



U.S. Fish & Wildlife Service

# Midwest Region

(Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, Wisconsin)



## Fisheries and Aquatic Resources Program Operational Plan - FY2008



**Partnerships and Accountability**



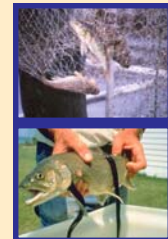
**Aquatic Habitat Conservation and Management**



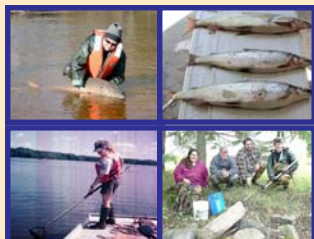
**Workforce Management**



**Aquatic Species Conservation and Management**



**Aquatic Invasive Species**



**Cooperation with Native Americans**



**Public Use**



**Leadership in Science and Technology**

# Midwest Region

## Message from the Assistant Regional Director for Fisheries

The Fisheries Program in the Midwest Region (Great Lakes – Big Rivers) is committed to the conservation of our diverse aquatic resources and the maintenance of healthy, sustainable populations of fish that can be enjoyed by millions of recreational anglers. To that end, we are working with the States, Tribes, other Federal agencies and our many partners in the private sector to identify, prioritize and focus our efforts in a manner that is most complementary to their efforts, consistent with the mission of our agency, and within the funding resources available.

At the very heart of our efforts is the desire to be transparent and accountable and, to that end, we present this “Fisheries and Aquatic Resources Program Operational Plan - FY2008” fashioned after the “Conserving America’s Fisheries Strategic Vision” developed in 2003. This plan captures what we intend to accomplish in FY 2008 arranged by focus area and station. An accomplishment report will be produced based on this operational plan.

This document cannot possibly capture the myriad of activities that are carried out by any one station in any one year, by all of the dedicated employees in the Fisheries Program, but, hopefully, it provides a clear indication of where our energy is primarily focused. This is a work in progress and we welcome your feedback on not only how to improve this document, but also on how we can better conserve all of our aquatic resources and recreational fishing opportunities. Thank you for taking the time to review this document and your efforts to help conserve our precious aquatic resources.

Nicole Alt

Acting Assistant Regional Director for  
Fisheries

## Introduction

The Fisheries Program of the U.S. Fish and Wildlife Service (Service) has played a vital role in conserving and managing fish and other aquatic resources since 1871. Today, the Fisheries Program is a critical partner with States, Tribes, other governments, other Service programs, private organizations, public institutions, and interested citizens in a larger effort to conserve these important resources. In 2002, working with its many partners in aquatic conservation through the Sport Fishing and Boating Partnership Council’s Fisheries Steering Committee, the Service completed its strategic vision for the Fisheries Program: “Conserving America’s Fisheries, U.S. Fish and Wildlife Service Fisheries Program, Vision for the Future.” The Vision includes goals, objectives, and action items on a national scale for the Fisheries Program.

The Midwest Region (Great Lakes/Big Rivers) Fisheries and Aquatic Resources Program Operational Plan - FY2008 is an extension of the Vision, describing more specifically the activities that the Regional Fisheries Program will implement in Fiscal Year 2008. The Fisheries Program and its partners and stakeholders recognize that responsibilities for managing and conserving many fish and other aquatic resources are shared, and overall success is contingent upon the combined knowledge, resources and commitment of each party. Therefore, the Region views this operational plan as a general contract between us and our partners and stakeholders. Specific species and habitat targets are identified in individual species management plans. For more information about management plans or for a listing of plans, please contact your local office or the Regional Office (612-713-5111).

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# Midwest Region Fisheries Divisions

## National Fish Hatcheries

The Region's National Fish Hatcheries primarily focus on native fish restoration/rehabilitation by stocking fish and eggs, such as pallid and lake sturgeon and by developing and maintaining brood stocks of selected fish strains, such as lake trout and brook trout.

Hatcheries also provide technical assistance to other agencies, provide fish and eggs for research, stock rainbow trout in fulfillment of federal mitigation obligations and assist with recovery of native mussels and other native aquatic species.

## National Fish and Wildlife Conservation Offices

National Fish and Wildlife Conservation Offices conduct assessments of fish populations to guide management decisions, perform key monitoring and control activities related to invasive, aquatic species; survey and evaluate aquatic habitats to identify restoration/rehabilitation opportunities; play a key role in targeting and implementing native fish and habitat restoration programs; work with private land owners, states, local governments and watershed organizations to complete aquatic habitat restoration projects under the Service's Partners for Fish and Wildlife and the Great Lakes Coastal Programs; provide coordination and technical assistance toward the management of interjurisdictional fisheries; maintain and operate several key interagency fisher-

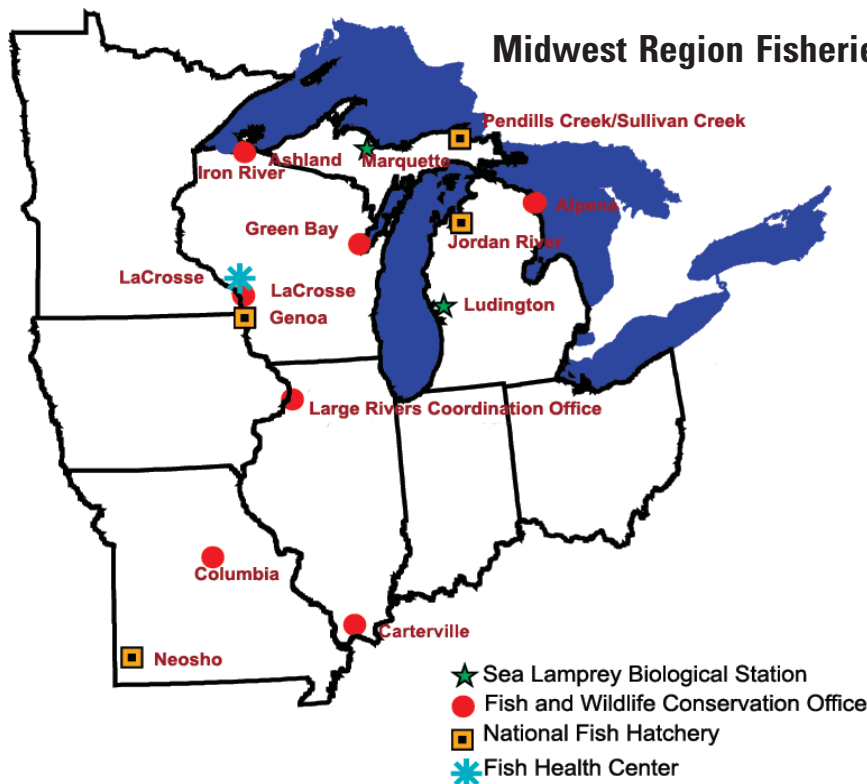
ies databases; provide technical expertise to other Service programs addressing contaminants, endangered species, federal project review and hydro-power operation and re-licensing; evaluate and manage fisheries on Service lands; and, provide technical support to 38 Native American tribal governments and treaty authorities.

## Sea Lamprey Biological Stations

The Fish and Wildlife Service is the United States Agent for sea lamprey control, with two Biological Stations assessing and managing sea lamprey populations throughout the Great Lakes. The Great Lakes Fishery Commission administers the Sea Lamprey Management Program, with funding provided through the U.S. Department of State, U.S. Department of the Interior, and Fisheries and Oceans Canada.

## Fish Health Center

The Fish Health Center provides specialized fish health evaluation and diagnostic services to federal, state, tribal and private hatcheries in the region; conducts extensive monitoring and evaluation of wild fish health; examines and certifies the health of captive hatchery stocks; and, performs a wide range of special services helping to coordinate fishery program offices and partner organizations.



# Conserving America's Fisheries

## Fisheries Program Vision for the Future

### *Region 3 Focus Areas*

#### **1. Partnerships and Accountability**

Partnerships are essential for effective fisheries conservation. Many agencies, organizations, and private individuals are involved in fisheries conservation and management, but no one can do it alone. Together, these stakeholders combine efforts and expertise to tackle challenges facing fisheries conservation. The success of these partnerships will depend on strong, two-way communications and accountability.

#### **2. Aquatic Species Conservation and Management**

The Fisheries Program maintains and implements a comprehensive set of tools and activities to conserve and manage self-sustaining populations of native fish and other aquatic resources. These tools and activities are linked to management and recovery plans that help achieve restoration and recovery goals, provide recreational benefits, and address Federal trust responsibilities. Sound science, effective partnerships, and careful planning and evaluation are integral to conservation and management efforts.

#### **3. Aquatic Invasive Species**

Aquatic invasive species are one of the most significant threats to fish and wildlife and their habitats. Local and regional economies are severely affected with control costs exceeding \$123 billion annually. The Fisheries Program has focused its efforts on preventing introductions of new aquatic invasive species, detecting and monitoring new and established invasives, controlling established invasives, providing coordination and technical assistance to organizations that respond to invasive species problems, and developing comprehensive, integrated plans to fight aquatic invasive species

#### **4. Public Use**

As the population in the United States continues to grow, the potential for adverse impacts on aquatic resources, including habitat will increase. At the same time, demands for responsible, quality recreational fishing experiences will also increase. The Service has a long tradition of providing opportunities for public enjoyment of aquatic resources through recreational fishing, habitat restoration, and education programs and through mitigating impacts of Federal water projects. The Service also recognizes that some aquatic habitats have been irreversibly altered by human activity (i.e. - dam building). To compensate for these significant changes in habitat and lost fishing opportunities, managers often introduce non-native species when native species can no longer survive in the altered habitat.

#### **5. Cooperation with Native Americans**

Conserving this Nation's fish and other aquatic resources cannot be successful without the partnership of Tribes; they manage or influence some of the most important aquatic habitats both on and off reservations. In addition, the Federal government and the Service have distinct and unique obligations toward Tribes based on trust responsibility, treaty provisions, and statutory mandates. The Fisheries Program plays an important role in providing help and support to Tribes as they exercise their sovereignty in the management of their fish and wildlife resources on more than 55 million acres of Federal Indian trust land and in treaty reserved areas.

#### **6. Leadership in Science and Technology**

Science and technology form the foundation of successful fish and aquatic resource conservation and are used to structure and implement monitoring and evaluation programs that are critical to determine the success of management actions. The Service is committed to following established principles of sound science.

#### **7. Aquatic Habitat Conservation and Management**

Loss and alteration of aquatic habitats are principal factors in the decline of native fish and other aquatic resources and the loss of biodiversity. Seventy percent of the Nation's rivers have altered flows, and 50 percent of waterways fail to meet minimum biological criteria.

#### **8. Workforce Management**

The Fisheries Program relies on a broad range of professionals to accomplish its mission: biologists, managers, administrators, clerks, animal caretakers, and maintenance workers. Without their skills and dedication, the Fisheries Program cannot succeed. Employees must be trained, equipped and supported in order to perform their jobs safely, often under demanding environmental conditions, and to keep current with the constantly expanding science of fish and aquatic resource management and conservation.

The vision of the Service's Fisheries Program is working with partners to restore and maintain fish and other aquatic resources at self-sustaining levels and to support Federal mitigation programs for the benefit of the American public.

Implementing this vision will help the Fisheries Program do more for aquatic resources and the people who value and depend on them through enhanced partnerships, scientific integrity, and a balanced approach to conservation.

The Fisheries and Aquatic Resources Program Operational Plan - FY2008 is based on the *Fisheries Program Vision for the Future*. This document sets forth specific performance measures that will be used to evaluate how well the Region 3 Fisheries program accomplishes its mission. The performance measures are focused on outcomes and meaningfully reflect the purpose of the Program. The plan describes how the goals and objectives identified in the Vision will be implemented in Region 3, and provides the specific target level of accomplishment for performance measures.

Following the format of the Vision, this plan is structured to enable straightforward and realistic measurement of implementation and performance. Under each focus area, the Vision provides goals that express what the Program will strive to achieve, and each of the eleven goals is linked to the Department of the Interior's (DOI) Strategic Plan to communicate the interrelationship and shared vision from the Fisheries Program level to the Department level. This document lists the field station level "Performance Measures," which are specific operational measures that are tracked. Planned performance measures are projected from base funding.

### **Goal (Base Funding)**

Performance Measures (Fisheries Strategic Plan v 11)

#### **Partnerships and Accountability**

Number of NFHS Facilities with friends groups

Number of recreation areas with community partnerships - NFHS

Regional Fisheries Goal	Genoa NFH Goal	Iron River NFH Goal	Jordan River NFH Goal	La Crosse FHC Goal	La Crosse FRO Goal	Pendills Creek NFH Goal	Neosho NFH Goal
5	1	1	1	1	1	1	1
5	1	1	1	0	NA	1	1

## Partnerships and Accountability

### Partnerships

**Partnership Goal:** Open, interactive communication between the Fisheries Program and its partners.

*Our primary focus is on developing and improving relationships with our stakeholders and partners and to strengthen government, Tribal, and non-governmental relationships in the Great Lakes-Big Rivers Region to promote collaborative conservation strategies for conserving aquatic resources.*

**Objective** - Develop and improve long-term partnerships with States, Tribes, other Federal agencies, non-governmental organizations, and other Service Programs to develop collaborative conservation strategies for aquatic resources.

#### **Our Commitment**

##### **– The Fisheries Program will:**

- Initiate frequent informal communications with state, tribal, Federal, non-governmental organizations, partners, and other programs of the Service to identify and resolve aquatic resource management problems, explore new opportunities for



-USFWS

Neil Rettig, a nationally-known filmmaker, received the Silver Eagle award for his work with filmmaking and the natural world. The award is the Midwest Region's most prestigious award given to individuals outside the Fish and Wildlife Service and was presented at the *Friends of the Upper Mississippi River Fishery Services* banquet.

cooperative conservation, prepare interagency fish and wildlife management plans, and maintain productive working relationships.

- Participate in meetings held by partners to broaden the Fisheries program's perspective and appreciation of the range of issues collectively faced by resource managers.
  - Work with the Mississippi Interstate Cooperative Resources Association (MICRA), the Great Lakes Fishery Commission, the Upper Mississippi River Conservation Committee, and the Missouri River Natural Resources Committee to conserve native species and fish communities.
  - Work with the Great Lakes Commission in monitoring the state of the Great Lakes and restoring environmental conditions that will support healthy fish and wildlife populations and habitats, participate in the preparation and revision of Lakewide Management Plans (LaMP) through the Binational Program, and participate in the State of the Lakes Ecosystem Conference (SOLEC).
  - Support Executive Order 13340 and the Great Lakes Collaboration of National Significance, through field activities and participation in the Great Lakes Strategy Teams, with special emphasis on the Habitat and Species Team and the Aquatic Invasive Species Team.
  - Work with various task forces and committees to restore aquatic resources in the Midwest.
- **Carterville National Fish and Wildlife Conservation Office will:**
- Develop a Carterville NFWCO Station Plan including major program areas and objectives with specific actions for each objective identified annually (IL, IN, OH).
  - Meet with Illinois DNR, Indiana DNR, and Ohio DNR to discuss integration and collaborative implementation of each state's Comprehensive Wildlife Conservation Plan and Carterville NFWCO Station Plan (IL, IN, OH).
  - Meet with select local Congressional offices to discuss Carterville NFWCO activities and other items of potential interest (IL, IN, OH).
- **Jordan River National Fish Hatchery will:**
- Continue development of partnerships with local school districts, providing direction and guidance in the Connecting Children with Nature initiative (MI).
  - Develop partnerships across programs within the Service, NGO's and Michigan DNR to collaborate and provide input on aquatic resource and habitat projects in the Lake Michigan basin, and the Jordan River, Boardman River, and Manistee River watersheds (MI).
  - Continue partnership with Michigan DNR Charlevoix Fisheries Station by providing housing to short-term workers who in turn volunteer at the hatchery one day per week (MI).
  - Communicate with tribes to determine plans for their role in inland fisheries and how the hatchery may partner with them in the future (MI).
- **La Crosse Fish Health Center will:**
- Work with other Federal, state and tribal agencies to develop surveillance and management plans for controlling invasive aquatic pathogens (MI, MN, WI, IA, IN, IL, OH, MO).
- **Neosho National Fish Hatchery will:**
- Provide walleye to the Missouri Department of Conservation for in-trade production (MO).
  - Continue to provide support to local tribes with expertise and training opportunities for young students, etc. (MO, OK).

# Partnerships and Accountability

## Accountability

**Accountability Goal:** Effective measuring and reporting of the Fisheries Program's progress toward meeting short-term and long-term fish and other aquatic resource conservation goals and objectives.

*Our primary focus is on developing effective accountability measurements and reporting.*

**Objective** - Develop and implement performance measures to determine the efficiency and effectiveness of Fisheries Program resource activities and financial accountability.

**Objective** - Manage Fisheries Program funding to maximize Program performance and to allocate and spend Program funds in a timely and responsible manner.

### Spotlight on Partnerships

Successful international partnerships in the Great Lakes have included restored fish populations, protected habitats, and enhanced recreational fisheries. Partners in the Great Lakes include 8 states, 30 tribes, the Province of Ontario, Federal agencies in the United States and Canada, non-governmental organizations, industry, and international organizations like the Great Lakes Fishery Commission. Since its formation in 1954, the Commission has looked to the Service as a partner in controlling the invasive sea lamprey and supporting the restoration and maintenance of the \$4-6 billion Great Lakes sport fishery. These partnerships restored lake trout in Lake Superior, one of the world's largest bodies of freshwater.

Through the Great Lakes Fish and Wildlife Restoration Act, the Service is authorized to implement fish and wildlife restoration projects and other activities of regional importance in the Great Lakes basin. Since 1998, 77 restoration projects totaling \$7.4 million — including \$4.4 million in Federal funds — have been implemented. More than 60 organizations have contributed \$3 million in matching partner support.

Aquatic resources in the United States are in decline, and habitat destruction and modification is a principal culprit. National conservation leaders agree something must be done, and have endorsed the National Fish Habitat Action Plan to harness the energies, expertise, and existing partnerships of government, Tribes, academia, industry, and nongovernmental organizations. The Plan will foster geographically-focused, locally driven, and scientifically based partnerships that will work together to protect, restore, and enhance aquatic habitats and reverse the decline of fish and aquatic species. The Fish and Wildlife Service is a key Federal partner in implementing the National Fish Habitat Action Plan, along with States, Tribes, other Federal agencies, conservation organizations, and industry.



# Partnerships and Accountability

## Our Commitment

### - The Fisheries Program will:

- Meet regularly with State and Tribal fish and wildlife agency representatives and non-governmental organizations to coordinate activities.
- Prepare an annual report on the Fisheries program's accomplishments.
- Manage our funds to maximize Fisheries program performance.
- Develop accomplishment reports and provide summaries to State and Tribal partners and stakeholders.
- Communicate regularly with our partners and stakeholders through *Fish Lines*, a monthly account of performance highlights.
- Develop regular station reports for inclusion in *Fish Lines* and also submit articles through the Accomplishment Reporting System.
- Maintain an informative website on the Internet at: <http://www.fws.gov/midwest/Fisheries/>.
- Develop station websites and provide regular updated materials.

### - All National Fish Hatcheries will:

- Continue to use the Service Asset Maintenance Management Systems (SAMMS) to track all operational and maintenance costs for real property assets and maintenance at the station (MI, WI, MO).

### - Alpena FRO will:

- Provide information about Alpena FRO activities and Service programs via the station website, and provide monthly accomplishment reports to state, Federal, non-governmental organizations (NGO's), congressional offices and the general public about station activities (MI, OH).

### - Iron River NFH will:

- Maintain the *Friends of the Iron River National Fish Hatchery* Friends Group.

### - La Crosse Fish Health Center will:

- Work with the National Fish Health Coordinator and other Fish Health Center staff to develop new measures and revise current performance measures that more adequately reflect national and regional fish health accomplishments (MI, MN, WI, IA, IN, IL, OH, MO).



-Neosho Daily News photo by Todd Higdon  
Members of the Friends of the Neosho National Fish Hatchery and Project Leader David Hendrix pose for a picture during the annual Friends Picnic.



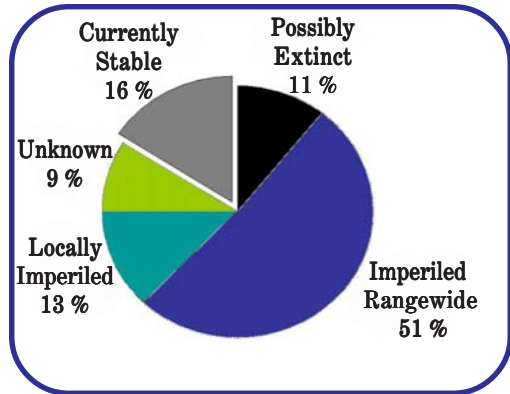
-USFWS photo by Robert Elliott  
Members of the Fish and Wildlife Service's Great Lakes Basin Ecosystem Team Lake Sturgeon Committee, with assistance from a steering committee of several partner representatives, held a third Great Lakes Lake Sturgeon Coordination meeting in Sault Ste. Marie, Michigan.

## some of our **Partners and Stakeholders**

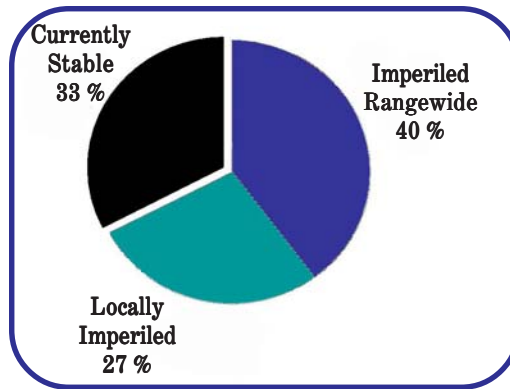
1854 Authority  
 Alpena Bass Club  
 American Fisheries Society  
 American Sportfishing Association  
 Audubon Society  
 Bad River Band of Lake Superior Tribe of Chippewa Indians  
 Badger Fly Fishers  
 BASS Federation  
 Bass Pro Shops  
 Bay Mills Indian Community  
 Bois Forte (Nett Lake) Lake Superior Band of Chippewa Indians  
 Brice Prairie Foundation  
 Bureau of Indian Affairs  
 Cabela's  
 Cheboygan Sportsmans Club  
 Chippewa Ottawa Resource Authority (CORA)  
 Cleveland Museum of Natural History  
 Crawford County Land Conservation Department  
 Department of Defense  
 Department of Fisheries and Oceans - Canada  
 DTE Energy  
 Falling Rock Walleye Club  
 Federal Emergency Management Authority  
 Fond du Lac (Lake Superior) Band of Chippewa Indians  
 Forest County Potawatomi Community  
 Friends of Pendills Creek Hatchery  
 Friends of the Big Muddy  
 Friends of the Jordan River Valley  
 Friends of the Neosho National Fish Hatchery  
 Friends of the Upper Mississippi River Fishery Services  
 Friends of the Upper Mississippi River Refuges  
 Grand Portage (Lake Superior) Band of Chippewa Indians  
 Grand River Partners Inc. (Ohio)  
 Grand Traverse Bay Band of Ottawa & Chippewa Indians  
 Great Lakes Fishery Commission  
 Great Lakes Indian Fish & Wildlife Commission  
 Great Lakes Sportfishing Council  
 Hannahville Indian Community  
 Hawkeye Fly Fishing Association  
 Ho-Chunk Nation of Wisconsin  
 Hungry Canyons Alliance  
 Illinois Department of Natural Resources  
 Indiana Department of Natural Resources  
 Iowa Department of Natural Resources  
 Iowa State University  
 Izaak Walton League  
 Keweenaw Bay Indian Community  
 Kickapoo Valley Resource Management Board  
 Lac Courte Oreilles Band  
 Lac du Flambeau Band of Lake Superior Chippewa Indians  
 Lac Vieux Desert Band of Lake Superior Chippewa Indians  
 LaCrosse County Conservation Alliance  
 LaCrosse County Dept. of Land Conservation  
 Lake Metro Parks (Ohio)  
 Lake Michigan Fisheries Forum-17 members  
 Leech Lake Band of Ojibwe  
 Legend Lake Property Owners Association  
 Little Manistee River Watershed Conservation Council  
 Little River Band of Ottawa Indians  
 Little Traverse Bay Bands of Odawa Indians  
 Living Lands and Waters  
 Lower Sioux Indian Community in Minnesota  
 Lower Sioux Mdewakanton Indian Community  
 M.A.K.O. Fly Fisher's Association  
 Mancelona Rotary  
 Manistique Papers Inc.  
 Manitou Bluffs Conservation Group (Missouri)  
 Match-E-Be-Nash-She-Wish Band of Potawatomi Indians of MI  
 Menominee Indian Tribe of Wisconsin  
 Michigan Association of RC&Ds  
 Michigan Charterboat Association  
 Michigan Conservation Districts  
 Michigan Department of Environmental Quality  
 Michigan Department of Natural Resources  
 Michigan Department of Transportation  
 Michigan Inland Lakes and Stream Association  
 Michigan State University  
 Michigan United Conservation Clubs  
 Mille Lacs Band of Ojibwe  
 Minnesota Department of Natural Resources  
 Mississippi Interstate Cooperative Resource Assoc.  
 Mississippi Valley Conservancy  
 Mississippi Valley Partners  
 Mississippi Walleye Club  
 Missouri Department of Conservation  
 Missouri River Communities Network  
 Missouri River Relief  
 Missouri Smallmouth Alliance  
 Mohican Nation Stockbridge-Munsee Band  
 National Fish and Wildlife Foundation  
 National Park Service  
 Natural Heritage Foundation  
 Natural Resource Conservation Service  
 Nebraska Game & Parks Commission  
 Nature Conservancy  
 New York Depart. of Environmental Conservation  
 North American Native Fishes Association  
 Northland Sportmans Club  
 Nottawaseppi Huron Band of Potawatomi  
 Ohio Department of Natural Resources  
 Ohio Environmental Protection Agency  
 Oneida Tribe of Indians of Wisconsin  
 Ontario Ministry of Natural Resources  
 Ottawa National Wildlife Refuge Association  
 Overton-Woodridge Levee and Drainage Dist.  
 Pennsylvania Depart. of Environmental Protection  
 Pere Marquette Watershed Council  
 Peshawbestown Community Center  
 Pokagon Band of Potawatomi Indians  
 Prairie Island Indian Community  
 Pure Fishing  
 Rainy River First Nation  
 Red Cliff Band of Lake Superior Chippewa Indians  
 Red Lake Band of Chippewa Indians  
 River Alliance of Wisconsin  
 River Relief/Missouri River Relief  
 Sac and Fox Tribe of the Mississippi in Iowa  
 Saginaw Chippewa Indian Tribe of Michigan  
 Sault Ste. Marie Tribe of Chippewa Indians  
 Sea Grant  
 Shakopee Mdewakanton Sioux Community  
 Sierra Club  
 Sakaogon Chippewa (Mole Lake) Community of Wisconsin  
 Soo Area Sportsman's Club  
 South Dakota Department of Game, Fish & Parks  
 Sport Fishing and Boating Partnership Council  
 St. Croix Chippewa Indians of Wisconsin  
 Sturgeon for Tomorrow  
 The Nature Conservancy  
 Thunder Bay Brown Trout Committee  
 Thunder Bay Walleye Club  
 Tip of the Mitt Watershed  
 Trout Unlimited  
 U. S. Army Corps of Engineers  
 U.S. Department of Agriculture  
 U.S. Environmental Protection Agency  
 U. S. Forest Service  
 U. S. Geological Survey  
 Upper Black River Restoration Committee  
 Upper Sioux Community of Minnesota  
 Vernon County Land/Water Conservancy  
 West Fork Sports Club  
 White Earth Band of Chippewa  
 Wisconsin Association of Lakes  
 Wisconsin Department of Natural Resources  
 Wisconsin Hunting and Fishing Alliance

# Our Fisheries and Aquatic Resources are in Trouble!

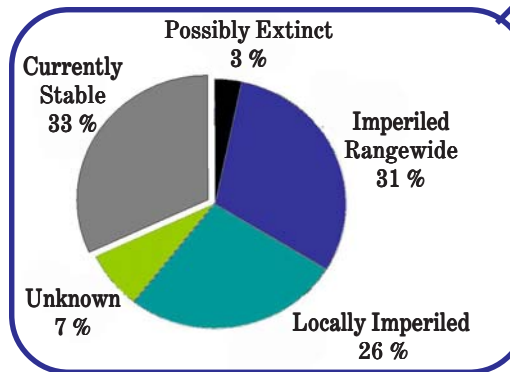
## Conservation Status of Aquatic Species in Region 3



Invertebrates-Freshwater Mussels



Invertebrates-Crayfish



Vertebrates-Fish



“Federal and state imperiled species lists were used as a primary source to identify imperiled aquatic species. The conservation status of these species was determined using scientific literature, available anecdotal information and [NatureServe.org](http://NatureServe.org), an online resource providing scientific information on species biology, distribution, management and conservation status. Using this background information, Fisheries Program Conservation Status Categories were assigned for all native freshwater mussels, fish and crayfish that occur or are known to have historically occurred in Region 3.”

### Region 3 Fisheries Program Conservation Status Categories for Fish, Crayfish and Mussels

**Possibly Extinct:** Species determined to be possibly (in some cases probably) extinct.

**Imperiled Range-wide:** Species which are federally-listed Endangered, Threatened, Candidate and Species of Concern, as well as species State-listed across most of their range.

**Locally Imperiled:** Species determined to be widespread and common with imperiled local populations, or species which are widespread with sporadic distribution.

**Unknown:** Species which have unknown conservation statuses or for which more information is needed.

**Currently Stable:** Species determined to be widespread, common and stable in range.



# Aquatic Species Conservation and Management

## Native Species

**Native Species Goal:** Self-sustaining populations of native fish and other aquatic resources that maintain species diversity, provide recreational opportunities for the American public, and meet the needs of tribal communities.

### (Self-sustaining Species)

*Our primary focus for this objective is on management activities that help maintain species at self-sustaining levels. Specifically, we work with lake whitefish, walleye, and shovelnose sturgeon.*

**Objective** - Maintain diverse, self-sustaining fish and other aquatic resource populations.

### **Our Commitment**

#### **– Regional Office will:**

- Work through the Council of Lake Committees of the Great Lakes Fishery Commission to conserve native fish and fisheries consistent with the Joint Strategic Plan for Management of Great Lakes Fisheries (IL, IN, MI, MN, NY, OH, PA, WI).
- Work through the Habitat and Species Strategy Team under the Great Lakes Regional Collaboration to conserve native fish and fisheries (IL, IN, MI, MN, NY, OH, PA, WI).

#### **– Alpena National Fish and Wildlife Conservation Office will:**

- Conduct fishery-independent assessments to monitor the status of lake whitefish populations in the 1836 Treaty waters of Lake Huron (MI).
- Work with the Michigan DNR, CORA, and the five 1836 Treaty Tribes to identify, assess, and reduce threats to lake whitefish, walleye, and other stocks targeted by fisheries in the 1836 Treaty waters of Lake Huron (MI).
- Work with the Michigan DNR and USGS to assess the near-shore fish community in the Detroit River International Wildlife Refuge and in the St. Clair River (MI).
- Work with the Michigan DNR, USGS, and OMNR to assess historical spawning habitats in the Lower Detroit River used by native fish including lake whitefish, walleye, lake sturgeon and other native species (MI, Ontario).
- Coordinate with Jordan River NFH to lead Service efforts on the Lake Huron Technical Committee for implementation of a pilot project to recover lake herring stocks in Lake Huron MI).

#### **– Ashland National Fish and Wildlife Conservation Office will:**

- Work with the Michigan DNR, CORA and the five 1836 Treaty Tribes to identify, assess, and reduce threats to lake whitefish, lake trout, walleye, and other stocks targeted by fisheries in the 1836 Treaty waters of Lake Superior (MI).
- Work with partners to monitor the status of and identify potential threats to lake trout populations in Lake Superior (MI, MN, WI).
- Conduct fishery-independent assessments to monitor the status of lake whitefish populations in the 1836 Treaty waters of Lake Superior (MI).
- Work with the Wisconsin DNR and the Great Lakes Indian Fish and Wildlife Commission to monitor the status of and identify threats to walleye populations targeted by fisheries in the 1837 and 1842 Treaty waters (WI).

#### **– Columbia National Fish and Wildlife Conservation Office will:**

- Collect and provide biological data on shovelnose sturgeon to the Missouri Department of Conservation for stock assessment (MO).
- Collect and provide biological data on white crappie, walleye and largemouth bass to DeSoto NWR (IA).

# Aquatic Species Conservation and Management



-USFWS  
Survival assessments are conducted on key sites on the Great Lakes to evaluate lake trout stocking programs.



-USFWS  
This yearling lake sturgeon was produced at the Genoa National Fish Hatchery to support restoration efforts in northern Wisconsin.



-USFWS photo by Robert Elliott

A lake sturgeon swims near the spawning grounds on the Fox River, Wisconsin.

- Collect and provide biological data on largemouth bass and channel catfish to Big Muddy National Fish and Wildlife Refuge (MO).
- Collect river redhorse for Southern Illinois University snail control study to determine potential for replacing black carp in aquaculture operations (MO, IL).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Conduct fishery assessments and monitor the status of lake whitefish populations in Lake Michigan (MI, WI).
  - Provide support to Wisconsin DNR to assess the status of yellow perch populations in Green Bay, Lake Michigan, using models and data analysis (WI).
  - Work with the Michigan DNR, CORA and the five 1836 Treaty Tribes to identify, assess and reduce threats to lake whitefish, walleye and other stocks targeted in fisheries of the 1836 Treaty waters of Lake Michigan (MI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Support the La Crosse FHC to conduct the annual Wild Fish Health Survey (MN, WI).
- **La Crosse Fish Health Center will:**
  - Conduct wild fish health surveys in support of the National Wild Fish Health Survey (IL, IN, IA, MI, MN, MO, WI).
  - Investigate disease outbreaks for wild and hatchery raised fish (IL, IN, IA, MI, MN, MO, OH, WI).
  - Conduct pathogen screening for wild fish brought onto the Service's NFH's (IA, MO, WI).
  - Verify findings from other agencies' fish pathologists (IL, IN, IA, MI, MN, MO, OH, WI).

## (Aquatic Species of Concern)

**Objective** - Restore declining fish and other aquatic resource populations before they require listing under the *Endangered Species Act*.

*Our primary focus for this objective is on restoration activities that will help prevent the need to list species under the ESA. Specifically, we work with lake sturgeon, paddlefish, and native mussels in the Mississippi, Missouri, and Ohio river basins and lake trout, coaster brook trout, lake sturgeon, and lake herring in the Great Lakes.*

## Our Commitment

- **Regional Office will:**
  - Work with partners through the Great Lakes Fish and Wildlife Restoration Proposal Review Committee to identify and fund native fish and wildlife restoration activities through the Great Lakes Fish and Wildlife Restoration Act (IL, IN, MI, MN, NY, OH, PA, WI).

# Aquatic Species Conservation and Management

- Work through our position as observer on the Council of Lake Committees to pursue native fish rehabilitation on a Great Lakes wide scale consistent with fish community objectives for each lake (IL, IN, MI, MN, NY, OH, PA, WI).
- Work with the Ecological Services program in responding to the petition to list the American eel (IA, IL, IN, MI, MN, MO, NY, OH, PA, WI).
- Work with the Ecological Services program in responding to the petition to list the Lake Superior coaster brook trout (MI, MN, WI).
- **Alpena National Fish and Wildlife Conservation Office:**
  - Work with partners to monitor the status of lake trout and to restore populations and habitat through interagency plans for Lake Huron, and lead efforts for the fourth revision of the Lake Huron Lake Trout Study Plan (MI).
  - Work with partners to monitor the status of lake sturgeon and to restore populations and habitat through interagency plans for the St. Marys River, Lake Huron, Lake Erie, and connecting waters of the Huron-Erie Corridor (MI, OH).
  - Work with partners through the Lake Huron Technical Committee – Lake Sturgeon Task Group to draft a lakewide management plan for lake sturgeon (MI).
  - Work with partners to identify the status of and develop interagency restoration plans for freshwater mussels in the St. Clair River Delta and participate on the Region 3 Mussel Group (MI).
  - Work with the Michigan DNR, East Lansing Field Office, and others to assess the status of the shallow-water fish community in the St. Clair River, lower Detroit River and W. Lake Erie (MI).
- **Ashland National Fish and Wildlife Conservation Office:**
  - Work with partners to monitor the status of brook trout and to restore populations and habitat through interagency plans for Lake Superior (MI, MN, WI).
  - Work with partners to monitor the status of lake sturgeon and to restore populations and habitat through interagency plans for Lake Superior (MI, MN, WI).
  - Work cooperatively with the Regional Office and Ecological Services Field Offices in responding to the petition to list Lake Superior coaster brook trout (MI, MN, WI).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Collect and provide biological data on lake sturgeon to the Missouri Department of Conservation for stock assessment (MO).
  - Work with University of Missouri-Columbia and the Missouri Cooperative Fish and Wildlife Unit to provide biological data on paddlefish in the Osage and Lower Missouri rivers to the Mississippi Interstate Cooperative Resource Association Paddlefish/Sturgeon Committee (MO).
  - Provide sicklefin, sturgeon, and speckled chubs to USGS for diet analysis study (MO).
  - Provide technical assistance to help write a comprehensive, multi-state paddlefish plan for the Upper Mississippi River basin (MN, WI, IL, IA, MO).
- **Green Bay National Fish and Wildlife Conservation Office**
  - Work with partners to monitor the status of lake trout in Lake Michigan, revise the lake trout rehabilitation plan and restore populations and habitat through coordinated interagency actions (MI, IL, IN, WI).
  - Monitor, with partners, the status of lake sturgeon in Lake Michigan, develop a rehabilitation plan and restore populations and habitat through coordinated interagency actions (MI, IL, IN, WI).
- **Genoa National Fish Hatchery will:**
  - Identify the host fish for various imperiled mussel species in the Upper Mississippi River Basin (IL, IA, MN, WI) (**Fully funded by FONS project # 2002-001**).
  - Culture 5-10,000 lake sturgeon (2 strains) for stocking under interagency restoration programs on the Menominee Indian Reservation (e.g. Menominee Indian Tribe and Wisconsin DNR), Red River of the North basin (e.g. First Nations of Canada, White Earth Band of Chippewa, and Minnesota DNR), and the Missouri River basin (e.g. Missouri Department of Conservation) (MN, MO, WI). (**Partially funded by FONS project # 2003-001**).

# Aquatic Species Conservation and Management



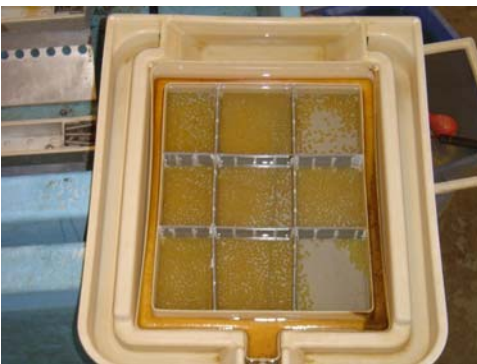
-USFWS

**Genoa National Fish Hatchery's sturgeon culture facility was built in 2004 and enables the Hatchery to produce over 40,000 lake sturgeon annually.**



-USFWS

**Biologist Nick Grueneis of the Iron River NFH spawns a male lake trout into a bag for shipping. The milt will be used to fertilize lake trout eggs at the White River NFH in Vermont.**



-USFWS

**Individual egg takes of the Seneca Lake strain of lake trout are separated in an incubator. Equal numbers of resultant fry will make up the brood stock line, ensuring maximum genetic variability from the wild population.**

- Culture 7,500 yearling brook trout and 20,000 fingerling brook trout for stocking under an interagency restoration program in Lake Superior (MI, MN, WI).
- Work with partners to collect and isolate future lake trout brood stock from wild Lake Superior, Seneca Lake, and Cayuga Lake donor populations, and future coaster brook trout brood stocks from the Lake Superior watershed as needed (MI, NY, WI).

## – Iron River National Fish Hatchery will:

- Work cooperatively with the Keweenaw Bay Indian Community, Genoa National Fish Hatchery, the Lacrosse Fish Health Center, and other partners to collect and isolate future lake trout and brook trout brood stock from wild Lake Superior donor populations (MI, WI) (FONS project # 2001-001).
- Maintain strains of lake trout (Klondike Reef, Apostle Island, and Traverse Island) and brook trout (Siskiwit Bay and Tobin Harbor) brood stock, as defined by restoration plans for lakes Superior, Huron, Michigan, Erie and Ontario, to support interagency restoration programs in the Upper Great Lakes to meet performance measure targets for brood stock production (MI, MN, IL, IN, NY, PA, WI).
- Produce lake trout (3-5 million eggs, 1.2 million yearlings, and up to 400,000 fingerlings) and brook trout (300,000-500,000 eggs, 100,000 - 200,000 fry/fingerlings) for stocking under interagency restoration programs in lakes Superior, Huron, and Michigan to meet performance measure targets for fish production (MI, MN, IL, IN, WI).
- Work with partners through lakes Huron, Michigan, and Superior Technical Committees to update and implement interagency lake trout and coaster brook trout rehabilitation plans (MN, MI, IL, IN, WI).
- Reduce lake trout brood stock strains/lines per advice from the Regional office, reflecting changes to rehabilitation programs for lakes Huron and Michigan (MI, WI, IL, IN).
- Ensure fish marking program meets the goals established by rehabilitation plans for the Upper Great Lakes (MI, MN, IL, IN, WI).

## – Jordan River National Fish Hatchery will:

- Produce 1.8 million lake trout yearlings for stocking under interagency rehabilitation programs in Lake Huron and Lake Michigan (MI, IL, IN, WI).
- Provide 700,000-1,000,000 lake trout fry to Pendills Creek NFH for rearing to yearling stage (MI, IL, IN, WI).
- Work with partners through the Lake Michigan Technical Committee and the Lake Huron Technical Committee to update and implement interagency lake trout rehabilitation plans (MI, IL, IN, WI).
- Investigate current capabilities and future needs at the facility in regard to culture of native species in decline, other than lake trout (MI).



# Aquatic Species Conservation and Management

- **Neosho National Fish Hatchery will:**
  - Hold 300 freshwater drum as host fish for Southwest Missouri State University's efforts to culture the Neosho mucket, a candidate species for listing under the *ESA* (MO).
  - Experiment with culturing freshwater drum to provide a continuous supply for Neosho mucket culturing efforts (MO).
- **Pendills Creek National Fish Hatchery will:**
  - Produce 900,000 lake trout yearlings and 200,000 fall fingerlings for stocking under interagency rehabilitation programs in Lake Huron and Lake Michigan (IL, IN, MI, WI) (**Funded by FONS project # 2006-014**).
  - Continue to utilize and monitor water filtration and liquid oxygen systems, bringing them into full operational use (MI) (**Funded by FONS project # 2006-009**).
  - Work with partners through the Lake Michigan Technical Committee and the Lake Huron Technical Committee to update and implement interagency lake trout rehabilitation plans (MI, IL, IN, WI).
- **Sullivan Creek National Fish Hatchery will:**
  - Work with partners to collect and isolate future lake trout brood stock from wild Lake Superior, Lake Huron, Seneca Lake and Cayuga Lake donor populations (MI, NY, WI).
  - Maintain various strains of lake trout brood stock as defined by rehabilitation plans to provide over five million eggs for interagency rehabilitation programs in Lake Huron and Lake Michigan (MI, IL, IN, WI).
  - Continue to reduce lake trout brood stock strains/lines per advice from the Regional Office, reflecting changes to rehabilitation programs for Lake Huron and Lake Michigan (MI).
- **La Crosse Fish Health Center will:**
  - Conduct fish health pathogen screening and diagnostic services for the Service's Great Lakes brook trout and lake trout restoration stocking activities (MI, WI).
  - Increase the total number of wild fish surveyed in watershed units (8-digit HUC) from 135 to approximately 145 (or more) out of 363 watersheds in Region 3 (IL, IN, IA, MI, MN, MO, OH, WI).
- **Marquette and Ludington Biological Stations will:**
  - Conduct sea lamprey control operations, in coordination with the Great Lakes Fishery Commission and other partners, to minimize potential impacts to non-target organisms including lake sturgeon, chestnut lamprey, northern brook lamprey, American brook lamprey and silver lamprey (IL, IN, MI, MN, NY, PA, OH, WI).

## *(Endangered and Threatened Species)*

**Objective** - Recover fish and other aquatic resource populations protected under the *Endangered Species Act*.

*Our primary focus for this objective is on implementing recovery activities that: 1) prevent the extinction of threatened and endangered species, and; 2) lead to down-listing or de-listing species listed under the ESA. Specifically, we work with pallid sturgeon, Higgins eye pearl mussel, winged mapleleaf, northern riffleshell mussel, Topeka shiner, Niangua darter and Ozark cavefish..*

## Our Commitment

- **Alpena National Fish and Wildlife Conservation Office:**
  - Work with partners to monitor status of and threats to endangered northern riffleshell mussel in the St. Clair River watershed (MI).
  - Work with the East Lansing Field Office, Michigan DNR and DEQ and conservation partners to develop protocols for conducting habitat restoration efforts in watersheds containing the Endangered Hungerford's Crawling Waterbeetle (MI).

# Aquatic Species Conservation and Management



-Kay Hively

A net containing a rare pallid sturgeon is handed to Gary Heidrich of the Missouri Department of Conservation. The fish was transported to the Neosho National Fish Hatchery for a captive breeding program.



-USFWS

Tony Brady from the Genoa National Fish Hatchery prepares mussel larvae which will be inoculated onto the gills of largemouth bass, where the young mussels will be nourished during this early life stage.

- **Carterville National Fish and Wildlife Conservation Office will:**
  - Provide input on pallid sturgeon recovery through attendance at Middle Basin Workgroup or other meetings and/or review of documents (IL, MO).
  - Assist in collection of pallid sturgeon from the Middle Mississippi River for use as brood stock or in a telemetry project (IL, MO).
- **Columbia National Fish and Wildlife Conservation Office:**
  - Serve as the Lower Missouri River Pallid Sturgeon Recovery Work Group Leader and coordinate endangered pallid sturgeon recovery efforts, including management, propagation and stocking in the Lower Missouri River (IA, KS, MO, NE).
  - Monitor the status of the pallid sturgeon population and associated fish community in the Lower Missouri River (IA, KS, MO, NE).
  - Monitor the effectiveness of the pallid sturgeon shallow water habitat created by U. S. Army Corps of Engineers activities in Lower Missouri River (IA, KS, MO, NE).
  - Provide technical assistance to the Niangua Darter Recovery Team for recovery in the Osage River basin (MO).
  - Provide technical assistance to update the Pallid Sturgeon Recovery Plan (IA, KS, MO, MT, NE, ND, SD).
  - Provide technical assistance to Ft. Leavenworth Army Post to develop endangered species management plan (KS).
- **La Crosse National Fish and Wildlife Conservation Office:**
  - Work with partners to collect, re-distribute and monitor endangered Higgins' eye pearl mussels for recovery efforts in the Upper Mississippi River basin (IL, IA, MN, WI).
  - Work with partners to collect and aggregate endangered winged mapleleaf mussels for recovery efforts in the Upper Mississippi River basin (MN, WI).
  - Serve on the Topeka Shiner Recovery Team (IA, MN, MO).
- **Genoa National Fish Hatchery:**
  - Culture winged mapleleaf mussel juveniles for reintroductions and stocking under an interagency recovery program in the Upper Mississippi River basin (MN, WI).
  - Develop and maintain a disease free brood source of channel catfish to use as host fish for winged mapleleaf mussel recovery efforts (MN, WI).
  - Culture Higgins' eye pearl mussels for stocking under an interagency recovery program in the Upper Mississippi River basin (IL, IA, MN, WI).
  - Culture approximately 8,000 yearling host fish of various species for endangered Higgins' eye pearl mussel recovery efforts (IL, IA, MN, WI).
- **Jordan River National Fish Hatchery:**
  - Identify and pursue opportunities to expand role in implementing recovery activities for species listed under ESA (MI).

# Aquatic Species Conservation and Management

- **Neosho National Fish Hatchery:**
  - Culture and tag 10,000 endangered pallid sturgeon (9 inch) for stocking under an interagency (e.g. Missouri Department of Conservation, Iowa DNR, and U.S. Army Corps of Engineers) recovery program in the Missouri River (MO, IA, KS, NE) (**Partially funded by FONS Project # 2002-007**).
  - Provide technical assistance to complete the Pallid Sturgeon Propagation and Stocking Plans for the Missouri River (IA, KS, MO, MT, NE, ND, SD).
  - Protect the water source for the threatened Ozark cavefish on a portion of the hatchery (MO) (**Fully funded by FONS Project 2002-004**).
- **La Crosse Fish Health Center:**
  - Complete one fish health assessment per year on pallid sturgeon cultured at the Neosho NFH (MO).
  - Complete at least one fish health assessment per year at Genoa NFH on host fish used for freshwater mussel culture (WI).
  - Provide technical assistance on pallid sturgeon fish health for Region 3 (IA, MO).
- **Marquette and Ludington Biological Stations will:**
  - Complete a programmatic Endangered Species Act Section 7 consultation with the Ecological Services program to ensure the conservation of all listed Great Lakes species during sea lamprey control operations. (IL, IN, MI, MN, NY, PA, OH, WI).

## Interjurisdictional Species

**Interjurisdictional Fisheries Goal:** Interjurisdictional fish populations are managed at self-sustaining levels.

*Our primary focus is on supporting, facilitating, and/or leading collaborative approaches to conserve and restore sustainable interjurisdictional fish populations.*

**Objective** – Co-manage interjurisdictional fisheries.

**Objective** - Support, facilitate, and/or lead collaborative approaches to manage interjurisdictional fisheries.

### Our Commitment

- **Regional Office will:**
  - Work with partners through the Great Lakes Fish and Wildlife Restoration Proposal Review Committee to identify and fund activities supporting collaborative approaches to managing interjurisdictional fish and wildlife through the Great Lakes Fish and Wildlife Restoration Act (IL, IN, MI, MN, NY, OH, PA, WI).
  - Work through the Council of Lake Committees to pursue collaborative approaches to managing interjurisdictional fisheries (IL, IN, MI, MN, NY, OH, PA, WI).
- **Alpena National Fish and Wildlife Conservation Office will:**
  - Participate through the Lake Huron Technical Committee to conserve, restore and manage interjurisdictional fish stocks in Lake Huron and the St. Marys River (MI).
  - Participate through the Habitat Task Group for the Lake Erie Committee to conserve, restore and manage habitats important to interjurisdictional fish stocks in Lake Erie (MI).
  - Assist Michigan, CORA and tribal parties to the Consent Decree in managing interjurisdictional fisheries in the 1836 Treaty waters of Lake Huron through the Technical Fisheries Committee, Modeling Subcommittee and Executive Council (MI).
  - Process lake trout heads recovered from CORA assessment and commercial fisheries, Michigan DNR sport fishery, and Service assessment operations, for coded-wire tag data recovery (MI).

# Aquatic Species Conservation and Management



-USFWS photo by Rob Elliott  
**Biologist Rob Elliott of the Green Bay National Fish and Wildlife Conservation Office holds a juvenile lake sturgeon captured from Green Bay waters of Lake Michigan.**



-USFWS photo by Wayne Talo  
**Christy Reinhardt removes the adipose fin of an anesthetized lake trout. She will then implant a coded-wire tag into its snout. Marking allows researchers to identify fish that are produced at a hatchery.**

- Provide data input to U.S. Geological Survey for the Lake Huron coded-wire tag database for use in managing interjurisdictional fisheries in Lake Huron (MI).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Participate through the Lake Superior Technical Committee to conserve, restore and manage interjurisdictional fish stocks in Lake Superior (MI, MN, WI).
  - Provide staff member to serve as the chair person for the Lake Superior Lake Sturgeon Committee (MI, MN, WI).
  - Assist Michigan, CORA and tribal parties to the Consent Decree in managing interjurisdictional fisheries in the 1836 Treaty waters of Lake Superior through the Technical Fisheries Committee (MI).
  - Assist Michigan, Minnesota, Wisconsin, Great Lakes Indian Fish and Wildlife Commission and member tribes in managing interjurisdictional fisheries in the 1837 and 1842 Treaty-ceded waters (MI, MN, WI).
- **Carterville National Fish and Wildlife Conservation Office will:**
  - Participate in the Mississippi Interstate Cooperative Resource Agency - Paddlefish/Sturgeon Committee to improve and coordinate management activities (IL, IN, IA, MN, MO, OH, WI).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Participate in the Mississippi Interstate Cooperative Resource Agency Paddlefish/Sturgeon Subcommittee to improve and coordinate management activities (IL, IN, IA, MN, MO, OH, WI).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Participate through the Lake Michigan Technical Committee to conserve, restore and manage interjurisdictional fish stocks in Lake Michigan (IL, IN, MI, WI).
  - Assist Michigan, CORA and tribal parties to the Consent Decree in managing interjurisdictional fisheries in the 1836 Treaty waters of Lake Michigan through the Technical Fisheries Committee, Modeling Subcommittee and the Executive Council (MI).
  - Maintain the following interagency databases: Great Lakes Fish Stocking Database, Lake Michigan Creel Summary and Lake Michigan Coded-Wire Tag Return Data (IL, IN, MI, MN, NY, OH, PA, WI).
- **Jordan River National Fish Hatchery will:**
  - Identify and pursue opportunities to support collaborative management efforts for interjurisdictional fisheries (MI).
- **La Crosse Fish Health Center will:**
  - Work with States and Tribes and other Federal agencies to coordinate regional responses and actions to new fish diseases, such as the spring viremia of carp virus, viral hemorrhagic septicemia virus, and the largemouth bass virus (IL, IN, IA, MI, MN, MO, OH, WI).

# Aquatic Invasive Species



-GLFC  
**Gregg Baldwin of the Marquette Biological Station presents information to Kingsford High School students on negative impacts of invasive species in the Great Lakes.**



-USFWS/AnjanetteBowen  
**Alpena NFWCO biologist Jim Boase sorts fish captured during efforts to survey Lake Huron and St. Marys River ports for new populations of invasive species.**



-GLFC  
**A biologist captures a larval sea lamprey using a backpack electrofisher.**

<b>Goal (Base Funding/Performance Managed at the Regional Office)</b> Performance Measures: (Fisheries Strategic Plan v 11) <b>Aquatic Nuisance Species</b>																	
Number of risk assessments conducted by the Region	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of aquatic invasive species populations controlled / managed by the Region	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of state/interstate ANS plans supported by the Region	7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of public awareness campaigns conducted and supported by the Region	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of effective partnerships supported by the Region	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of surveys conducted for aquatic invasive species baseline/trend information supported by the Region	3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Number of activities conducted for rapid response by the Region	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Regional Fisheries Goal	Alpena Goal	Ashtabula Goal	Carterville Goal	Columbia Goal	Genoa Goal	Green Bay Goal	Iron River Goal	Jordan River Goal	La Crosse Goal	La Crosse Goal	Neesho Goal	Pendillus Creek Goal	Sea Lamprey Control Goal			

## Aquatic Invasive Species



-GLFC

Amanda Bedora displays an adult invasive sea lamprey to students from the Menominee, Michigan, school district.



-USFWS

These invasive ruffe were captured during invasive species assessments in central and southern Thunder Bay Harbour, Lake Superior.



-Wisconsin DNR/Patrick Short

Increasing numbers of large ornamental fish, such as this 14-inch pacu, have been illegally released into the Upper Mississippi River by owners. The La Crosse National Fish and Wildlife Conservation Office and partners have developed a disposal program for unwanted fish.

**Aquatic Nuisance Species Goal:** Risks of aquatic nuisance species invasions are substantially reduced, and their economic, ecological, and human health impacts are minimized.

*Our primary focus is on education, preventing new introductions of aquatic invasive species (AIS), and working with others to reduce the impacts from Asian carp, zebra mussels, round gobies, sea lamprey, rusty crayfish, Eurasian water milfoil, spiny water fleas, and Eurasian ruffe.*

**Objective** – Prevent new introductions of aquatic nuisance species.

### Our Commitment

#### – Regional Office will:

- Work with partners through the Great Lakes Fish and Wildlife Restoration Proposal Review Committee to identify and fund activities reducing the risk of AIS introductions through the Great Lakes Fish and Wildlife Restoration Act (IL, IN, MI, MN, NY, OH, PA, WI).
- Work to implement priority actions, of the Aquatic Invasive Species Strategy Team, listed in the Great Lakes Regional Collaboration's *Strategy to Restore and Protect the Great Lakes* (IL, IN, MI, MN, NY, OH, PA, WI).
- Provide technical assistance to the State of Minnesota to assist development of their State Invasive Species Management Plan (MN).
- Support all approved State and Interstate (St. Croix) ANS Management Plans (IL, IA, MI, MN, OH, WI).
- Continue to help lead the Great Lakes and Mississippi River Basin ANS Regional Panels while they continue to coordinate regional efforts to prevent species invasions (IL, IN, IA, MI, MN, MO, OH, WI).
- If funding allows, we will work with Wildlife Forever, Minnesota and Wisconsin Departments of Natural Resources, Minnesota and Wisconsin Sea Grant, and U.S. Forest Service to purchase billboard spaces that educate anglers and boaters about how they can help stop the spread of AIS (MN, WI).

#### – All Offices will:

- Deliver educational programs and materials to the public about the threat of AIS and actions the public can take to prevent introduction and spread of AIS (IL, IN, IA, MI, MN, MO, OH, WI).
- Provide technical assistance and information exchange to agencies and researchers investigating prevention, containment, and control measures for AIS (IL, IN, IA, MI, MN, MO, OH, WI).
- Review and update Hazard Analysis and Critical Control Point (HACCP) plans for each discrete activity (e.g., gill netting, seining, electrofishing, stocking) with risk of spreading AIS.

# Aquatic Invasive Species

- **Alpena National Fish and Wildlife Conservation Office will:**
  - Conduct surveillance for Eurasian ruffe and other AIS in areas of probable invasion in order to detect early presence and initiate control actions in Lake Huron (MI).
  - Will continue to work with Michigan DNR and La Crosse FHC for the collection of samples to monitor status and spread of viral hemorrhagic septicemia in the Great Lakes (MI).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Conduct surveillance for Eurasian ruffe and other AIS in areas of probable invasion in order to detect new populations and initiate control actions in Lake Superior (MI, MN, WI).
  - Convene a meeting of the Ruffe Control Committee and revise the Ruffe Control Plan - establish programmatic priorities for the next five years...(MI, MN, WI).
- **Cartersville National Fish and Wildlife Conservation Office will:**
  - Evaluate ecologically safe and economically viable alternatives to black carp for snail control through a cooperative project with Southern Illinois University (IL).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Conduct surveillance for Eurasian ruffe and other AIS in areas of probable invasion in Lake Michigan (MI, WI).
- **Genoa National Fish Hatchery will:**
  - Continue to implement Federal fish health policy to include sampling cold, cool, and warm-water species of fish held on station (WI).
  - Continue to work with our partners to retain genetic integrity of captive brood-stocks of fish in conjunction with fish health surveillance and best management practices to infuse wild genetics safely into captive brood lines to ensure the genetic integrity of stocks (WI).
  - Maintain two disease free forage species to feed host fish and captive brood stock to reduce disease vectors from other forage fish sources (WI).
- **Iron River National Fish Hatchery will:**
  - Ensure out-of-basin egg and fish transfers meet APHIS/DATCAP guidelines for pathogen management (WI).
  - Ensure Schacte and Middle Creek watersheds on NFH property are managed to minimize potential risks and impacts of invasives (WI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Develop and provide information to commercial and recreational baitfish harvesters that will help prevent accidental and deliberate unauthorized introductions of Asian carps (IL, MN, WI).
  - Develop and provide information to recreational fishers and boaters that will help prevent accidental and deliberate unauthorized introductions of Asian carps (IA, MN, WI).

**Objective** – Minimize range expansion and population growth of established AIS.

## Our Commitment

- **Regional Office will:**
  - Work through the Aquatic Invasive Species Strategy Team under the Great Lakes Regional Collaboration to identify and prioritize activities to minimize range expansion and population growth of established aquatic nuisance species (IL, IN, MI, MN, NY, OH, PA, WI).

## Aquatic Invasive Species



-USFWS

Dozens of invasive silver carp leap out of the boat wake near the Starved Rock State Park on the Illinois River.



-USFWS

Large net-fulls of Asian carp is becoming a norm during fishery assessments in many areas of the lower Missouri River.



- Work through membership on the Sea Lamprey Integration Committee Core Group to provide planning and recommendations guiding the control of sea lamprey to the Great Lakes Fishery Commission (IL, IN, MI, MN, NY, OH, PA, WI).
- Work with the City of Chicago, State of Illinois, the U.S. Army Corps of Engineers, and the Metropolitan Water Reclamation District of Greater Chicago to stop Asian carp from establishing self-sustaining populations in the Great Lakes (IL, IN, MI, MN, OH, WI).
- Assist states while they develop, promulgate, and enforce regulations that manage the harvest, transport, import, trade and possession of Asian carps (IL, IN, IA, MI, MN, MO, OH, WI)
- Continue to help lead the Great Lakes and Mississippi River basin ANS Regional Panels while they continue to coordinate regional efforts to contain and control populations of AIS (IL, IN, IA, MI, MN, MO, OH, WI).

- **Alpena National Fish and Wildlife Conservation Office will:**
  - Conduct Eurasian ruffe and round goby monitoring activities to determine status, population trends and impacts on native fishes in Lake Huron and the St. Marys River (MI).
  - Coordinate with state, tribal and Federal partners, the U.S. Coast Guard, the Great Lakes Carriers Association and others to detect and control AIS in Lake Huron and Lake Erie (MI, OH).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Coordinate monitoring and surveillance programs for Eurasian ruffe Great Lakes-wide through position as Chair of the Ruffe Control Committee (IL, IN, MI, MN, NY, OH, PA, WI).
  - Conduct Eurasian ruffe and round goby monitoring activities to determine status, population trends, and impacts on native fishes in Lake Superior (MI, MN, WI).
  - Coordinate with state, tribal, and Federal partners, the U.S. Coast Guard, the Great Lakes Carriers Association and others to detect and control AIS in Lake Superior (MI, MN, WI).
  - Assist La Crosse NFWCO in monitoring range expansion of round goby, Asian carp and other AIS in the Illinois waterway (IL).
- **Carterville National Fish and Wildlife Conservation Office will:**
  - Lead the development and implementation of the National Asian Carp Management and Control Plan (IL, IN, IA, OH, MI, MN, MO, WI).



## Aquatic Invasive Species

- Identify suitable areas for recruitment of Asian carps in the Upper Mississippi River through a cooperative effort with Southern Illinois University (IL, IN, IA, MN, MO, WI).
  - Investigate the feasibility of producing food for zoo animals from Asian carps through a cooperative project with the St. Louis Zoo (IL, IN, IA, OH, MI, MN, MO, WI).
  - Inspect and certify shipments of triploid grass carp from private producers to reduce risk of expanding diploid populations in the wild (IL, IN, OH).
  - Facilitate the exchange of information on ongoing implementation activities for Asian carps through coordination with state partners via the Mississippi River Basin Panel (IL, IN, IA, OH, MI, MN, MO, WI).
  - Conduct outreach activities to increase awareness of Asian carps and what people can do to minimize range expansion (IL, IN, IA, OH, MI, MN, MO, WI).
  - Assist with early detection monitoring for Asian carps on the upper Illinois River in the vicinity of the electrical barrier in the Chicago Sanitary and Shipping Canal between the Mississippi River and Lake Michigan (IL, IN, OH, MI, MN, WI).
  - Work with partners to improve early detection monitoring in the Illinois River through the use of telemetry to monitor movements of fish in the pools leading up to the electrical barrier in the Chicago Sanitary and Shipping Canal between the Mississippi River and Lake Michigan (IL, IN, OH, MI, MN, WI).
- **Columbia National Fish and Wildlife Conservation Office will:**
- Work with Missouri Department of Conservation, University of Missouri - Columbia, St. Louis Zoo, and U.S. Geological Survey to determine the feasibility of utilizing Asian carp in the pet food industry and as a food supply for zoo animals (MO).
  - Evaluate gear and harvest method effectiveness on Asian carps, develop new gears if necessary (MO).
  - Evaluate use of largemouth bass for control of young-of-the-year Asian carp in scour holes on the Missouri River floodplain (MO).
- **Green Bay National Fish and Wildlife Conservation Office will:**
- Coordinate with state, tribal, and Federal partners, the U.S. Coast Guard, the Great Lakes Carriers Association and others to detect and control AIS in Lake Michigan (MI, IL, IN, WI).
- **Jordan River National Fish Hatchery will:**
- Maintain and update HAACP plans for hatchery operations, fish stocking and transportation operations (MI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
- Monitor the range expansion of zebra mussels on the St. Croix River and Upper Mississippi River (MN, WI).
  - Lead the Service's effort to coordinate and monitor the range expansion and changes in abundance of round gobies and Asian carp in the Illinois River and Waterway (IL).
  - Work with partners to monitor Asian carp in the Illinois River and Waterway (IL).
- **Marquette and Ludington Biological Stations will:**
- Plan and conduct sea lamprey assessment and control operations in coordination with the Great Lakes Fishery Commission, Fisheries and Oceans Canada, U.S. Geological Survey along with state, tribal, and university partners (IL, IN, MI, MN, NY, OH, PA, WI, Ontario).
  - Meet the species-specific international treaty obligation to control sea lamprey populations (IL, IN, MI, MN, OH, WI) (**FY05 Department of the Interior Performance Measure**).



## Public Use

**Recreational Fishing Goal: Quality opportunities for responsible fishing and other related recreational enjoyment of aquatic resources on Service lands, on Tribal and military lands, and on other waters where the Service has a role.**

*Our primary focus is on enhancing recreational fishing opportunities on Service, Tribal, and Department of Defense lands.*

**Objective** - Enhance recreational fishing opportunities on Service and Department of Defense lands.

### Our Commitment

- **Alpena National Fish and Wildlife Conservation Office will:**
  - Host National Fishing Day events and organize additional aquatic education and fishing clinics in Michigan (MI).
  - Will collaborate with Shiawassee NWR for the collection of fisheries population data in refuge waters for expansion of public use related to recreational fishing (MI).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Participate in National Fishing Day events and aquatic education and fishing clinics in partnership with Whittlesey Creek NWR and Iron River NFH (WI).
  - Assist Whittlesey Creek NWR in evaluating and managing sport fish populations and providing recreational fishing opportunities (WI).
  - Assist Whittlesey Creek NWR and the Northern Great Lakes Visitor Center in Migratory Bird Day activities (WI).
- **Carterville National Fish and Wildlife Conservation Office will:**
  - Assist in assessing recreational fisheries and developing management recommendations on Crab Orchard NWR in conjunction with the Illinois DNR and the Refuge (IL).
  - Assess recreational fisheries and develop management recommendations on Scott Air Force Base and Crane Naval Weapons Support Center (IL, IN).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Participate in a State of Missouri Fishing Day and the National Hunting and Fishing Day events (MO).
  - Assess recreational fisheries and develop management recommendations on DeSoto NWR (IA).
  - Assess recreational fisheries and develop management recommendations on Big Muddy National Fish and Wildlife Refuge (MO).
  - Assess recreational fisheries and develop management recommendations on the Iowa Army Ammunition Plant (IA).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Host National Fishing Day events and organize additional aquatic education and fishing clinics (WI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Co-host Fishing Day events at Tomah Veterans Administration Hospital and participate in Fishing Day events at Minnesota Valley NWR, Necedah NWR, Upper Mississippi River National Wildlife and Fish Refuge and Genoa NFH (MN, WI).
  - Assess recreational fisheries and develop management recommendations on Horicon, Necedah, and Tamarac, Minnesota Valley, and Big Stone NWR's, on a rotational basis (MN, WI).
- **Genoa National Fish Hatchery will:**
  - Co-host Fishing Day events at Tomah Veterans Administration Hospital and the NFH (MN, IA, WI).
  - Participate in Fishing Day events as requested at the Upper Mississippi River National Wildlife & Fish Refuge and U.S. Army Corps of Engineers' Blackhawk Park as requested (IA, MN, and WI).

## Public Use



-USFWS

Carterville National Fish and Wildlife Conservation Office biologist Mike Stahl provides information to the public at the 20th Anniversary of Southern Illinois Hunting and Fishing Days.



-USFWS

Genoa NFH staff shows a presentation to a group of students on the wall of the warm-water culture building.



-USFWS

Visitors to Iron River NFH's fourth annual open house were greeted with staff presentations.

- Culture 15,000 rainbow trout (8-10 inch) for recreational fishing at Fort McCoy and Tomah Veterans Administration Hospital; and Red Lake, Grand Portage, Lac Vieux Desert and Oneida Indian Reservations (WI, MN).
- Culture walleye for recreational fishing on the Upper Mississippi River National Wildlife & Fish Refuge, Crane Naval Base and Fort McCoy (IA, IN, MN, WI).
- Culture fish of various species for fish community objectives on Horicon NWR and Upper Mississippi River National Wildlife & Fish Refuge (IA, MN, WI).
- Culture trout for recreational fishing objectives at a Wisconsin Boy Scout camp (WI).
- Culture largemouth bass for recreational fishing objectives at Crab Orchard NWR and Crane Naval Base (IA, IN, WI).

– **Iron River National Fish Hatchery will:**

- Host National Fishing Day events and organize additional aquatic education and fishing clinics in partnership with the Northern Great Lakes Visitor Center, Whittlesey Creek NWR, and Ashland FRO (WI).

– **Jordan River National Fish Hatchery will:**

- Host children's fishing events and aquatic education programs in partnership with the Friends of the Jordan River NFH and others including Imaginature program, Village of Mancelona and Boy Scouts of America (MI).
- Raise trout at the hatchery with Imaginature program partners and Boy Scouts, and donate catchable size fish for stocking at Mancelona and East Jordan, Michigan "Opening Day of Trout Season" kids fishing events (MI).

– **Neosho National Fish Hatchery will:**

- Host an "Annual Fishing Outing" for the physically challenged and elderly in nursing homes in the area (MO).
- Culture 1,500 rainbow trout (9 inch) for the Iowa Veterans Administration Hospital (IA).
- Culture 1,000 rainbow trout (17 inch) for the Neosho NFH Annual Kids Fishing Clinic/Derby (MO).

– **Pendills Creek and Sullivan Creek National Fish Hatcheries will:**

- Host or co-host National Fishing Day events and organize additional aquatic education and fishing clinics in partnership with Seney NWR and the Soo Area Sportsmen's Club (MI).

– **La Crosse Fish Health Center will:**

- Co-host Fishing Day events at Tomah Veterans Administration Hospital (WI).
- Participate in Fishing Day events (e.g., Upper Mississippi River NW&FR and Genoa NFH (MN, WI)).

**Objective** - Provide support to States, Tribes, and other partners to identify and meet shared or complementary recreational fishing and aquatic education and outreach objectives.

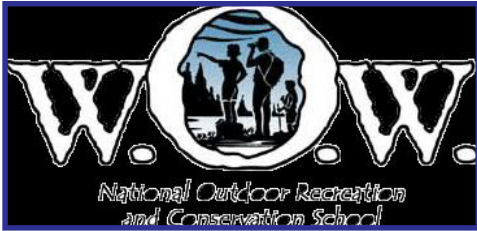
# Public Use

**Objective** – Recognize and promote the value and importance of recreational fishery objectives in implementation of other Service responsibilities.

## Our Commitment

- **All Field Stations will:**
  - Host station tours and participate in/or organize other public education events for local schools, environmental groups and interested organizations (IL, MI, MO, IA, WI).
- **Alpena National Fish and Wildlife Conservation Office will:**
  - Participate in the Great Lakes Lighthouse Festival and other public events to provide information on aquatic recreation opportunities and restoration activities of the Service (MI).
  - Will initiate program with a local elementary school to promote objectives of the national Children in Nature initiative (MI).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Work with the Northern Great Lakes Visitor Center partners to enhance educational displays and conduct public education events (WI).
- **Cartersville National Fish and Wildlife Conservation Office will:**
  - Participate in a National Fishing Day event in partnership with the Crab Orchard NWR (IL).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Assist in teaching Wonders of the Outdoor World recreational fishing education courses (MO).
  - Participate in state-wide aquatic stewardship education and outreach events (MO).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Work with the Oneida Tribe of Indians of Wisconsin and Wisconsin DNR to organize and hold an annual youth and elders fishing day (WI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Conduct environmental education activities and provide displays for various events, such as Earth Day and River Fest in La Crosse, Trempleau, and Lynxville, Wisconsin (WI).
- **Genoa National Fish Hatchery will:**
  - Collect and/or propagate northern pike (300,000 fry), sauger eggs (.5-2 million), walleye (12-20 million eggs; 100,000 two-inch fingerlings; 15,000 six-inch advanced fingerlings) for other state and tribal resource agencies' management efforts (IA, OK, NM, MN and WI).
- **Iron River National Fish Hatchery will:**
  - Work with the Northern Great Lakes Visitor Center (U.S. Forest Service) to enhance educational displays and conduct public education and fishing events (WI).
  - Work with State partners providing surplus trout when requested and where appropriate for stocking into public waters to enhance recreational fishing (WI, MN, MI).
  - Work with the *Friends of Iron River Hatchery* to help sponsor public education in conservation in the Iron River, Wisconsin, area (WI).
- **Jordan River National Fish Hatchery will:**
  - Participate in the Mancelona Bass Festival, the Northland Hunting and Fishing Expo, Trout and salmon tournaments and other public events to provide information on aquatic recreation opportunities and restoration activities of the Service (MI).
  - Investigate potential for providing catchable size trout for public outreach events with tribes on and off service lands (MI).
  - Work with the *Friends of Jordan River Hatchery* to help sponsor public education in conservation in the Otsego, Antrim and Charlevoix County areas (MI).
- **La Crosse Fish Health Center will:**
  - Provide annual fish health services to the mitigation program at Neosho NFH (MO).
- **Ludington and Marquette Biological Stations will:**
  - Participate in the Great Lakes Lighthouse Festival and other public events to provide information on aquatic recreation opportunities and restoration activities of the Service (MI).

## Public Use



- **Neosho National Fish Hatchery will:**
  - Host an Annual Open House to educate the public about the hatchery, the Service and the natural resources of Missouri (MO).
- **Pendills Creek and Sullivan Creek National Fish Hatcheries will:**
  - Participate in the SOO Area Home Show, SOO Locks Festival, Snowmobile Hatchery Open House and Summer Hatchery Open House Events, Brimley Fourth Of July Parade and other public events to provide information on aquatic recreation opportunities and restoration activities of the Service (MI).
  - Continue to work with the *Friends of Pendills Creek Hatchery* to help sponsor public education in conservation in the Brimley, Michigan, area (MI).



-USFWS

This youngster is certainly happy with his catch at the 5th annual Kids Fish Day at the Genoa National Fish Hatchery.



-GLFC

Volunteer Barry Matthews explains about the sea lamprey invasion in the Great Lakes. The presentation was given aboard the educational schooner *Inland Seas*.

### *Take Me Fishing Campaign*



-photos courtesy of the *Take Me Fishing Campaign*

The Fish and Wildlife Service supports the national campaign to increase participation in recreational angling and boating. The Recreational Boating and Fishing Foundation sponsors the *Take Me Fishing* advertising campaign and highlights National Boating and Fishing Week events (<http://www.rbff.org/>).

# Public Use

## Mitigation Fisheries



-USFWS  
The crew at the Neosho NFH load rainbow trout onto a Missouri Department of Conservation distribution truck for mitigation stocking into Lake Taneycomo.

**Mitigation Fisheries Goal:** The Federal government meets its responsibilities to mitigate for the impacts of federal water projects, including restoring habitat and/or providing fish and associated technical support to compensate for lost fishing opportunities.

*Our primary focus is on meeting our mitigation responsibilities associated with Lake Taneycomo (Table Rock Dam), Missouri.*

**Objective** – Identify the mitigation responsibilities of Federal agencies related to water projects.

**Objective** - Meet the Service’s responsibilities for mitigating fisheries.

**Objective** – Achieve full cost recovery from water project sponsors.

### Our Commitment

- **Neosho National Fish Hatchery will:**
  - Culture 225,000 rainbow trout (nine to ten inches) to meet the Federal mitigation responsibilities for the Federally funded water project at Lake Taneycomo (MO).
  - Meet the mitigation production target (MO). (**FY07 Department of the Interior Performance Measure**).
- **La Crosse Fish Health Center will:**
  - Provide annual fish health services to the mitigation program at Neosho NFH (MO).



-USFWS photo by Rick Nelson  
Fish health inspection set-up for rainbow trout at the Neosho NFH.



-USFWS photo by George Gentry



**Historic photo of the Neosho NFH. Neosho NFH was built in 1888 but was renovated in 1961 to produce rainbow trout.**

Neosho NFH, one of the oldest hatcheries still operating, was retrofitted in 1961 to raise rainbow trout to help compensate for the impacts of Federal dams built on the White River in Missouri. Today, Lake Taneycomo is one of the most popular trout fishing locations in the state.





# Cooperation with Native Americans

**Native American Goal:** Assistance is provided to Tribes that results in the management, protection, and conservation of their treaty-reserved or statutorily defined trust natural resources, which helps Tribes develop their own capabilities.

*Our primary focus is on respecting and promoting Tribal self-government, self-determination, and sovereignty of Federally recognized Tribes relating to fish and wildlife resource, as defined by the Service's Native American Policy.*

**Objective** - Provide technical assistance to Tribes.

**Objective** – Identify sources of funds to enhance Tribal resource management.

**Objective** – Recognize and promote the Service's distinct obligations toward Tribes within the Fisheries Program.

## Our Commitment

### – Regional Office will:

- Work with partners through the Great Lakes Fish and Wildlife Restoration Proposal Review Committee to identify and fund fish and wildlife restoration activities led by tribal governments through the Great Lakes Fish and Wildlife Restoration Act (MI, MN, NY, WI).
- Support enhancement of capabilities of tribal natural resource departments through functions of the Native American Fish and Wildlife Society (MI, MN, WI).
- Support enhancement of tribal natural resource department capabilities and conservation programs through the Tribal Wildlife and Tribal Land Owner Incentive grant programs (MI, MN, WI, IA).
- Develop policy, briefings and positions to address 1836 Treaty fishery issues raised by tribal parties to the Executive Council or through the dispute resolution process of Consent Decree (MI).

### – Alpena National Fish and Wildlife Conservation Office will:

- Provide technical assistance to tribes in Michigan according to Federal trust responsibilities, reserved rights, tribal management authority and Regional tribal liaison assignments (MI).
- Provide technical assistance to Chippewa Ottawa Resource Authority for walleye recruitment surveys in the St. Marys River (MI).
- Participate with the Technical Fisheries Committee, Modeling Subcommittee and Executive Council, under the August 7, 2000, U.S. District Court Consent Decree, generating annual harvest limits for tribal fisheries in 1836 Treaty waters (MI).
- Process coded-wire tags from lake trout captured in tribal commercial, subsistence, and assessment to recover data for lake trout rehabilitation in 1836 Treaty waters of Lake Huron (MI).

### – Ashland National Fish and Wildlife Conservation Office will:

- Provide technical assistance to tribes in Minnesota, Wisconsin and Michigan according to Federal trust responsibilities, reserved rights, tribal management authority and Regional tribal liaison assignments (MI, MN, WI).
- Provide technical assistance to the Red Lake Band in monitoring the status of forage and wall-eye populations in Red Lake (MN).
- Provide technical assistance to the parties to the 1836 Treaty Waters Consent Decree by aging lake trout captured in assessment fisheries (MI).
- Provide technical assistance to the Keweenaw Bay Indian Community to collect and transfer largemouth bass for a kids fishing day (MI).
- Provide technical assistance to the Bad River Band in assessing lake sturgeon in the Bad River (WI).
- Coordinate and publish the Midwest Tribal Aquaculture Network newsletter (MI, MN, WI).
- Assist the Region 3 Native American Program Coordinator in administering the Tribal Wildlife Grants Program and the Tribal Landowner Incentive Grants Program (MN, MI, WI).

## Cooperation with Native Americans



-USFWS

This lake sturgeon was originally stocked as a 6 inch fingerling into White Earth Lake.



-USFWS

A Menominee tribal biologist and a student from the tribal college proudly display some young lake sturgeon collected in a fishery survey of Legend Lake on the Menominee Reservation.



-USFWS

Incubation trays are prepared for shipping lake trout fry from the Iron River National Fish Hatchery to the Keweenaw Bay Indian Community Tribal Fish Hatchery.

- Coordinate Region 3 Partners for Fish and Wildlife program activities with the Bureau of Indian Affairs Circle of Flight program (MI, MN, WI).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to tribes in Wisconsin and Michigan (in the Lake Michigan watershed) according to Federal trust responsibilities, reserved rights, tribal management authority and Regional tribal liaison assignments (MI, WI).
  - Participate with the Technical Fisheries Committee, Modeling Subcommittee, and Executive Council, under the August 7, 2000, U.S. District Court Consent Decree, generating annual harvest limits for tribal fisheries in 1836 Treaty waters (MI).
  - Process coded-wire tags from lake trout captured in tribal commercial, subsistence, and assessment to recover data beneficial to lake trout rehabilitation in 1836 Treaty waters of Lake Michigan (MI).
  - Provide technical assistance to the Oneida Tribe of Indians of Wisconsin in assessing the fisheries of Quarry Lake and implementing habitat restoration in Trout Creek (WI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to tribes in Wisconsin and Minnesota according to Federal trust responsibilities, reserved rights, tribal management authority and Regional tribal liaison assignments (MN, WI).
  - Continue efforts to restore lake sturgeon to the White Earth and Menominee Indian Reservations and evaluate stocking success (MN, WI).
  - Harvest walleye at Rydell NWR for stocking on the White Earth Indian Reservation if there are excess fish (MN).
- **Ludington and Marquette Biological Stations will:**
  - Work cooperatively with the Great Lakes Indian Fish and Wildlife Commission, Chippewa Ottawa Resource Authority, Bad River Band, Red Cliff Band, Grand Traverse Bay Band and Little Traverse Bay Band to implement sea lamprey control activities (MI, WI).
- **Iron River National Fish Hatchery will:**
  - Consult regularly with tribal partners to support management objectives for restoration of lake trout and coaster brook (MI, MN, WI).
  - Work cooperatively with the Red Cliff Band to provide technical support for brook trout propagation programs and rehabilitation plans in Lake Superior (WI).
  - Work cooperatively with the Keweenaw Bay Indian Community to provide technical support for the Jumbo River

## Cooperation with Native Americans

brook trout, lake trout and coaster brook trout rehabilitation programs (MI).

- Work cooperatively with the Grand Portage Indian Community to provide technical support for hatchery operations and coaster brook trout rehabilitation programs (MN).

**Jordan River National Fish Hatchery will:**

- Provide technical assistance to the Little Traverse Bay Band in the development of a collaborative lake trout propagation program (MI).
- Provide technical assistance to the Chippewa Ottawa Resource Authority Nunn's Creek Fish Hatchery in enhancing tribal propagation programs (MI).

– **Pendills Creek National Fish Hatchery will:**

- Work with the Bay Mills Indian Community, Sault Ste. Marie Band and the Chippewa Ottawa Resource Authority to provide technical assistance in fish propagation and develop cooperative natural resource programs (MI).

– **La Crosse Fish Health Center will:**

- Provide technical assistance by hosting workshops, conferences, training opportunities, and fish health services for Tribal governments (MI, MN, WI).

**Objective** - Provide fish for Tribal resource management.

### Our Commitment

– **Genoa National Fish Hatchery will:**

- Culture 600 lake sturgeon yearlings on alternate years for stocking under an interagency restoration program for the Menominee Indian Reservation (WI).
- Culture 13,000 Rainy River strain lake sturgeon for stocking under interagency restoration plans for White Earth Indian Reservation and the Red River of the North (MN).
- Culture 10,000 Rainy River strain lake sturgeon for stocking under interagency restoration plans for the Red Lake Indian Reservation and the Red River of the North (MN).
- Culture 600 brook trout (10 inches) for stocking under interagency restoration programs at the Red Lake Indian Reservation (MN).
- Culture six-inch walleye fingerlings for stocking under interagency restoration programs at the Menominee, Stockbridge Munsee, Red Lake and White Earth Indian Reservations (MN, WI).
- Culture bluegills, brook trout, largemouth bass, rainbow trout, and walleye, as requested, for recreational fishing on Tribal lands (MI, MN, WI).
- Culture 2,000 (8 inch) brook trout yearlings for First County Potawatomi Tribe (WI).

– **Iron River National Fish Hatchery will:**

- Work with Tribal partners providing surplus trout when requested and where appropriate for stocking to enhance recreational fishing opportunities (WI, MN, MI).
- Enhance programs and facilities to produce additional lake trout above current goal of 1.2 million yearlings to help meet requirements of the August 7, 2000, Consent Decree (MI,WI).

– **Jordan River National Fish Hatchery will:**

- Meet current goal of 1.85 million yearlings to help meet requirements of the August 7, 2000, Consent Decree (MI).
- Investigate opportunities for hatchery to rear and provide fish for tribal management commitments and goals.

– **Pendills Creek National Fish Hatchery will:**

- Enhance programs and existing facilities to produce additional lake trout above the current goal of 900,000 yearlings and 100,000 fingerlings to help meet the requirements of the August 7, 2000, Consent Decree (MI).

– **La Crosse Fish Health Center will:**

- Conduct fish health assessments as part of interagency lake sturgeon restoration efforts on the Menominee Indian Reservation and the White Earth Indian Reservation (MN, WI).

## Coordination with Tribal Governments

The area of the United States encompassed by the Midwest Region of the U. S. Fish and Wildlife Service is home to 36 Federally recognized tribes, bands, and communities, and 3 intertribal organizations. The fish, wildlife and natural resource interests of Native Americans in our Region cover large areas included under the Treaties of 1836, 1837, 1842 and 1854. These lands and waters contain a great diversity of plant and animal life managed under authorities of tribal governments and states.

The Federal Government, Department of Interior, and Fish and Wildlife Service, have trust responsibilities to assist Native Americans in protecting, conserving and utilizing their reserved, treaty guaranteed, or statutorily identified trust assets. The Service adopted a Native American Policy in 1994 with the express purpose to articulate the general principles that will guide the service's government-to-government relationship to Native American governments in the conservation of fish and wildlife resources.

For the Service's Region 3 Fisheries Program, the most important aspects of fulfilling trust responsibilities to tribes are to provide consultation, technical assistance, cooperative partnerships and training opportunities to Native American fish and wildlife professionals, consistent with the principles of tribal self-determination and self-governance.

Effective and efficient coordination with tribal natural resource programs is therefore one of our most important goals. We will hold regular coordination meetings with tribes and continue the more frequent communication that occurs between tribes, our National Fish and Wildlife Conservation Offices, and National Fish Hatcheries, in planning and implementing conservation activities.

In order to establish the most direct and efficient lines of communication between tribes and the Service's Fishery Program in this Region, we have assigned each of our National Fish and Wildlife Conservation Offices with the lead responsibility for supporting the needs of several recognized Native American groups in the Great Lakes – Big Rivers Region, as outlined here.



*-USFWS photo by Aaron Woldt*  
**Staff from the Alpena National Fish and Wildlife Conservation Office set a gill net as part of the fishery independent lake whitefish survey in Northern Lake Huron.**

### **The Alpena NFWCO is responsible for working with:**

Chippewa Ottawa Resource Authority

Bay Mills Indian Community

Sault Ste. Marie Tribe of Chippewa Indians

Saginaw Chippewa Indian Tribe of Michigan

Match-E-Be-Nash-She-Wish Band of Potawatomi Indians of Michigan

Pokagon Band of Potawatomi Indians

Nottawaseppi Huron Band of Potawatomi

## Coordination with Tribal Governments



-USFWS  
The Red Cliff Natural Resources Department staff are encouraged with their coaster brook trout stocking program, where assessments indicate that many mature fish are present in the population.



-USFWS  
Walleye sampling in Northern Wisconsin is a critical component to estimate adult populations, determine recruitment, and establish harvest levels.



-USFWS  
Biologists from the White Earth Department of Natural Resources and La Crosse National Fish and Wildlife Conservation Office carefully remove a young lake sturgeon from a net, evidence of a successful stocking project on White Earth Lake.

### The Ashland NFWCO is responsible for working with:

Great Lakes Indian Fish and Wildlife Commission  
1854 Authority

Bois Forte (Nett Lake) Lake Superior Band of Chippewa Indians  
Fond du Lac (Lake Superior) Band of Chippewa Indians  
Grand Portage (Lake Superior) Band of Chippewa Indians  
Mille Lacs Band of Ojibwe  
Red Lake Band of Chippewa Indians  
Leech Lake Band of Ojibwe  
Keweenaw Bay Indian Community  
Lac Vieux Desert Band of Lake Superior Chippewa Indians  
Bad River Band of Lake Superior Tribe of Chippewa Indians  
Lac Courte Oreilles Band  
Lac du Flambeau Band of Lake Superior Chippewa Indians  
Red Cliff Band of Lake Superior Chippewa Indians  
Sokaogon Chippewa (Mole Lake) Community of Wisconsin  
St. Croix Chippewa Indians of Wisconsin

### The Green Bay NFWCO is responsible for working with:

Oneida Tribe of Indians of Wisconsin  
Mohican Nation Stockbridge-Munsee Band  
Hannahville Indian Community  
Forest County Potawatomi Community  
Grand Traverse Bay Band of Ottawa and Chippewa Indians  
Little Traverse Bay Bands of Odawa Indians  
Little River Band of Ottawa Indians

### The LaCrosse NFWCO is responsible for working with:

White Earth Band of Chippewa  
Menominee Indian Tribe of Wisconsin  
Shakopee Mdewakanton Sioux Community  
Upper Sioux Community of Minnesota  
Lower Sioux Indian Community in Minnesota  
Prairie Island Indian Community  
Sac and Fox Tribe of the Mississippi in Iowa  
Stockbridge Munsee Community  
Ho-Chunk Nation



# Leadership in Science and Technology

**Leadership in Science and Technology Goal:** Science developed and used by Service employees for aquatic resource restoration and management is state-of-the-art, scientifically sound and legally defensible. Technological advances in fisheries science developed by Service employees are available to partners.

*Our primary focus is on developing, applying, and disseminating state-of-the-art science and technology to conserve and manage aquatic resources.*

**Objective** - Develop and share applied aquatic scientific and technologic tools with partners.

## Our Commitment

### – Regional Office will:

- Work with partners through the Great Lakes Fish and Wildlife Restoration Proposal Review Committee to identify and fund state-of-the-art science to enhance conservation of Great Lakes fish and wildlife resources through the Great Lakes Fish and Wildlife Restoration Act (IL, IN, MI, MN, NY, OH, PA, WI).
- Work with other Service programs to identify research priorities for U.S. Geological Survey under the Science Support Program (IL, IN, MI, MN, IA, OH, MO, WI).
- Work with partners and stakeholders to establish an Aquatic Resource Technology Center, enhancing science capabilities in the Region (IL, IN, MI, MN, IA, OH, MO, WI) .

### – Alpena National Fish and Wildlife Conservation Office will:

- Investigate the use of mass marking technology for use in conducting studies of hatchery lake trout life history in Lake Huron (MI).
- Work with other Great Lakes Fisheries offices to coordinate and schedule assessment activities utilizing the capabilities of the *M/V Spencer F. Baird* (MI,WI).

### – Ashland National Fish and Wildlife Conservation Office will:

- Develop and transfer expertise in state-of-the-art techniques in riparian and hydrology restoration and analysis for fish habitat (MI, MN, WI).

### – Columbia National Fish and Wildlife Conservation Office will:

- Work with the Missouri River basin partners to determine the highest priority needs for research on the Missouri River, specifically related to endangered pallid sturgeon (IA, MO).
- Develop large river trawling technology and techniques for application on the Missouri River (IA, MO).
- Assist the U.S. Geological Survey and Missouri Department of Conservation with development of a stream classification system based on Instream Flow methodology for Missouri streams (MO).
- Assist in analysis and reporting of a pallid sturgeon needs assessment workshop (MO, NE).
- Provide support to the U.S. Geological Survey and Southern Illinois University to develop single nucleotide polymorphism markers for standardized identification of pallid and shovelnose sturgeon larvae (MO, IA, NE, KS).

### – Green Bay National Fish and Wildlife Conservation Office will:

- Initiate implementation of a Mass Marking program to tag all of the 30 million salmonids stocked into the Great lakes (IL, IN, MI, WI, MN, NY, OH, PA).
- Work cooperatively with the Wisconsin DNR to develop population models for lake whitefish and yellow perch in Lake Michigan and lake trout in Lake Superior (WI).

### – La Crosse National Fish and Wildlife Conservation Office will:

- Continue work with the U.S. Geological Survey to develop laboratory methods to define life history characteristics and for propagating the endangered winged mapleleaf mussel (MN, WI).

### – Ludington and Marquette Biological Stations will:

- Analyze and implement results of the larval assessment and sterile male release technique peer reviews as part of sea lamprey control operations (IL, IN, MI, MN, NY, OH, PA, WI).

## Leadership in Science and Technology



-USFWS by David Hendrix

The new pallid sturgeon culture building at the Neosho National Fish Hatchery nears completion in this photo. Culture tanks are one of the next additions to the building.



The relative size of a coded-wire tag is apparent when placed on a finger-tip (above). A magnified image can be viewed below.



-USFWS photos

- Participate in the development of experimental pheromone release technique as an alternative sea lamprey control measure (IL, IN, MI, MN, NY, OH, PA, WI).
  - Work in partnership with the Great Lakes Fishery Commission, US Geological Survey, and sea lamprey program researchers to conduct field trials for the use of migratory and reproductive pheromones as alternative means for sea lamprey control (IL, IN, MI, MN, NY, PA, OH, WI).
- **Genoa National Fish Hatchery will:**
- Culture largemouth bass, northern pike, rainbow trout, smallmouth bass, walleye, and yellow perch and other fish and freshwater mussel species as requested for USGS and university research (WI).
  - Continue to assist in ongoing Science Support Program project with Upper Midwest Environmental Science Center in studies to eliminate bacterial kidney disease in captive populations of coaster brook trout and lake trout using the antibiotic Baytril (WI).
  - Perform wild fish collection tasks/trials necessary to determine the fish host/reproductive biology of the sheepsnose mussel, a candidate species on the Endangered Species list (WI, MN, IA).
  - Continue to work with USGS to determine the effects of a new zebra mussel control on native mussel populations (WI).
  - Continue investigations to refine methods for the large scale production of the endangered Higgins' eye pearl mussel, and endangered winged mapleleaf mussel (WI, MN, IA).
- **Iron River National Fish Hatchery will:**
- Continue to investigate the use of mass marking technology for use in conducting studies of hatchery lake trout life history in Lake Michigan and Lake Huron (IL, IN, MI, WI).
  - Continue to investigate the use of hydrogen peroxide as an alternative to formaldehyde for control of fungus on eggs and fish.
  - Continue to investigate the use of moist-air egg incubation technology to facilitate delaying egg maturation and reduce or eliminate use of chemicals for control of fungus on developing eggs.
- **Jordan River National Fish Hatchery will:**
- Provide technical leadership in the operation of the *M/V Spencer F. Baird* during spring 2008 stocking and assessment activities to enhance lake trout rehabilitation in Lake Huron and Lake Michigan (IL, IN, MI, WI).
  - Continue to assist with the use of mass marking technology for use in conducting studies of hatchery lake trout life history in Lake Michigan and Lake Huron (IL, IN, MI, WI).



## Leadership in Science and Technology

- Develop new techniques and/or evaluate potential improvements to culture techniques and hatchery operations (MI).
- Report and/or publish results and analysis of scientific evaluations for use by internal and external fisheries professionals (IL, IN, IA, OH, MI, MN, MO, WI).
- **Neosho National Fish Hatchery will:**
  - Experiment with live and dry diets for pallid sturgeon culture as part of the Pallid Sturgeon Recovery effort (MO, KS, IA, NE).
- **Pendills Creek National Fish Hatchery will:**
  - Continue to investigate the use of mass marking technology for use in conducting studies of hatchery lake trout life history in Lake Michigan and Lake Huron (IL, IN, MI, WI).
- **La Crosse Fish Health Center will:**
  - Teach a fish health management short course in Region 3 (IL, IN, IA, OH, MI, MN, MO, WI).
  - Work with research labs to field test new procedures and techniques (IL, IN, IA, OH, MI, MN, MO, WI).
  - Continue to refine the Service's Fish Health Policies and Guidelines (IL, IN, IA, OH, MI, MN, MO, WI).
- **Marquette and Ludington Biological Stations will:**
  - Work in partnership with the Great Lakes Fishery Commission, USGS, and sea lamprey program researchers to conduct field trials for the use of migratory and reproductive pheromones as alternative means for sea lamprey control (IL, IN, MI, MN, NY, PA, OH, WI).

**Objective** - Utilize appropriate scientific and technologic tools in formulating and executing fishery management plans and policies.

### Our Commitment

- **Alpena National Fish and Wildlife Conservation Office will:**
  - Participate in the development and use of Geographic Information Systems capability to support aquatic habitat conservation activities for Lake Huron and Lake Erie (MI, OH).
  - Contribute to lake-wide assessment plans and fish community and environmental objectives for lakes Huron and Erie, through the Great Lakes Fishery Commission (MI, OH).
  - Evaluate and define genetic characteristics of lake sturgeon and contribute to restoration planning and workshops on these stocks (MI, OH).
  - Conduct statistical catch-at-age modeling of lake trout and lake whitefish populations in Northern Lake Huron to produce safe harvest limits for state recreational and tribal commercial fisheries (MI).
  - Provide leadership to USGS and the Lake Huron Technical Committee for lakewide burbot aging to assist in efforts to quantify age and growth of Lake Huron populations (MI).
  - Increase involvement in the Michigan Stream Team to develop regional curves for improved outcomes of watershed restoration efforts in Michigan (MI).
  - Update and continue management of the Great Lakes Lake Sturgeon Tag Identification Database (housed on the Great Lakes Fishery Commission website) (MI, WI, MN, IL, IN).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Contribute to lake-wide assessment plans and fish community objectives for Lake Superior through the Great Lakes Fishery Commission (MI, MN, WI).
  - Contribute to interagency efforts to evaluate and define genetic characteristics of migratory Lake Superior brook trout and to restoration planning and workshops on these stocks (MI, MN, WI).
  - Contribute to interagency efforts to evaluate and define genetic characteristics of lake sturgeon and restoration planning and workshops on these stocks (MI, MN, WI).

## Leadership in Science and Technology



-USFWS  
Columbia Fishery Resources Office crew samples the Missouri River fish community with a stern trawling boat.



-USFWS photo by Brett Witte  
Columbia National Fish and Wildlife Conservation Office technician Emily Kunz applies a tissue adhesive (Nexaband S/C) to an incision on the belly of a shovelnose sturgeon.



-USFWS/Jeff Finley  
Displayed is a net-full of native river redhorse. These fish will be used in a snail control study in aquaculture ponds as an alternative to using non-native fish such as black carp.

- **Columbia National Fish and Wildlife Conservation Office will:**
  - Manage and analyze data in the Mississippi Interstate Cooperative Resource Association Paddlefish Stock Assessment Database to help develop inter-jurisdictional management plans (IL, IN, IA, MN, MO, OH, WI).
  - Evaluate the effectiveness of a push trawl for sampling shallow water habitats in the Missouri River (IA, KS, MO, NE).
  - Evaluate the effectiveness of standardized sampling gears for capturing big river fishes (IA, KS, MO, NE).
  - Evaluate wounding rates associated with checking gonad state of maturity for shovelnose sturgeon (IA, KS, MO, NE).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to the other Service's Great Lakes fisheries stations through the Great Lakes Fishery Analyst (IL, IN, MI, MN, NY, OH, PA, WI).
  - Provide technical leadership by chairing the Lake Michigan Lake Trout Task Group, Lake Sturgeon Task Group, and the Modeling Subcommittee (IL, IN, MI, WI).
  - Contribute to lake-wide assessment plans and fish community objectives for Lake Michigan through the Great Lakes Fishery Commission (IL, IN, MI, WI).
  - Evaluate and define genetic characteristics of lake sturgeon and contribute to restoration planning and workshops on these stocks (IL, IN, MI, WI).
- **Iron River National Fish Hatchery will:**
  - Refine fish culture and husbandry techniques in order to produce the highest quality lake trout and coaster brook trout possible (IL, IN, MI, MN, WI).
  - Develop methods to manipulate lake trout brood stock spawning cycles and incubation periods by delaying maturation and chilling eggs, to better meet production requirements (IL, IN, MI, NY, WI).
  - Work with University partners to initiate research projects relevant to lake trout and coaster brook trout restoration within the Great Lakes (IL, IN, MI, MN, WI).
  - Explore the potential for rearing non-traditional fish species (lake herring, coregonids) (IL, IN, MI, MN, WI).
- **Jordan River National Fish Hatchery will:**
  - Refine fish culture techniques and hatchery operations in order to produce the highest quality lake trout possible (MN, IL, IN, MI, WI).
  - Create Comprehensive Hatchery Management Plan Template for lake trout hatcheries in Region 3 (IL, IN, IA, OH, MI, MN, MO, WI).
  - Assist the Lake Trout Task Group in the preparation of a comprehensive lake trout rehabilitation plan for the Service's Great Lakes operations covering all aspects of propagation and stocking (IL, IN, MI, WI).

# Leadership in Science and Technology



-USFWS  
This juvenile lake sturgeon was sampled from the Peshtigo River, Wisconsin.



-USFWS  
Largemouth bass, a host fish for mussels, are involved in temperature trials for the Federally endangered Higgins' eye pearl mussel, to determine optimum temperatures for survival of the early life stage of this mussel species.

- **Neosho National Fish Hatchery will:**
  - Continue to refine density requirements for culturing pallid sturgeon (IA, KS, MO, NE).
  - Continue to refine diet requirements for pallid sturgeon production (IA, KS, MO, NE).
- **Pendills Creek National Fish Hatchery will:**
  - Refine fish culture and husbandry techniques in order to produce the highest quality lake trout possible (IL, IN, MI, WI).
- **Pendills Creek and Sullivan Creek National Fish Hatcheries will:**
  - Develop methodology to manipulate lake trout brood stock spawning cycles by delaying egg maturation and continue evaluation and monitoring of moist air chilling/incubation to better meet production requirements (IL, IN, MI, NY, WI).
- **La Crosse Fish Health Center will:**
  - Provide fish health services to states, tribes, other Federal agencies, and private aquaculturists during any fish health emergency (IL, IN, IA, OH, MI, MN, MO, WI).
  - Maintain a modern, operational laboratory able to conduct highly technical laboratory procedures (IL, IN, IA, OH, MI, MN, MO, WI).



-USFWS  
Eric Leis of the La Crosse Fish Health Center samples fish from Lake Erie to determine whether viral hemorrhagic septicemia can still be detected in the lake.



-USFWS photo by Wayne Talo  
A pectoral fin is removed from a lake trout yearling. Hatchery-reared fish are marked prior to stocking into the Great Lakes.

## National Fish Habitat Action Plan

The [National Fish Habitat Action Plan](#) is an unprecedented attempt to address an unseen crisis for fish nationwide: loss and degradation of their watery homes. The plan was born 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 need for a nationally focused fisheries conservation effort was validated by fisheries experts attending a series of regional meetings held by the Council - they were nearly unanimous in their support for the plan. In 2004 the International Association of Fish and Wildlife Agencies, which represents all state wildlife agencies, voted to lead the plan. The Fish and Wildlife Service and National Oceanic and Atmospheric Administration Fisheries are principal Federal partners.

The [Midwest Driftless Area Restoration Effort](#) is a geographically-focused, locally-driven, consensus-based effort to protect, restore, and enhance riparian and aquatic habitat throughout the Driftless Area. The Midwest Driftless Area, noted as a national treasure, is located in the heart of the Upper Mississippi River valley, encompassing a 24,000 square-mile area of southeast Minnesota, northeast Iowa, southwest Wisconsin, and northwest Illinois. The Midwest Driftless Area Restoration Effort includes a broad partnership of Federal, state, and local government, landowners, academic institutions, conservation organizations, sportsmen's groups, and other interested parties. This coalition of partners will work together to identify threats to brook trout and other aquatic species and seek potential solutions, prioritize watershed focus areas and projects, implement actions with measurable successes, build new partnerships and strengthen existing ones, leverage additional funds, and produce outreach and educational programs to raise public awareness and ensure future support.

*Aquatic resources in the United States are in decline, and habitat destruction is a principal culprit. Habitat alteration is a contributing factor to 75 percent of all fish extinctions during the past 75 years and 91 percent of fish listings under the Endangered Species Act.*

## National Fish Passage Program

**Through September 30, 2007, the Midwest Region Fisheries Program has initiated 69 projects. Through FY2007, 87 barriers have been removed and 660 stream miles reconnected. Projects currently in progress will remove 23 barriers and reconnect an additional 394 stream miles.**

Summary Table of USFWS Region 3 Fish Passage Program Accomplishments 1999 - 2007

	# of Barriers Removed/ In-Progress	# of Projects	# of Stream Miles Reconnected/ In-Progress	Fish Passage Program Funding	Partner Matching Funds and In-Kind Support	Total Project Costs	Number of Partners
<b>Iowa</b>	9	3	72.1	\$118,727	\$255,000	\$373,727	7
<b>Illinois</b>	5	3	172	\$207,387	\$851,442	\$1,058,829	32
<b>Michigan</b>	26	28	164	\$884,787	\$1,960,730	\$2,845,517	47
<b>Minnesota</b>	9	8	397.5	\$374,714	\$3,613,000	\$3,987,714	17
<b>Missouri</b>	6	7	59.4	\$337,153	\$539,690	\$876,843	14
<b>Ohio</b>	3	3	52	\$115,000	\$138,900	\$253,900	8
<b>Wisconsin</b>	52	17	137.7	\$455,932	\$699,748	\$1,155,680	30
<b>Totals</b>	<b>110</b>	<b>69</b>	<b>1054.7</b>	<b>\$2,493,700</b>	<b>\$8,058,510</b>	<b>\$10,552,210</b>	<b>155</b>

# Aquatic Habitat Conservation and Management



-USFWS/Heather Rawlings

Before (left) and after (right) restoration at the Robinson Road stream-crossing on the Maple River, Michigan. Five degraded culverts were replaced with two elliptical culverts which will provide uninhibited fish passage and reduce erosion and sedimentation.



-USFWS/Heather Rawlings

Dry weather conditions in Northern Michigan allowed wetland restoration projects to move forward without any weather delays; however, this project site in Montmorency County, Michigan, will have to wait until spring to fill.



-USFWS

The Kabasa Wetland Restoration Project consisted of four wetland restoration sites totaling five acres, and enhancement of 10 acres of upland grass waterfowl nesting cover through a deferred haying/grazing agreement.

Goal (Base Funding)		Regional Alperna Ashland Carter- Columbia Genoa Green Iron Jordan La La Neosho Pendills Sea																	
Performance Measures (Fisheries Strategic Plan v.11)		Fisheries/NFMCO		NFMCO		NFMCO		NFMCO		NFMCO		NFMCO		NFMCO		NFMCO		NFMCO	
Aquatic Habitat Conservation and Management		Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal	Goal
Number of acres re-opened to Fish Passage by FWMA		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number miles re-opened to Fish Passage By FWMA		58	49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number fish passage barriers removed or bypassed by FWMA		5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Number of habitat assessments completed FWMA		44	16	0	0	0	6	NA	NA	12	NA	NA	NA	NA	0	NA	NA	NA	NA
Number miles of instream habitat assessed by FWMA		120	0	37	0	49	NA	NA	32	NA	NA	NA	NA	2	NA	NA	NA	NA	NA
Number miles of instream restored by FWMA		5	0	2	0	0	NA	2	NA	NA	NA	NA	1	NA	NA	NA	NA	NA	NA
Number of fish populations of management concern with approved watershed mgmt. plans by FWMA		1	0	0	0	0	NA	1	NA	NA	NA	NA	0	NA	NA	NA	NA	NA	NA
Number of NEHS NPDES permits in compliance		4	NA	NA	NA	NA	0	NA	1	1	1	NA	NA	0	NA	NA	2	NA	NA

# Aquatic Habitat Conservation and Management

**Aquatic Habitat Conservation and Management Goal: America's streams, lakes, estuaries, and wetlands are functional ecosystems that support self-sustaining communities of fish and other aquatic resources.**

*Our primary focus is on collaborating with partners to conserve and restore habitats for sturgeon, trout, darters, and other native fish species.*

**Objective** - Facilitate management of aquatic habitats on national and regional scales.

## Our Commitment

### - Regional Office will:

- Work with partners through the Great Lakes Fish and Wildlife Restoration Proposal Review Committee to identify and fund aquatic habitat restoration proposals through the Great Lakes Fish and Wildlife Restoration Act (IL, IN, MI, MN, NY, OH, PA, WI).
- Work through the Habitat and Species Strategy Team under the Great Lakes Regional Collaboration to conserve and restore habitat for native fish and fisheries (IL, IN, MI, MN, NY, OH, PA, WI).
- Work with partners and stakeholders to support and develop the National Fisheries Habitat Action Plan (IL, IN, IA, MI, MN, MO, OH, WI).
- Work with partners and stakeholders to develop watershed-scale Fish Passage program initiatives (IL, IN, IA, MI, MN, MO, OH, WI).

### - Alpena National Fish and Wildlife Conservation Office will:

- Employ a systematic aquatic habitat information and evaluation approach for use in prioritizing habitat restoration activities in the Lake Huron and Lake Erie watersheds, in coordination with the Michigan and Ohio DNR's and other partners (MI, OH).
- Work with partners to propose, implement, and monitor results of habitat restoration projects through the Service's Partners for Fish and Wildlife Program, Fish Passage Program and Coastal Program in Northern Michigan (MI).
- Lead the Service's implementation of the Partners for Fish and Wildlife Program habitat restoration projects in 20 counties of Michigan's Northern Lower Peninsula (MI).
- Work with the Michigan and Ohio DNR's and USGS to identify and describe juvenile rearing and adult spawning habitat for lake sturgeon in the Saginaw River, St. Clair River, Detroit River and Maumee River (MI, OH).
- Work with USGS, Michigan DNR and other partners to develop a National Fish Habitat joint venture focusing on the Huron-Erie Corridor (MI, OH).



-USFWS

**Modifications to a culvert on Trout Brook in Ashland County, Wisconsin, included raising the riffle area directly below the culvert to provide a minimum of six inches of water on the apron of the culvert.**



-USFWS

**Brush bundles and other instream fish habitat structures were placed into Graveyard Creek to restore and enhance habitat. The site is on the Bad River Indian Reservation in Ashland County, Wisconsin.**

# Aquatic Habitat Conservation and Management

- Work with other Great Lakes NFWCO's in leading the development of a Great Lakes Partnership consistent with goals and objectives of the NFHAP (MI, MN, IL, IN, WI).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Employ a systematic aquatic habitat information and evaluation approach in prioritizing habitat restoration activities in the Lake Superior watershed, in coordination with the Michigan, Minnesota and Wisconsin DNR's, and other partners (MI, MN, WI).
  - Work with partners to develop, prioritize and monitor habitat improvement projects through the Service's Partners for Fish and Wildlife Program, Great Lakes Coastal Program, and Fish Passage Program, and the Superior Coastal Initiative under the North American Wetlands Conservation Act (MI, MN, WI).
  - Work with the appropriate agencies and organizations to help with the restoration of the Bad River Watershed and the five priority Bayfield Peninsula streams: Whittlesey Creek, Sioux River, Raspberry River, Bark River and Cranberry River (WI).
  - Co-lead the Service's implementation of Coastal Program supported aquatic habitat conservation and restoration activities in the Upper Great Lakes with East Lansing Field Office (IL, IN, MI, MN, WI).
  - Assist Federal resource managers with aquatic habitat management on National Forests and National Parks (MN, MI, WI).
  - Participate in the Lake Superior Binational Program through the Lake Superior LaMP Terrestrial and Aquatic Committees and the Lake Superior Work Group, and advocate for aquatic and terrestrial habitat restoration projects (MN, MI, WI).
  - Work with the Minnesota, Michigan and Wisconsin DNR's, to develop a National Fish Habitat joint venture focusing on Lake Superior tributary habitat restoration (MN, MI, WI).
  - Work with the Minnesota and Wisconsin DNR's, St. Louis River Citizens Action Committee, and other partners involved in the Lower St. Louis River Habitat Plan (MN, WI).
- **Carterville National Fish and Wildlife Conservation Office will:**
  - Serve on interagency teams to develop, prioritize and monitor habitat improvement projects as part of the Upper Mississippi River Environmental Management Program (IL, MO).
  - Serve on interagency teams to develop, prioritize and monitor habitat improvement projects as part of the Navigation and Ecosystem Sustainability Program (IL, MO).
  - Work with the Region 3 Fisheries Program Fish Habitat Team to identify priority areas for aquatic habitat conservation and/or restoration in Region 3 (IA, IL, IN, MI, MN, MO, OH, WI).
  - Work with partners to form an Ohio River Basin Habitat Partnership that is officially recognized by the National Fish Habitat Action Plan and then begin identifying and implementing habitat conservation and restoration actions (IL, IN, OH).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Coordinate and evaluate Missouri River habitat projects with U.S. Army Corps of Engineers, DeSoto NWR, Big Muddy National Fish & Wildlife Refuge, Ft. Leavenworth Army Post and basin states (IA, KS, MO, NE).
  - Provide technical assistance for Missouri River habitat projects as part of the Missouri River Mitigation Project Team (IA, KS, MO, NE).
  - Monitor and assess fish communities in portions of the Missouri River to determine fish response to habitat modifications (MO).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Work with the Illinois, Indiana, Michigan and Wisconsin DNR's to employ a systematic approach to evaluate and prioritize aquatic habitat restoration activities in the Lake Michigan watershed (IL, IN, MI, WI).
  - Propose, implement and monitor the results of aquatic habitat improvement projects in the Lake Michigan watershed through the Service's Partners for Fish and Wildlife Program, Fish Passage

# Aquatic Habitat Conservation and Management



-USFWS

The Midwest Driftless Area is a 24,000 square mile region of Southeast Minnesota, Northeast Iowa, Western Wisconsin, and Northwest Illinois that was circumvented by the Wisconsin glacier. The area is circled in green on the above map.



-USFWS photo by Jennifer Johnson

This large catfish was sampled as part of the Mitigation Program 2006 which is intended to evaluate side channels, or chutes, on the lower Missouri River.

Program, and Coastal Program, working with the Illinois, Indiana, Michigan, and Wisconsin DNR's, and other partners (IL, IN, MI, WI).

- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Work with Service programs, states and other partners as part of the National Fish Habitat Initiative's Driftless Area Restoration Effort partnership to prioritize and develop aquatic habitat restoration projects in the Driftless Area (IL, IA, MN, WI).
  - Participate in planning ecosystem restoration projects implemented as part of the U.S. Army Corps of Engineers' Upper Mississippi River-Illinois Waterway System Navigation Study (IL, IA, MN, WI).
  - Serve on interagency teams to develop, prioritize and monitor habitat improvement projects constructed as part of the Upper Mississippi River Environmental Management Program (IL, IA, MN, WI).
  - Participate in planning and evaluation of fish passage improvements at locks and dams as part of the Upper Mississippi River Navigation Project (IL, IA, MN, WI).
  - Work with the appropriate agencies and organizations to help with the restoration of the Red River watershed (MN).
- **Iron River NFH will:**
  - Monitor the status of Schacte Creek and Middle Creek watersheds and take action as needed, in coordination with the Wisconsin DNR, to conserve aquatic habitat quality (WI).
  - Monitor the Orienta Falls site on the Iron River and continue to advise the Regional Office on the status of fish passage and actions needed to protect programs at Iron River NFH from impacts through feral fish in the basin (WI).
  - Work cooperatively with the Green Bay Ecological Services Office to protect National Fish Hatchery system interests and enhance habitat within the Iron River watershed (WI).
- **Jordan River NFH will:**
  - Participate actively on national and regional collaborative committees to promote wise use, long term planning and management of Great Lakes aquatic ecosystems (MI).
- **Marquette and Ludington Biological Stations will:**
  - Work with Service field stations in Fisheries and Ecological Services, and with our partners, to ensure that fish passage activities effectively resolve the need to pass priority species of native fish while continuing to provide barriers to sea lamprey spawning and nursery areas in Great Lakes tributaries (IL, IN, MI, MN, NY, PA, OH, WI).
- **Pendills Creek and Sullivan Creek NFH's will:**
  - Continue working with the U.S. Forest Service, Michigan Department of Environmental Quality and Michigan DNR to monitor the status of the Videans Creek, Pendills Creek and



# Aquatic Habitat Conservation and Management

Sullivan Creek watersheds and take action as needed to conserve aquatic habitat and water quality (MI).

- Continue working with the Hiawatha National Forest and the Michigan DNR to develop and implement a plan for population control of beaver in the Pendills Creek watershed, to reduce associated impacts to water quality (MI).

**Objective** - Expand the use of Fisheries program expertise to avoid, minimize, or mitigate impacts of habitat alteration on fish and other aquatic species.

## Our Commitment

- **Alpena National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to Thunder Bay Power and Michigan DNR to achieve compliance with Federal Energy Regulatory Commission license on the Thunder Bay River (MI).
  - Provide technical support to the East Lansing Field Office and the Reynoldsburg Field Office in reviewing permits, licenses, Federal projects and other actions proposed for the Lake Huron and Lake Erie basins (MI, OH).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Provide technical support to the East Lansing Field Office and the Twin Cities Field Office in reviewing permits, licenses, Federal projects and other actions proposed for the Lake Superior Basin (MI, MN, WI).
- **Cartersville National Fish and Wildlife Conservation Office will:**
  - Determine the effect of a Navigation and Ecosystem Sustainability Program habitat restoration project on fish populations in the Herculaneum reach of the Middle Mississippi River (IL, MO).
  - As part of a Navigation and Ecosystem Sustainability Program habitat restoration project, collect pre-project information on fish locations below Lock and Dam 22 and Mel Price Lock and Dam to aid in development and placement of fish passage structures through these blockages on the Upper Mississippi River (IL, MO).
  - Work with the Service's Ecological Services and NWR programs to monitor and evaluate aquatic habitat restoration efforts in the Illinois, Mississippi and Ohio rivers associated with U.S. Army Corps of Engineers activities (IL, IN, IA, MN, MO, OH, WI).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Implement aquatic habitat restoration project for Niangua darters in the Osage River watershed in Missouri (MO).
  - Complete surveys of low-water crossings within range of threatened Niangua darter to aid in development of watershed level fish passage plan (MO).
  - Remove fish passage barrier to Topeka shiner in Moniteau Creek watershed in Missouri (MO).
  - Remove fish passage barriers to flathead chubs in West Nishnabotna River watershed in Iowa (IA).
  - Assist the Army Corps of Engineers evaluate fish use of dike structures created in the Missouri River (IA, KS, MO, NE).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to the Lower Green Bay/Fox River Natural Resource Damage Assessment for restoration planning and implement aquatic habitat rehabilitation projects (WI).
  - Monitor the effectiveness of the fish barrier net at the Ludington Pumped Storage Hydroelectric plant and determine the annual fish damages as mitigation for the operation of the plant (MI).
  - Propose and implement aquatic habitat rehabilitation projects through the Great Lakes Fishery Trust (MI).
  - Provide technical assistance to the Green Bay Field Office to achieve fisheries habitat goals for Federal Energy Regulatory Commission licensed facilities in tributaries to Green Bay (MI, WI).

# Aquatic Habitat Conservation and Management



-USFWS photo by Jeff Finley  
Shoreline vegetation is inundated by floodwaters at the mouth of Overton Bottoms chute on the Missouri River.



-USFWS photo by Colby Wrasse  
Biologist Nate Caswell hands over a flathead catfish to Rick Echols. The fish was collected on the Mississippi River during gill netting as part of the Stone Dike Alteration Project.



-USFWS  
Coastal counties of the United States include the Great Lakes and comprise less than 25% of America's land area, but are home to more than 50% of our total population.

- Provide technical support to the Green Bay Field Office, East Lansing Field Office and Chicago Field Office in reviewing permits, licenses, Federal projects and other actions proposed for the Lake Michigan basin (IL, IN, MI, WI).
- **Jordan River National Fish Hatchery will:**
  - Assist in coordination, development and implementation of Fish Passage and habitat projects in Northwest Michigan, Lake Michigan Basin and in particular the Jordan River watershed (MI).
- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Provide fish passage technical assistance for the Federal Energy Regulatory Commission re-licensing of the Prairie du Sac dam (WI).
  - Implement aquatic habitat restoration projects for sturgeon in the Red River of the North watershed in Minnesota (IA, WI).
- **La Crosse Fish Health Center will:**
  - Work with the Service's NWR Program and other fisheries offices to help assess various water habitats on Service lands to address concerns of fish health and species identification (IL, IN, IA, OH, MI, MN, MO, WI).

**Objective** – Increase the quantity and improve the quality of aquatic and riparian habitat on Service lands.

## Our Commitment

- **Alpena National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to Shiawassee and Ottawa NWR's and the Detroit River International Wildlife Refuge to plan, design and implement aquatic habitat restoration projects (MI, OH).
- **Ashland National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to Whittlesey Creek and Rice Lake NWR's to plan, design and implement sport fishing and aquatic habitat restoration projects (MN, WI).
- **Carterville National Fish and Wildlife Conservation Office will:**
  - Conduct post-project biological monitoring to evaluate fisheries age structure response to the Swan Lake Habitat Rehabilitation and Enhancement Project at Two Rivers NWR (IL).
- **Columbia National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to the Big Muddy National Fish & Wildlife Refuge and DeSoto NWR to plan, design and implement aquatic habitat restoration projects (IA, MO).
- **Green Bay National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to Seney NWR to plan, design and implement projects to enhance brook trout habitat in the Upper Dregs River (MI).

# Aquatic Habitat Conservation and Management



-USFWS  
The effluent basin at the Jordan River National Fish Hatchery settles out waste solids from fish culture operations, minimizing the impact on the Jordan River.



-USFWS photo by Rob Simmonds  
Biologist Nate Caswell records data while technician Ray Wild measures a fish captured during pre-restoration sampling at the Harlow Island side channel site on the Middle Mississippi River, Missouri.



-USFWS/Heidi Keuler  
Bill Peterson and Youth Conservation Corps staff from the Necedah National Wildlife Refuge sample the fish populations present in Beaver Creek prior to aquatic habitat improvements. Populations will be sampled after project completion to determine the effectiveness of the improvements.

- **La Crosse National Fish and Wildlife Conservation Office will:**
  - Provide technical assistance to the Upper Mississippi River National Wildlife & Fish Refuge, and Minnesota Valley, Necedah, Horicon and Tamarac NWR's to plan, design and implement aquatic habitat restoration projects (MN, WI).
- **Iron River NFH will:**
  - Work with the Service's National Wildlife Refuge and Ecological Services Programs and other partners to manage 1,200 acres of Service land at the Iron River NFH (WI).
  - Assist Ashland FRO in implementing aquatic habitat evaluation and restoration projects at Whittlesey Creek NWR and within the Lake Superior watershed (MN, WI).
- **Jordan River NFH will:**
  - Coordinate with Friends Group, Imaginature program partners and others to identify projects on hatchery grounds that may enhance or rehabilitate aquatic and terrestrial habitats (MI).
- **Pendills Creek and Sullivan Creek NFHs will:**
  - Assist, if possible, Green Bay FRO in implementing aquatic habitat evaluation and restoration projects at Seney NWR (MI).
- **Neosho NFH will:**
  - Work with the Service's NWR and Ecological Services programs and other partners to manage 244 acres of Service land under management of the Neosho NFH (MO).



-USFWS photos  
A perched culvert (left) was replaced by a culvert which allows uninhibited fish passage on Little Whittlesey Creek that lies within the boundaries of the Whittlesey Creek National Wildlife Refuge.

# Workforce Management



-USFWS  
**Student employee Sara Marso prepares telemetry equipment to locate tagged catfish in the Missouri River to help determine fish movements.**



-USFWS  
**Volunteers net lake trout brood stock into a tub for spawning at the Iron River National Fish Hatchery.**

<i>Goal/Actual Accomplishment for FY 2007</i>		<i>Performance Measures (Fisheries Strategic Plan v. 11)</i>	
<b>Workforce Management</b>			
Number of volunteer participation hours are supporting Fisheries objectives NFI/FWMA (GPRRA)			
9500	850	150	250
1800	360	0	400
2500	40	450	1500
1200	0		

# Workforce Management

**Workforce Management Goal: Maintain and support an adequately-sized, strategically positioned workforce with state-of-the-art training, equipment, and technologies in their career fields.**

*Our primary focus is on recruiting, supporting, and positioning an effective and motivated workforce capable of meeting the expectations of employees and partners in fish and other aquatic resource conservation.*

**Objective** - Staff Fisheries program field stations at levels adequate to effectively meet the Service's goals and objectives in fish and other aquatic resource conservation.

**Objective** - Provide employees with opportunities to maintain competencies in the expanding knowledge and technologies needed to improve opportunities for professional achievement, advancement, and recognition.

**Objective** - Provide employees with access to facilities and equipment needed to effectively, efficiently, and safely perform their jobs.

## Our Commitment

- Ensure staffing levels are adequate to meet mission critical goals.
- Initiate recommendations from the Workforce Planning Team for the Fish and Wildlife Management Assistance Program.
- Identify core competencies required for our employees and work with the National Conservation Training Center to develop training opportunities for employees to meet competency levels.
- Ensure that supervisors maintain current Individual Development Plans for their employees and ensure that employees complete individual developmental activities.
- Identify and implement operational, structural, and geographic changes that will help maximize effectiveness and efficiency at field stations.
- Continue to enhance and develop the current volunteer program at the hatchery for the benefit the service, resources and the American people.
- **Iron River National Fish Hatchery will:**
  - Implement operational changes that will help maximize the effectiveness and efficiency of the fish marking program ensuring it meets critical management guidelines. Work cooperatively with its partners to meet fish marking needs throughout Region 3.



-USFWS

**Mark Brouder is the new project leader at the Ashland National Fish and Wildlife Conservation Office. He transferred from the Arizona Fish and Wildlife Conservation Office.**



-NCTC

**Fisheries Academy Class of 2007**



-Michelle Baumstark

**Lee Erickson of the Columbia Fish and Wildlife Conservation Office gives a presentation about Fish and Wildlife Service careers to a Gentry Middle School class in Columbia, Missouri.**

## List of Acronyms

ANS - Aquatic Nuisance Species or AIS - Aquatic Invasive Species  
Commission - Great Lakes Fishery Commission  
Consent Decree - U.S. District Court Consent Decree  
CORA - Chippewa Ottawa Resource Authority  
CORPS - U. S. Army Corps of Engineers  
DNR – Department of Natural Resources  
ESA – Endangered Species Act  
FERC – Federal Energy Regulatory Commission  
FHC - Fish Health Center  
FONS - Fishery Operational Needs System  
FRO - Fishery Resources Office  
GAO - Government Accounting Office  
GIS - Geographical Information System  
GLIFWC – Great Lakes Indian Fish and Wildlife Commission  
GLFC - Great Lakes Fishery Commission  
HACCP - Hazard Analysis and Critical Control Point  
MDC – Missouri Department of Conservation  
MICRA – Mississippi Interstate Cooperative Resource Association  
M/V - Motor Vessel  
NF&WR - National Fish and Wildlife Refuge  
NFH - National Fish Hatchery  
NRCS - Natural Resource Conservation Service  
NRDA – Natural Resources Damage Assessment  
NW&FR - National Wildlife and Fish Refuge  
NWR – National Wildlife Refuge  
NWRS - National Wildlife Refuge System  
PIT - Passive Integrated Transponder  
Region - Great Lakes-Big Rivers Region  
Service - U.S. Fish and Wildlife Service

## List of State Acronyms

IA – Iowa  
IL – Illinois  
IN – Indiana  
KS – Kansas  
MI – Michigan  
MN – Minnesota  
MO – Missouri  
NE – Nebraska  
NY – New York  
OH – Ohio  
PA – Pennsylvania  
SD – South Dakota  
WI – Wisconsin

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## Fisheries and Aquatic Resources Program Operational Plan - FY2008

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