
[Pat.rivers@state.mn.us](mailto:Pat.rivers@state.mn.us)

### Illinois

Joe Ferencak, IL DNR  
Tel: 815/625-2968  
[Joe.Ferencak@illinois.gov](mailto:Joe.Ferencak@illinois.gov)

### Indiana

Stu Shipman, IN DNR  
Tel: 260/244-6805  
[SShipman@dnr.IN.gov](mailto:SShipman@dnr.IN.gov)

### Iowa

Mike McGhee, IA DNR  
Tel: 515/281-6281  
[mike.mcghee@dnr.state.ia.us](mailto:mike.mcghee@dnr.state.ia.us)

### Michigan

Jo Latimore, MI State Univ. Ext.  
Tel: 517/432-1491  
[latimor1@msu.edu](mailto:latimor1@msu.edu)

### North Dakota

Scott Elstad, ND Game and Fish Dept.  
Tel: 701/220-1036  
[selstad@nd.gov](mailto:selstad@nd.gov)

### South Dakota

Mark Ermer, SD Dept. Game, Fish & Parks  
Tel: 605/345-3381  
[mark.ermer@state.sd.us](mailto:mark.ermer@state.sd.us)

### Wisconsin

Carroll Schaal, WI DNR  
Tel: 608/261-6423  
[Carroll.Schaal@Wisconsin.gov](mailto:Carroll.Schaal@Wisconsin.gov)

## What's Next in 2011?

### ASSESSMENT COMPLETE IN DECEMBER

In the coming year, the Midwest Glacial Lakes Partnership in cooperation with partners will complete a habitat condition assessment for all Midwestern lakes larger than 10 acres in size. The analysis will examine numerous variables to estimate the relative health of lakes as reflected in lakes and their local and tributary watersheds. This analysis will rank and estimate the most significant resources stressors and their impacts and help prioritize lakes for strategic habitat conservation.

### PROJECTS FOR 2011 AND BEYOND

Our partnership selected several high-priority projects to fund 2011 with NFHAP dollars. We will work with partners to complete those projects and seek additional project proposals for 2012 and beyond. We will continue to seek additional resources for projects that meet the goals and objectives of the National Fish Habitat Action Plan.

### "YEAR OF OUTREACH"

Outreach has been identified as a priority activity in 2011 for the National Fish Habitat Action Plan at the national and regional level. It will also be a priority for MGLP. Goals to increase partnership capacity and overall visibility will guide actions in the coming year. Plans are underway to partner with statewide lake association organizations and other conservation partners to grow MGLP.