



U.S. Fish & Wildlife Service

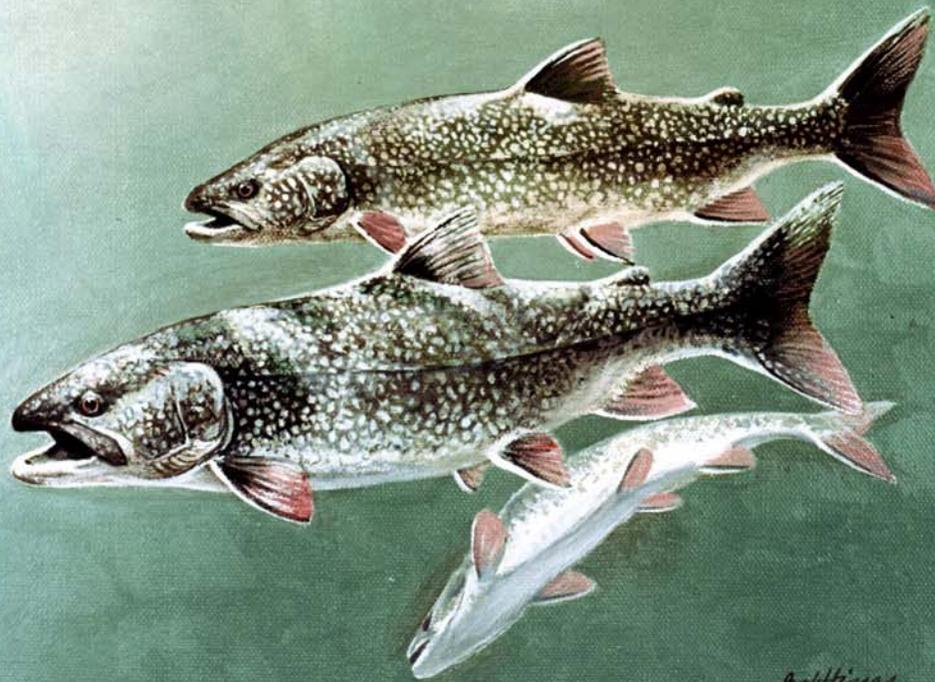
Great Lakes - Big Rivers Region

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

March 2003

Region 3

Fisheries Program Operational Plan Fiscal Years 2004 & 2005



Great Lakes - Big Rivers Region

Message from the Assistant Regional Director for Fisheries

The Fisheries Program in Region 3 (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 Region 3 Fisheries Program specific “Operational Plan” fashioned after the “Conserving America’s Fisheries Strategic Vision” developed in 2003. This plan captures what we intended to accomplish in FY 2004 and what we have committed to accomplish in FY 2005 arranged by focus area and station. A similar document will be produced annually in the future.

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.

Gerry Jackson

Assistant Regional Director
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 Great Lakes/Big Rivers Region (Region) Operational Plan is an extension of the Vision, describing more specifically the activities that the Regional Fisheries Program will implement in Fiscal Years 2004 and 2005. This operational plan will help us plan for the next five years to fulfill the goals and objectives identified in the Vision. 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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Great Lakes - Big Rivers Region Fisheries Field Offices

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.

Sea Lamprey Control Stations

Sea Lamprey Control Stations assess and control sea lamprey populations throughout the Great Lakes. The U.S. Department of State and Canadian Department of Fisheries and Oceans fund this program through the Great Lakes Fishery Commission.

Fishery Resources Offices

Fishery Resources Offices conduct assessments of fish populations to guide management decisions, perform key monitoring and control activities related to invasive, aquatic species; survey and evalu-

ate 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 inter-agency fisheries 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. In other Regions of the Service, FRO's are also referred to as Fish and Wildlife Management Assistance Offices.

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 throughout the region; 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.

Great Lakes - Big Rivers Region Fisheries Field Offices



Great Lakes - Big Rivers Regional Fisheries Offices

Regional Office, 1 Federal Drive, Fort Snelling, MN 55111-4056; 612/713-5111
Gerry Jackson (gerry_jackson@fws.gov)

Michigan

Alpena Fishery Resources Office
Federal Building; 145 Water Street
Alpena, MI 49707
Jerry McClain (jerry_mcclain@fws.gov)
989/356-3052

Jordan River National Fish Hatchery
6623 Turner Road
Elmira, MI 49730
Rick Westerhof (rick_westerhof@fws.gov)
231/584-2461

Ludington Biological Station
229 South Jebavy Drive
Ludington, MI 49431
Dennis Lavis (dennis_lavis@fws.gov)
231/845-6205

Marquette Biological Station
1924 Industrial Parkway
Marquette, MI 49855
Gary Klar (gerald_klar@fws.gov)
906/226-6571

Pendills Creek/Sullivan Creek
National Fish Hatchery
21990 West Trout Lane
Brimley, MI 49715
Curt Friez (curt_friez@fws.gov)
906/437-5231

Missouri

Columbia Fishery Resources Office
101 Park Deville Drive; Suite A
Columbia, MO 65203
Tracy Hill (tracy_hill@fws.gov)
573/234-2132

Neosho National Fish Hatchery
East Park Street
Neosho, MO 64850
David Hendrix (david_hendrix@fws.gov)
417/451-0554

Illinois

Carterville Fishery Resources Office
9053 Route 148, Suite A
Marion, Illinois 62959
Rob Simmonds (rob_simmonds@fws.gov)
618/997-6869

Wisconsin

Ashland Fishery Resources Office
2800 Lake Shore Drive East
Ashland, WI 54806
Mark Dryer (mark_dryer@fws.gov)
715/682-6185

Genoa National Fish Hatchery
S5689 State Road 35
Genoa, WI 54632-8836
Doug Aloisi (doug_aloisi@fws.gov)
608/689-2605

Green Bay Fishery Resources Office
2661 Scott Tower Drive
New Franklin, WI 54229
Mark Holey (mark_holey@fws.gov)
920/866-1717

Iron River National Fish Hatchery
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Iron River, WI 54847
Dale Bast (dale_bast@fws.gov)
715/372-8510

LaCrosse Fish Health Center
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Onalaska, WI 54650
Richard Nelson (rick_nelson@fws.gov)
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555 Lester Avenue
Onalaska, WI 54650
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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.

Partnerships and Accountability

Partnerships

Our 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.

Our Objective Strengthen government, Tribal, and non-governmental relationships in the Great Lakes-Big Rivers Region to promote collaborative conservation strategies for conserving 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, and maintain productive working relationships.
- Participate in meetings held by partners to broaden the Program's perspective and appreciation of the range of issues collectively faced by resource managers.
- Work with the Mississippi Interstate Cooperative Resources Association (MICRA) and the Great Lakes Fishery Commission to conserve native species.
- Work with various task forces and committees to restore aquatic resources in the Midwest.

– Jordan River and Iron River National Fish Hatcheries will:

- Develop a Friends Group to help foster interactions between the local communities and the Hatcheries (MI, WI). (FY05 and FY06 Department of the Interior Performance Measure).



-USFWS

Carterville FRO staff assisted the Ohio Division of Wildlife with a shovelnose sturgeon reintroduction project on the Scioto River.



-USFWS

Rob Elliott, Green Bay FRO, Tom Meronek, Wisconsin DNR, and Greg Bunker, Stockbridge-Munsee Indian Community Conservation Office examine an adult lake sturgeon captured during a joint fishery assessment.



-GLFC

Tribal members from the Red Cliff Tribe of Lake Superior Chippewa Indians assist sea lamprey control staff during the lampricide treatment of Red Cliff Creek in northern Wisconsin.

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, 10 tribes, the Province of Ontario, Federal agencies in the U.S. 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 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 Fisheries Program has funded nearly \$3 million in state and tribal projects to restore Great Lakes fishery resources. Projects focus on 32 fisheries restoration recommendations submitted in a 1995 report to Congress, as well as priorities of the Lake Committees, articulated in Fish Community Objectives for each of the Great Lakes.

Partnerships and Accountability



-USFWS

Since 2000, a variety of conservation measures have been implemented by the U.S. Army Corps of Engineers with assistance from the interagency Mussel Coordination Team to save the Federally endangered Higgins' eye pearly mussel from extinction.



-USFWS

Rare Ozark cavefish inhabit one of the springs that supply water to the Neosho NFH. Hatchery staff continue efforts to protect the area surrounding the spring and educate the public about this unique native fish.



-USFWS

Fish and Wildlife Service personnel apply lampricide on the St Marys River to areas with high densities of invasive sea lampreys. Over 200 acres of river bottom were treated in 2004. The St Marys River is the international boundary between the United States and Canada.

Accountability

Our 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.

Our Objectives

- Improve communication and accountability to States, Tribes, partners, and other stakeholders regarding plans, accomplishments, and commitments.
- Manage Fisheries Program activities and funding to maximize performance.
- Improve the transfer of information developed by the Fisheries Program to States, Tribes, partners, and other stakeholders.

Our Commitment

- The Fisheries Program will:

- Meet at least annually 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.
- Participate in Government Accounting Office (GAO) audits of the Service.
- Participate in audits of the Service's financial management records by KPMG, which is a private auditing firm.
- Participate in an independent performance evaluation conducted by the Sport Fishing and Boating Partnership Council.
- Communicate regularly with our partners and stakeholders through *Fish Lines*, a monthly account of performance highlights. (<http://midwest.fws.gov/Fisheries/library/fishlines.htm>)
- Maintain an informative website on the internet. (<http://midwest.fws.gov/Fisheries/>)

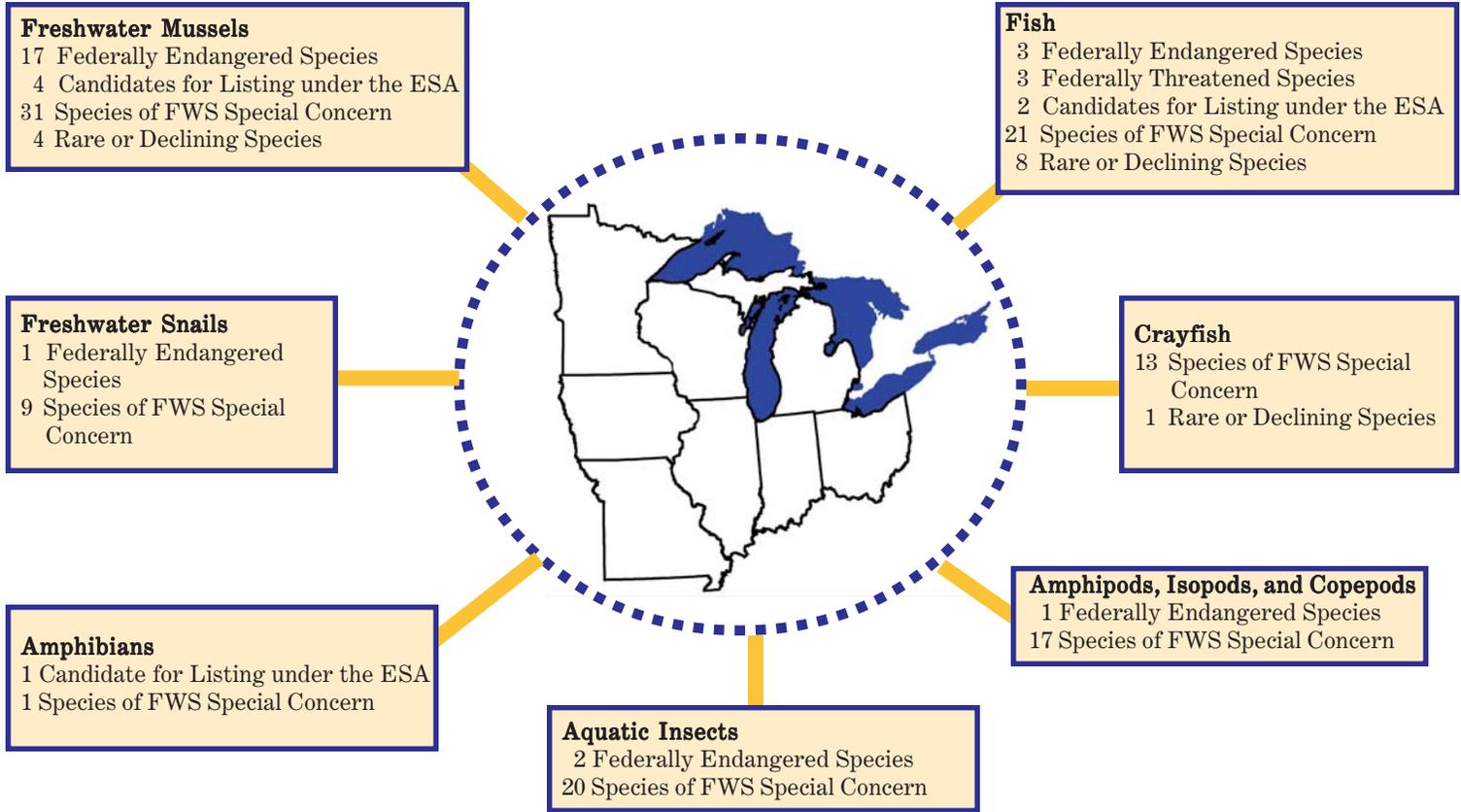
The U.S. General Accounting Office (GAO) released a report in April, 2003, describing 148 Federal and 51 state programs that fund environmental restoration activities in the Great Lakes Basin. Among the findings, the GAO report indicated that only eight of those Federal or state programs report outcome information. Of the eight programs, the GAO report cites two Service programs, sea lamprey control and stocking depleted lake trout populations, as examples. The Service conducts sea lamprey control operations as the U.S. agent in partnership with the Great Lakes Fishery Commission, Fisheries and Oceans Canada, and the U. S. Geological Survey.

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
 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
 East Jordan Snowmobile Club
 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 & and Wildlife Commission
 Great Lakes Sportfishing Council
 Hannahville Indian Community
 Hawkeye Fly Fishing Association
 Ho-Chunk Nation of Wisconsin
 Illinois Department of Natural Resources
 Indiana Department of Natural Resources
 Iowa Department of Natural Resources
 Izaak Walton League
 Joint Sport Fishing Club Meeting
 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
 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 Michigan
 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 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 Smallmouth Alliance
 Mohican Nation Stockbridge-Munsee Band
 National Fish and Wildlife Foundation
 National Park Service
 Natural Heritage Foundation
 Natural Resource Conservation Service
 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
 Overton-Woodridge Levee and Drainage District
 Pennsylvania Depart. of Environmental Protection
 Pere Marquette Watershed Council
 Peshawbestown Community Center
 Pokagon Band of Potawatomi Indians
 Prairie Island Indian Community
 Pure Fishing
 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
 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. Environmental Protection Agency
 U.S. Forest Service
 U.S. Geological Survey
 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

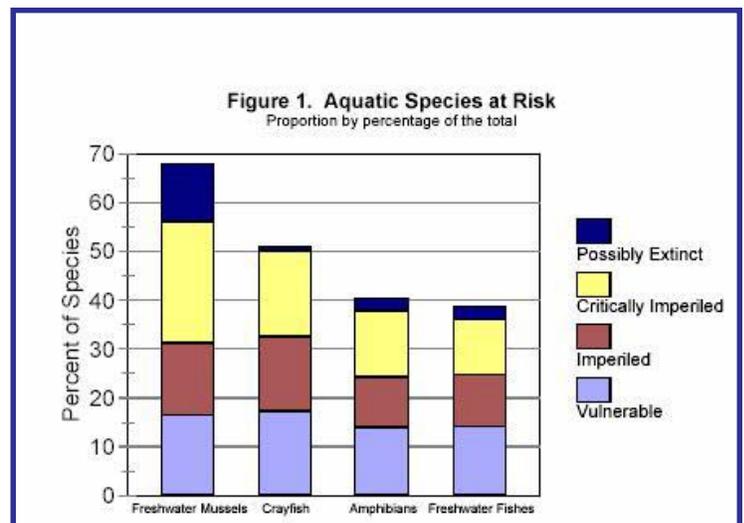
Our Fisheries and Aquatic Resources are in Trouble!

Conservation Status of Aquatic Species in Region 3



The need to protect, restore, and enhance aquatic resources has never been greater.

- Since 1900, 123 aquatic freshwater species have become extinct in North America (Ricciardi and Rasmussen 1999).
- Of the 822 native freshwater fish species in the U.S., 39% are at risk of extinction (Stein and Flack 1997).
- Forty-three percent of federally-listed threatened and endangered species rely to some extent on wetland habitats (Sipple).
- Thirty four percent of fish, 65% of crayfish, and 75% of the 297 freshwater mussels in the U.S. are classified as rare or extinct, in comparison to 11-15% of terrestrial vertebrates (Master 1990).
- As of 2004, 227 aquatic species are federally threatened or endangered: 21 amphibians, 115 fish, 70 bivalves, and 21 crustaceans (USFWS 2004).



(Stein and Flack, 1997 Species Report Card)

Aquatic Species Conservation and Management



-USFWS

Pallid sturgeon are reared in tanks at the Neosho NFH in support of the Pallid Sturgeon Recovery Plan.



-USFWS

Mussel Propagation Biologist Tony Brady collects mussel larva, glochidia, from a Higgins' eye pearlymussel at Genoa NFH. Genoa NFH developed culturing techniques for native mussels and carefully monitor their growth.



-USFWS

The winged mapleleaf is a Federally endangered mussel. In 2004, La Crosse FRO, working with U.S. Geological Survey and others, identified the host fish. In 2005, Genoa NFH will begin efforts to culture this species.

Native Species

Our 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.

(Endangered and Threatened Species)

Our Objective Recover fish and other aquatic resource populations protected under the Endangered Species Act (ESA), in collaboration with the Service's Endangered Species Program.

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 pearlymussel, Winged Mapleleaf, Topeka shiner and Niangua darter.

Our Commitment

- **Columbia Fishery Resources Office will:**
 - 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 Lower Missouri River (IA, KS, MO, NE).
 - Provide technical assistance to the Niangua Darter Recovery Team to recover darters in the Osage River Basin
- **La Crosse Fishery Resources Office will:**
 - Work with partners to collect, re-distribute and monitor endangered Higgins' eye pearlymussel 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).
- **Genoa National Fish Hatchery will:**
 - Work with partners (e.g. Minnesota & Wisconsin DNRs and U.S. Geological Survey) to begin efforts to culture Winged Mapleleaf mussels for stocking under an interagency recovery program in the Upper Mississippi River Basin (MN, WI).
 - Culture Higgins' eye pearlymussel for stocking under an interagency recovery program in the Upper Mississippi River Basin (IL, IA, MN, WI). (FONS project # 2002-001)
 - Culture approximately 10,000 yearling host fish for endangered Higgins' eye pearlymussel recovery efforts (IL, IA, MN, WI).

Aquatic Species Conservation and Management



-USFWS

La Crosse FHC and Neosho NFH staff complete two fish health assessments per year on cultured pallid sturgeon, an endangered species.

- **Neosho National Fish Hatchery will:**
 - Culture and tag 5,000 endangered pallid sturgeon (nine 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). (**FONS project # 2002-007**)
 - Provide technical assistance to complete the Pallid Sturgeon Propagation Plan 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 Ozark Cavefish NWR (MO).
- **La Crosse Fish Health Center will:**
 - Complete two fish health assessments 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 the Region (IA, MO).

(Aquatic Species of Concern)

Our Objective Restore declining fish and other aquatic resource populations, in collaboration with States, Tribes, partners, and stakeholders.

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 Act Proposal Review Committee to identify and fund native fish restoration activities addressing recommendations of the Great Lakes Fishery Resources Restoration Study (IL, IN, MI, MN, NY, OH, PA, WI).
 - 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).
- **Alpena Fishery Resources Office will:**
 - Work with partners to monitor the status of lake trout and to restore populations and habitat through interagency plans for Lake Huron (MI).
 - Work with partners to monitor the status of lake sturgeon and to restore populations and habitat through interagency plans for Lake Huron, Lake Erie and connecting waters (MI, OH).



-USFWS

Iron River and Sullivan Creek NFHs serve as lake trout brood stock stations and produce millions of eggs for rehabilitation programs in the Great Lakes.



-USFWS

Biologists from the Region's FROs have helped to develop interagency management plans to restore native lake sturgeon populations throughout the Midwest.

Aquatic Species Conservation and Management



-USFWS

Staff from the Service, Wisconsin DNR, and Trout Unlimited partnered to conduct a fish population estimate for Whittlesey Creek near Ashland, Wisconsin. Estimates are a critical component in the experiment to establish a self-sustaining native brook trout population there.



-USFWS

Nate Caswell, Carterville FRO, holds a shovelnose sturgeon collected during a fishery assessment, looking at the population in the Middle Mississippi and Lower Ohio Rivers. Commercial fishermen are increasingly targeting shovelnose sturgeon for a source of caviar.

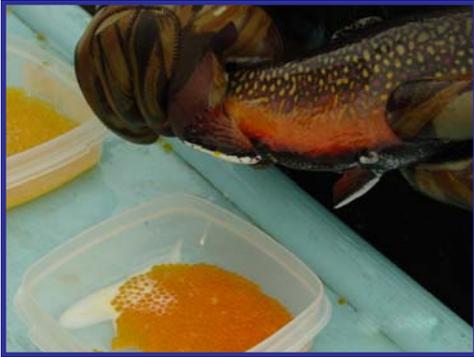


-USFWS

Biologist Crystal Anderson spawns a lake trout at the Sullivan Creek NFH. Lake trout from Service hatcheries are used for rehabilitation programs in the Great Lakes.

- Work with partners to monitor the status of lake herring and develop interagency recovery plans in Lake Huron (MI).
- Work with partners to identify the status of and develop interagency restoration plans for freshwater mussels in the St. Clair River Delta (MI).
- Work with the Michigan DNR, East Lansing Field Office and others to assess the status of Eastern sand darter (MI).
- **Ashland Fishery Resources Office will:**
 - 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 Endangered Species program and the U.S. Geological Survey to assess the status of shortjaw cisco in Lake Superior.
- **Carterville Fishery Resources Office will:**
 - Collect 150-200 adult shovelnose sturgeon from the Ohio River (extirpated from portions of Ohio waters) to support Ohio DNR's reintroduction program (IL, OH).
- **Columbia Fishery Resources Office will:**
 - Collect and provide biological data on lake sturgeon to the Missouri Department of Conservation for stock assessment (MO).
 - Collect and provide biological data on paddlefish in the Lower Missouri River to the Mississippi Interstate Cooperative Resource Association Paddlefish/Sturgeon Committee for stock assessments (MO).
 - Provide technical assistance to Missouri Department of Conservation to help re-write a 10-year paddlefish management plan (MO).
 - Provide technical assistance to help write a comprehensive, multi-state paddlefish plan for the Lower Missouri River (SD, NE, KS, IA, MO).
- **Green Bay Fishery Resources 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).
 - Work with partners to monitor 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).
 - Work with partners to identify the status of spotted musky and develop and implement interagency rehabilitation plans for Green Bay (MI, WI).
- **Genoa National Fish Hatchery will:**
 - Work with partners (e.g. Minnesota and Wisconsin DNRs) to identify the host fish for various imperiled mussels species in the Upper Mississippi River Basin (IL, IA, MN, WI). (FONS project # 2002-001)

Aquatic Species Conservation and Management



-USFWS

Eggs are gently removed from a coaster brook trout at the Iron River NFH. Biologists at the hatchery will hatch the eggs for rehabilitation programs in Lake Superior.



-USFWS

The Fish and Wildlife Service's lake trout stocking vessel, M/V Togue, travels approximately 2,500 miles in Lake Michigan and Lake Huron stocking approximately 3,400,000 lake trout yearlings on about 35 off shore reefs annually. It is the second most active vessel in the Great Lakes.



-USFWS

The Region's lake trout hatcheries produce fry and fingerlings for stocking the Great Lakes under interagency restoration programs.

- Culture 1,000 lake trout in the isolation unit for future brood stock at Sullivan's Creek NFH under interagency restoration programs for the Great Lakes (MI, WI).
- Culture 25,000 lake sturgeon (3 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). (**FONS project # 2003-001**)
- 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 (MI, NY, WI).

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

- Work cooperatively with the Keweenaw Bay Indian Community 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 (Apostle Island, Green Lake, Traverse Island, and Isle Royale) and brook trout (Siskowit Bay and Tobin Harbor) brood stock, as defined by restoration plans for lakes Superior, Huron, and Michigan, to support interagency restoration programs in the upper Great Lakes (MI, MN, IL, IN, WI).
- Produce lake trout (3-5 million eggs; 1.2 million yearlings) and brook trout (3-500,000 eggs; 50,000 fry; 50,000 fingerlings; 50 adults) for stocking under interagency restoration programs in Lake Superior, Lake Huron, and Lake Michigan (MI, MN, 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 restoration plans (MI, IL, IN, WI).

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

- Produce 1.8 million lake trout yearlings for stocking under interagency restoration programs in Lake Huron and Lake Michigan (MI, IL, IN, WI).
- Operate the M/V Togue to stock 3 million lake trout yearlings from Iron River, Pendills Creek and Jordan River NFHs at offshore reefs in Lake Michigan and Lake Huron (MI, IL, IN, WI).
- Provide 600,000-900,000 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 restoration plans (MI, IL, IN, WI).

Aquatic Species Conservation and Management



-USFWS

The Sullivan Creek NFH maintains the Klondike strain of lake trout to provide offspring for rehabilitation programs in Lake Erie.



-USFWS

The La Crosse FHC conducts a fish health pathogen screening at one of the Region's Great Lakes fish hatcheries.



-USFWS

These lake whitefish were captured during a survey in Lake Huron. This native fish is important to the Native American commercial fishery. Alpena FRO assisted the Chippewa Ottawa Resources Authority and Bay Mills Indian Community with lake whitefish assessments in lakes Huron and Michigan. Note the sea lamprey wounding scar.

- **Neosho National Fish Hatchery will:**
 - Hold 100 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 750,000 lake trout yearlings for stocking under interagency restoration programs in Lake Huron and Lake Michigan (IL, IN, MI, WI).
 - Work with partners through the Lake Michigan Technical Committee and the Lake Huron Technical Committee to update and implement interagency lake trout restoration 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 strains of lake trout brood stock, as defined by restoration plans to provide 5 million eggs for interagency restoration programs in lakes Huron and Michigan (MI, IL, IN, WI).
 - Maintain Lake Superior Klondike strain lake trout brood stock and provide 200,000 eggs to Allegheny NFH for rearing to the yearling stage and stocking under interagency restoration programs in Lake Erie (MI, NY).
- **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 number of watersheds with current wild fish health surveys to 36 out of 363 watersheds in Region 3 (IL, IN, IA, MI, MN, MO, OH, WI). (**FY05 Department of the Interior Performance Measure**)

(Self-sustaining Species)

Our Objective Maintain diverse, self-sustaining fish and other aquatic resource populations in collaboration with Tribes, States, partners, and other stakeholders.

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.

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).
- **Alpena Fishery Resources Office will:**
 - Conduct fishery-independent assessments to monitor the status of lake whitefish populations in the 1836 Treaty waters of Lake Huron (MI).

Aquatic Species Conservation and Management



-USFWS

Greg Conover from the Carterville FRO holds a paddlefish collected during a fisheries assessment in Pool 26 of the Mississippi River. The effort is part of a larger basin effort involving 23 states to understand paddlefish migration and basin-wide stocking.



-USFWS

Green Bay FRO and Wisconsin DNR biologists work cooperatively to enhance yellow perch stock assessment capabilities.



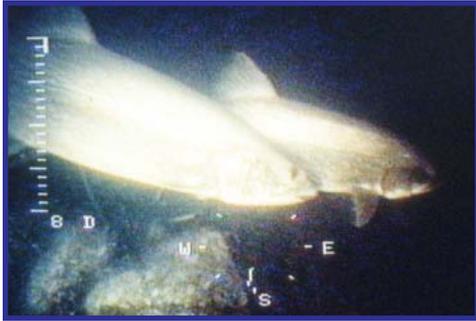
-USFWS

This northern pike was captured during spring fishery operations near Genoa NFH. Annual production and distribution of eggs and fish from cool and warm water native fish species number more than 5 million.

- Work with Chippewa Ottawa Resource Authority, Michigan DNR, Ontario Ministry of Natural Resources, Bruce Power, and the First Nations to conduct a lake-wide lake whitefish tagging study to determine stock delineation in Northern Lake Huron (MI).
- Work with the Michigan DNR, Chippewa Ottawa Resource Authority 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).
- **Ashland Fishery Resources Office will:**
 - Work with the Michigan DNR, Chippewa Ottawa Resource Authority 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 Fishery Resources Office will:**
 - Collect and provide biological data on shovelnose sturgeon to the Missouri Department of Conservation for stock assessment (MO).
- **Green Bay Fishery Resources Office will:**
 - Conduct fishery-independent assessments and monitor the status of lake whitefish populations in northern Lake Michigan (MI, WI).
 - Work cooperatively with the 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, Chippewa Ottawa Resource Authority 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 Fishery Resources Office will:**
 - Support the La Crosse FHC to conduct the annual Wild Fish Health Survey (MN, WI).
 - Conduct post-construction fish sampling (non-paddlefish and sturgeon) at the Polander Lake island construction project in the Upper Mississippi River (MN, WI). (FY04 only)
- **La Crosse Fish Health Center will:**
 - Conduct the Wild Fish Health Survey (IL, IN, IA, MI, MN, MO, OH, 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 NFHs (MI, MO, WI).
 - Verify findings from other agencies' fish pathologists (IL, IN, IA, MI, MN, MO, OH, WI).

Aquatic Species Conservation and Management

Interjurisdictional Species



-USGS photo by Greg Kennedy

This image shows two lake trout on spawning reef habitat at the Tawas artificial reef in Lake Huron which is in approximately 12-15 feet of water.



-USFWS

Ashland FRO biologists assess spawning sturgeon populations in the Bad and White Rivers, Wisconsin. Data collected will be used to estimate the size, to describe biological characteristics of fish, and to analyze the genetic characteristics of the 2004 spawning runs.



-USFWS

Lake whitefish assessments on Lake Huron help determine safe harvest limits under a Consent Decree for fishery management and allocation in 1836 Treaty waters of the Upper Great Lakes.

Our 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.

Our 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 Act Proposal Review Committee to identify and fund activities supporting collaborative approaches to managing interjurisdictional fisheries (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 Fishery Resources Office will:

- Participate through the Lake Huron Technical Committee to conserve, restore and manage interjurisdictional fish stocks in Lake Huron (MI).
- Assist Michigan, Chippewa Ottawa Resource Authority 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).
- 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 Fishery Resources Office will:

- Participate through the Lake Superior Technical Committee to conserve, restore, and manage interjurisdictional fish stocks in Lake Superior (MI, MN, WI).
- Assist Michigan, Chippewa Ottawa Resource Authority, 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).

Aquatic Species Conservation and Management



-USFWS

Dredge material from maintaining the navigation channel was placed on a site along the Illinois River. Carterville FRO worked with the U.S. Army Corps of Engineers to assess the impacts to fish communities when they place dredge material in the river. This assessment helped us learn that proper placement of dredge material in the river can help create fish habitat.



-USFWS

Joanne Grady from the Columbia FRO holds an endangered pallid sturgeon. The FRO participates in recovery efforts to monitor the pallid sturgeon population in the Lower Missouri River and monitor the U.S. Army Corps of Engineer's efforts to create habitat for pallid sturgeon.



-USFWS

Cory Puzach from the La Crosse FHC takes a sample from a carp to test for the Spring Viremia of Carp Virus. The non-native virus was detected in carp located in Wisconsin and Illinois.

- **Carterville Fishery Resources Office will:**
 - Provide fisheries technical assistance to the U.S. Army Corps of Engineers for mitigation planning as part of the Ohio River Main Stem Studies (IL, IN, OH).
 - Participate in the Mississippi Interstate Cooperative Resource Agency - Paddlefish/Sturgeon Subcommittee to improve and coordinate management activities (IL, IN, IA, MN, MO, OH, WI).
- **Columbia Fishery Resources 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 Fishery Resources 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, Chippewa Ottawa Resource Authority, 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).
- **La Crosse Fish Health Center will:**
 - Work with States and Tribes to coordinate regional responses and actions to new fish diseases, such as the Spring Viremia of Carp Virus and the Largemouth Bass Virus (IL, IN, IA, MI, MN, MO, OH, WI).

Aquatic Invasive Species



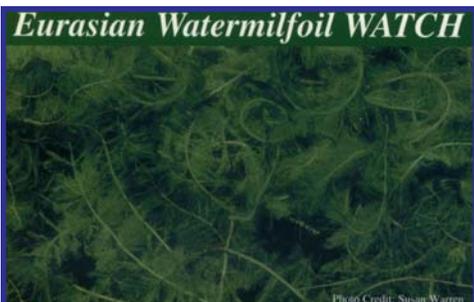
-GLFC

Parasitic sea lampreys are attached to this native lake trout. Each sea lamprey, an invasive species in the Great Lakes, is capable of killing upwards of 40 pounds of lake trout.



-USFWS

Divers from the Region's Dive Team prepare to "treasure hunt" in Pool 2 of the Upper Mississippi River near Minneapolis, Minnesota. The treasure they will look for is endangered mussels. Native mussels have been impacted by invasive zebra mussels.



Eurasian watermilfoil is a feathery, submerged invasive aquatic plant that can quickly form thick mats in shallow areas of lakes and rivers. This invasive plant chokes out native plants and interferes with boating, fishing, and swimming.

Our Goal: Risks of aquatic nuisance species (ANS) invasions are substantially reduced, and their economic, ecological, and human health impacts are minimized.

Our primary focus is on education, preventing new introductions of ANS 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.

Our Objective Work with other Service programs, States, Tribes, partners, and other stakeholders to reduce the risk of new ANS introductions.

Our Commitment

– Regional Office will:

- Work with partners through the Great Lakes Fish and Wildlife Restoration Act Proposal Review Committee to identify and fund activities reducing the risk of aquatic nuisance species introductions (IL, IN, MI, MN, NY, OH, PA, WI, and Ontario).
- Provide technical assistance to the States of Minnesota and Missouri to assist development of their State ANS Management Plans (MN, MO).
- Support all approved State and the St. Croix Interstate ANS Management Plans (IL, IA, MI, MN, OH, WI).
- Support the Great Lakes and Mississippi River Basin ANS Regional Panels (IL, IN, IA, MI, MN, MO, OH, WI, and others within the Basins).
- Provide technical assistance and support for the 100th Meridian Initiative, a Traveler Information System, focusing on educating travelers about how they can prevent the spread of aquatic invasive species (MN).
- Work with the Cabela's store in Owatonna, Minnesota and Minnesota DNR to install a kiosk to help educate the 1 million store visitors about invasive species, their impacts, agencies activities, and what people can do to prevent the spread and minimize impacts (MN).

– All Fishery Resources Offices will:

- Deliver educational programs and materials to the public and news media about the threat of aquatic invasive species and actions the public can take to prevent introduction and range expansion (IL, IN, IA, MI, MN, MO, OH, WI).
- Provide technical assistance and information exchange to agencies and researchers investigating potential control and prevention measures for new aquatic invasive species (IL, IN, IA, MI, MN, MO, OH, WI).

– Alpena Fishery Resources Office will:

- Conduct surveillance for Eurasian ruffe and other aquatic invasive species in areas of probable invasion in order to detect early presence and initiate control actions in Lake Huron (MI).

Aquatic Invasive Species



-USFWS

Biologists use gill nets to remove invasive Eurasian ruffe adults from Thunder Bay, Lake Huron in hopes of stopping, or at least slowing their spread to new areas.



-USFWS

These invasive bighead carp were captured in backwater areas of the Mississippi River in Southern Illinois. Agencies are working together to prevent Asian carp species from establishing populations in the Great Lakes.



-Shedd Aquarium

Originally discovered in the Great Lakes, the invasive round goby population exploded. The goby passed through the inter-basin connection to the Illinois River and is moving closer to the Mississippi River.

- **Ashland Fishery Resources Office will:**
 - Conduct surveillance for Eurasian ruffe and other aquatic invasive species in areas of probable invasion in order to detect early presence and initiate control actions in Lake Superior (MI, MN, WI).
- **Carterville Fishery Resources Office will:**
 - Inspect and certify shipments of triploid grass carp from private producers to reduce risk of expanding diploid populations in the wild.
- **Green Bay Fishery Resources Office will:**
 - Conduct surveillance for Eurasian ruffe and other aquatic invasive species in areas of probable invasion in order to detect early presence and initiate control actions in Lake Michigan (MI, WI).
- **Genoa National Fish Hatchery will:**
 - Adhere to the station's zebra mussel prevention plan and develop Hazard Analysis and Critical Control Point plans to avoid aquatic invasive species introductions and reduce risks of aquatic invasive species introductions through existing stocking programs (WI). (FY05 only)

Our Objective Work with other programs in the Service, States, Tribes, partners, and other stakeholders to monitor and track the existing range and impacts of ANS and develop programs designed to limit the expansion of those populations.

Our Commitment

- **Regional Office will:**
 - 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 Upper Mississippi River Basin States to evaluate the biological and environmental soundness of technological barriers to slow or stop the upstream colonization by bighead and silver carp (IA, IL, MN, 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).
- **Alpena Fishery Resources 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).
 - Conduct round goby surveillance activities to monitor the status and trends of populations at Shiawassee NWR (MI).
 - Coordinate with state, tribal and Federal partners, the U.S. Coast Guard, the Great Lakes Carriers Association and others to detect and control aquatic nuisance species in Lake Huron and Lake Erie (MI, OH).
- **Ashland Fishery Resources 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).

Aquatic Invasive Species



-USFWS

This is a young-of-the-year silver carp collected from the Illinois River. Silver and bighead carp are spreading within the Mississippi and Missouri rivers and Great Lakes Regions causing harm to native fish and wildlife.



-USFWS

Since their introduction to the Great Lakes in 1986 in ships' ballast water, invasive zebra mussels have quickly spread and are now found in at least twenty states and two Canadian Provinces.



-GLFC

This is a sea lamprey treatment site on the Manistique River. Marquette and Ludington Biological Stations control sea lampreys in coordination with the Great Lakes Fishery Commission and other stakeholders.

- 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 aquatic nuisance species in Lake Superior (MI, MN, WI).
- **Carterville Fishery Resources Office will:**
 - Lead the development of a National Asian Carp Management and Control Plan (IL, IN, IA, OH, MI, MN, MO, WI).
 - Monitor the presence of Asian carp in the Cache River within the Cypress Creek NWR (near the site where the first black carp was caught in the wild) (IL).
 - Determine Asian carp habitat use on the Middle Mississippi River NWR (IL, MO).
 - Complete a preliminary assessment using traditional and non-traditional sampling gears for capturing Asian carp to develop a standardized sampling protocol as identified by the Asian Carp Work Group (IL, MO).
- **Columbia Fishery Resources Office will:**
 - Complete a preliminary assessment using new sampling gears to begin assessing the population of Asian carp in the Missouri River (MO).
 - Develop techniques to age Asian carp and improve population estimates in the Missouri River (MO).
- **Green Bay Fishery Resources Office will:**
 - Monitor Eurasian ruffe to determine the status and trends of populations in Lake Michigan (MI, WI).
 - Coordinate with state, tribal and Federal partners, the U.S. Coast Guard, the Great Lakes Carriers Association and others to detect and control aquatic nuisance species in Lake Michigan (MI, IL, IN, WI).
- **La Crosse Fishery Resources 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 the City of Chicago, State of Illinois, the U.S. Army Corps of Engineers and others to develop a rapid response capability in case Asian carp make it past the electric barrier (IL).
 - Work with partners to monitor the Asian carp population 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 and State, Tribal, and university partners (IL, IN, MI, MN, NY, OH, PA, WI, and 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

Our 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.

Our Objective Work with other Service programs, States, Tribes, partners, and other stakeholders to enhance recreational fishing opportunities on Service, Tribal, and Department of Defense lands.

Our Commitment

- **Alpena Fishery Resources Office will:**
 - Host National Fishing Day events and organize additional aquatic education and fishing clinics in Michigan (MI).
 - Assist Shiawassee NWR, Detroit River International Wildlife Refuge and Ottawa NWR in evaluating and managing sport fish populations and providing recreational fishing opportunities (MI, OH).
- **Ashland Fishery Resources Office will:**
 - Host National Fishing Day events and organize additional 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).
- **Carterville Fishery Resources Office will:**
 - Participate in a National Fishing Day event in partnership with the Crab Orchard NWR (IL).
 - Assess recreational fisheries and develop management recommendations on:
 - Crab Orchard, Illinois River Complex, Big Oaks, Port Louisa, and Two Rivers NWR's (IL, IN).
 - Scott Air Force Base and Crane Naval Weapons Support Center (IL, IN).
- **Columbia Fishery Resources Office will:**
 - Participate in a National Fishing Day event held by a partner (MO).
 - Assess recreational fisheries and develop management recommendations on DeSoto NWR (IA).
- **Green Bay Fishery Resources Office will:**
 - Host National Fishing Day events and organize additional aquatic education and fishing clinics (WI).
 - Assist Seney NWR in evaluating and managing sport fish populations and providing recreational fishing opportunities (MI).



-USFWS
Alpena FRO staff talks to the public during the annual Brown Trout Fishing Derby at Alpena, Michigan.



-USFWS
A volunteer carefully stocks a coaster brook trout into Whittlesey Creek near Ashland, Wisconsin as part of a long-term plan with the Wisconsin DNR to establish a self-sustaining population.



-USFWS
This healthy bass was collected during an electrofishing survey at DeSoto Lake. This lake, which is part of the DeSoto NWR, has provided excellent recreational fishing for decades.

Public Use



-USFWS

With assistance from refuge staff, La Crosse FRO personnel perform a fishery survey at Tamarac NWR. Fishery management has been incorporated into Refuge Comprehensive Conservation Plans.



-USFWS

Over 100 people attended the first annual Genoa NFH fishing clinic/derby in June 2003 hosted by the hatchery and the Friends of the Upper Mississippi River Fishery Stations.



-USFWS

Steve Redman (center left) and Dale Bast (center right) from the Iron River NFH show off coaster brook trout brood fish at the Fishing Expo sponsored by Trout Unlimited held at the Bayfield County Civic Center in Ashland, Wisconsin.

- **La Crosse Fishery Resources 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 NW&FR, and Genoa NFH (MN, WI).
 - Assess recreational fisheries and develop management recommendations on Horicon, Necedah, and Tamarac NWR's (MN, WI).
- **Genoa National Fish Hatchery will:**
 - Co-host Fishing Day events at Tomah Veterans Administration Hospital and the hatchery (MN and WI).
 - Participate in Fishing Day events at the Upper Mississippi River NW&FR (IA, MN, and WI).
 - Culture 15,000 rainbow trout (8-10 inch) for 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 Desoto NWR, Upper Mississippi River NW&FR, Crane Naval Base, Fort McCoy, and Iowa Ammunition Plant (IA, IN, MN, WI).
 - Culture 100-200,000 bluegills, 200-300,000 northern pike, and 50-400 adult white bass for recreational fishing objectives on Horicon NWR and Upper Mississippi River NW&FR (IA, MN, WI).
 - Culture 500 brook trout for recreational fishing objectives at a Wisconsin Boy Scout camp (WI).
 - Culture largemouth bass for recreational fishing objectives on Desoto and Crab Orchard NWRs, Crane Naval Base, and the Iowa Ammunition Plant (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 Whittlesey Creek NWR and Ashland FRO (WI).
- **Jordan River National Fish Hatchery will:**
 - Host National Fishing Day events and organize additional aquatic education and fishing clinics in partnership with Pendills Creek NFH and Alpena FRO (MI).
- **Neosho National Fish Hatchery will:**
 - Culture 1,500 rainbow trout (nine-inch) for the Iowa Veterans Administration Hospital (IA).
 - Culture 5,000 rainbow trout (nine-inch) for Fort Riley (KS).
 - Host the Neosho NFH Annual Fishing Clinic/Derby (MO).
- **Pendills Creek and Sullivan Creek National Fish Hatcheries will:**
 - Host National Fishing Day events and organize additional aquatic education and fishing clinics in partnership with Seney NWR, Jordan River NFH and Alpena FRO (MI).

Public Use



-USFWS

Staff at Iron River NFH give a tour of the hatchery to students and instructors from Lac Courte Oreilles College, Hayward, Wisconsin.



-USFWS

Nick Starzl gives a tour to students at the Genoa NFH. Annually, several hundred students visit the hatchery and learn about recreational fishing and native species restoration.



-GLFC

A young child is in awe over an adult sea lamprey display provided by the Sea Lamprey Control Program.

- **La Crosse Fish Health Center will:**
 - Co-host Fishing Day events at Tomah Veterans Administration Hospital.
 - Participate in Fishing Day events at the Upper Mississippi River NW&FR and the Genoa NFH (MN, WI).

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

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, WI).
- **Alpena Fishery Resources 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).
- **Ashland Fishery Resources Office will:**
 - Work with the Northern Great Lakes Visitor Center partners to enhance educational displays and conduct public education events (WI).
- **Green Bay Fishery Resources Office will:**
 - Work with the Oneida Tribe of Indians of Wisconsin and the Wisconsin DNR to organize and hold an annual youth and elders fishing day (WI).
- **La Crosse Fishery Resources Office will:**
 - Conduct environmental education activities and provide displays for various events, such as Earth Day and River Fest in La Crosse, Wisconsin (WI).
- **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).
- **Genoa National Fish Hatchery will:**
 - Collect and/or propagate northern pike (300,000 fry; 30,000 two-inch fingerlings) and walleye (12-20 million eggs; 1-2 million fry; 100,000 two-inch fingerlings; 15,000 six-inch advanced 'fingerlings) for other state and tribal resource agencies' management efforts (AZ, IL, OK, TX, and WI).
 - Culture 5,000 (six inch) walleye for recreational fishing on Legend Lake, Wisconsin (WI).
 - Collect 30-60,000 sauger eggs for the State of Nebraska's recreational fishing objectives (NE).

Public Use

- **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 the Wisconsin DNR to provide surplus brook trout for stocking into public waters to enhance recreational fishing (WI).
- **Jordan River National Fish Hatchery will:**
 - Participate in the Great Lakes Lighthouse Festival, Mancelona Bass Festival, Kalkaska Trout Festival, Traverse City Sports Show, the Northland Hunting and Fishing Expo and other public events to provide information on aquatic recreation opportunities and restoration activities of the Service (MI).
 - Hold an annual Jordan River Hatchery Festival to educate children about natural resources, in coordination with Seney NWR, Alpena FRO and Pendills Creek NFH, Michigan DNR, Michigan Department of Environmental Quality and local non-governmental organizations (MI).
- **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 Great Lakes Lighthouse Festival, Traverse City Sports Show, the Northland Hunting and Fishing Expo and other public events to provide information on aquatic recreation opportunities and restoration activities of the Service (MI).
 - Work with the Friends of Pendills Creek Hatchery to help sponsor public education in conservation in the Brimley, Michigan area (MI).



-USFWS

Fishery biologists Heather Enterline and James Boase answer questions for the public at the Traverse City Hunting and Fishing Expo.

Water Works Wonders Campaign



-photos courtesy of the Water Works Wonders 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 Water Works Wonders advertising campaign and highlights National Boating and Fishing Week events.

Public Use

Mitigation Fisheries

Our 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.

Our Objective Meet the Service's responsibilities for mitigating fisheries at Federally funded water projects in the Great Lakes-Big Rivers Region.

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). (FY05 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

Rainbow trout in a raceway at Neosho NFH are crowded together in preparation for distribution to Lake Taneycomo, a popular fishing location.



-USFWS

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



-USFWS photo by George Gentry



-USFWS

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



-USFWS

A lake sturgeon is released after a biologist records measurements and collects tissue samples. Tissue samples are used for genetic analysis. Tribal commercial fishers are providing excellent support by gathering biological information and tagging captured lake sturgeon.



-USFWS

Ashland FRO Biologist Frank Stone is geared up for cold weather. Stone is assisting the Great Lakes Indian Fish and Wildlife Commission in determining recruitment levels of juvenile walleye in several northern Wisconsin lakes.



-USFWS

Keweenaw Bay staff takes a photo break from their stream survey work. Data will be used to develop baseline information to manage their fisheries. Ashland FRO staff assisted the Keweenaw Bay Natural Resources Department.

Our Goal: To assist Tribes in the management, protection, and conservation of their treaty-reserved or statutorily defined trust natural resources.

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.

Our Objective Provide technical assistance in fisheries science and natural resource management to Tribes and Treaty Authorities in the Region.

Our Commitment

– Regional Office will:

- Work with partners through the Great Lakes Fish and Wildlife Restoration Act Proposal Review Committee to identify and fund native fish and aquatic habitat restoration activities lead by tribal governments (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 the tribal parties to the Executive Council or through the dispute resolution process of the Consent Decree (MI).

– Alpena Fishery Resources 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 beneficial to lake trout rehabilitation in 1836 Treaty waters of Lake Huron (MI).

– Ashland Fishery Resources 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 walleye populations in Red Lake (MN).
- Provide technical assistance to the Mille Lacs Band in monitoring the status of walleye populations in Mille Lacs Lake (MN).

Cooperation with Native Americans



-USFWS

The Green Bay FRO staff worked cooperatively with the Forest County Potawatomi to perform stream electroshocking surveys on tribal land.



-USFWS

Heidi Keuler, a La Crosse FRO biologist, samples aquatic vegetation on a lake at the Prairie Island Dakota Community. The Community is interested in establishing rice beds in the study area.



-GLFC

Tribal members from the Red Cliff Tribe of Lake Superior Chippewa Indians assist sea lamprey control staff during the lampricide treatment of Red Cliff Creek in Northern Wisconsin.

- 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).
- **Green Bay Fishery Resources 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 Fishery Resources 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).
 - Conduct trout stream and lake surveys on the Menominee and White Earth Indian Reservations (MN, WI).
 - Work with Ashland FRO to monitor walleye populations at Mille Lacs Lake for the Mille Lacs Band and Great Lakes Indian Fish and Wildlife Commission (MN).
 - Harvest walleye at Rydell NWR for stocking on the White Earth Indian Reservation (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:**
 - Work cooperatively with the Red Cliff Band to enhance brook trout propagation programs to support rehabilitation plans in Lake Superior (WI).
 - Work cooperatively with the Keweenaw Bay Band to enhance propagation capabilities in support of the Jumbo River rehabilitation program (MI).
- **Jordan River National Fish Hatchery will:**
 - Provide technical assistance to the Little Traverse Bay Band in the development of a lake trout propagation program (MI).
 - Provide technical assistance to the Chippewa Ottawa Resource Authority's Dunns Creek Fish Hatchery in enhancing propagation programs (MI).

Cooperation with Native Americans



-USFWS

Scott Yess (center) from the La Crosse FRO poses with Randy Zortman (left), White Earth Natural Resources Department, and Joe Hunter (right) from Rainy River First Nations during an egg collection project for lake sturgeon.



-USFWS

John Johnston, Iron River NFH, and two Keewenaw Bay Tribal Hatchery workers load lake trout and brook trout that have passed through a two year isolation period. In exchange for this service, Iron River stocks lake trout yearlings into nearby Lake Superior.



-USFWS

Staff from the Iron River NFH transfer lake trout to the offshore stocking vessel, M/V Togue. The vessel is scheduled to be replaced in 2006 and will improve stocking and assessment capabilities.

- **Pendills Creek National Fish Hatchery will:**
 - Work with the Bay Mills Indian Community, the 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).

Our Objective Provide fish from National Fish Hatcheries to support Tribal fish culture programs, subsistence programs, ceremonies, outdoor recreation and resource management activities.

Our Commitment

- **Genoa National Fish Hatchery will:**
 - Culture 1,500 lake sturgeon yearlings 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 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 (FY04 – 13,000; FY05 – 3,000), Stockbridge Munsee (FY04 only – 600), Red Lake (FY04 – 21,000; FY05 – 8,000), and White Earth (FY04 only – 52,000) 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).
- **Iron River National Fish Hatchery will:**
 - 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).
 - Provide lake trout yearlings to the Keweenaw Bay Indian Community for stocking into Lake Superior as part of the Memorandum of Understanding through which the Keweenaw Bay Tribal Hatchery operates as a brood stock isolation facility (MI).
- **Jordan River National Fish Hatchery will:**
 - Enhance programs and facilities to produce additional lake trout above the current goal of 1.8 million yearlings to help meet requirements of the August 7, 2000, Consent Decree (MI).
- **Pendills Creek National Fish Hatchery will:**
 - Enhance programs and existing facilities to produce additional lake trout above the current goal of 750,000 yearlings to help meet the requirements of the August 7, 2000, Consent Decree (MI).
 - Construct new hatchery facilities and double lake trout production to 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 (WI).

Coordination with Tribal Governments

The area of the United States encompassed by the Great Lakes – Big Rivers 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 Fishery Resources 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 Fishery Resources Offices the lead responsibility for supporting the needs of several recognized Native American groups in the Great Lakes – Big Rivers Region, as outlined here.



-USFWS

Alpena FRO staff set experimental gill nets as part of the fishery independent lake whitefish survey in 1836 Treaty waters of Northern Lake Huron.

The Alpena FRO is responsible for working with:

Chippewa Ottawa Resource Authority

Bay Mills Indian Community

Sault Ste. Marie Tribe of Chippewa Indians

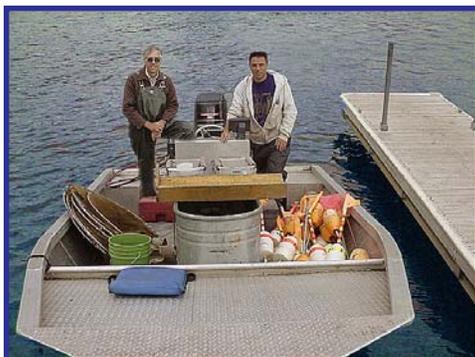
Saginaw Chippewa Indian Tribe of Michigan

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

Ashland FRO and Fond du Lac Band staff are ready for a lake sturgeon assessment on the St. Louis River. Fin samples are taken from captured fish for genetic analysis.



-USFWS

The Bad River Band of Lake Superior Chippewa Wildlife Department completed the second year of a 3 year study to assess sora, Virginia, and yellow rail populations in the wild rice dominated wetlands of the Kakagon/Bad River wetland complex.



-USFWS

White Earth Department of Natural Resources Biologist Will Bement holds a lake sturgeon that was caught in Round Lake on the White Earth Reservation. Lake sturgeon have been re-introduced on the reservation by the White Earth DNR, Fish and Wildlife Service, and others.

The Ashland FRO 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 Orielles Band
Lac du Flambeau Band of Lake Superior Chippewa Indians
Red Cliff Band of Lake Superior Chippewa Indians
Sakaogon Chippewa (Mole Lake) Community of Wisconsin
St. Croix Chippewa Indians of Wisconsin

The Green Bay FRO 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 FRO 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
Ho-Chunk Nation

Leadership in Science and Technology



Our Goal: Science developed and used by Service employees for aquatic resource restoration and management is state-of-the-art, scientifically sound and legally defensible, and 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.

Our Objective Utilize state-of-the-art, scientifically sound, legally defensible scientific and technologic tools to formulate and execute fishery related plans and policies.

Our Commitment

– Alpena Fishery Resources 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).

– Ashland Fishery Resources 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 to restoration planning and workshops on these stocks (MI, MN, WI).
- Participate in the development and use of Geographic Information Systems capability to support aquatic habitat conservation activities for Lake Superior, with initial focus on Whittlesey Creek NWR and Isle Royale National Park (MI, WI).

– Carterville Fishery Resources Office will:

- Manage the Mississippi Interstate Cooperative Resource Association Paddlefish Coded Wire Tag Center to provide consolidated data used to develop interjurisdictional management plans (IL, IN, IA, MN, MO, OH, WI).

-USFWS

Ashland FRO Biologist Lee Newman is conducting a radio telemetry study on coaster brook trout. Newman tries to locate one of twenty-six radio-tagged fish recently released into Whittlesey Creek near Ashland, Wisconsin.



-USFWS

Alpena FRO's new vessel, R/V Sentinel, will enhance the Fish and Wildlife Service's ability to contribute to lake-wide assessment plans and fish community and environmental objectives.



-USFWS

Paddlefish that are captured during assessment activities provide information for the Mississippi Interstate Cooperative Resource Association Sturgeon and Paddlefish Stock Assessment Database. The database is managed by the Carterville and Columbia FROs.

Leadership in Science and Technology



-USFWS

A student employee at the Jordan River NFH sample counts a group of lake trout as part of a diet comparison.



-USFWS

Neosho NFH staff continue to refine culture techniques for endangered pallid sturgeon.



-USFWS

Pictured are lake trout eggs in an incubator. Two types of temperature recorders were tested during this project. Hatching of some lake trout eggs are delayed at the Pendills Creek NFH to help accommodate rehabilitation programs.

- **Columbia Fishery Resources Office will:**
 - Manage and analyze data in the Mississippi Interstate Cooperative Resource Association Paddlefish Stock Assessment Database to help develop interjurisdictional management plans (IL, IN, IA, MN, MO, OH, WI).
- **Green Bay Fishery Resources 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 and Lake Sturgeon Task Group (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 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).
- **Jordan River National Fish Hatchery will:**
 - Refine fish culture and husbandry techniques in order to produce the highest quality lake trout possible (MN, IL, IN, MI, WI).
 - Prepare a comprehensive lake trout rehabilitation plan for the Service's Great Lakes operations covering all aspects of propagation and stocking (IL, IN, MI, WI).
- **Neosho National Fish Hatchery will:**
 - Continue to refine density requirements for pallid sturgeon (MO, KS, IA, 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 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).
- **La Crosse Fish Health Center will:**
 - Provide fish health services to states, tribes, 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).

Leadership in Science and Technology



-USFWS

Technicians from Northwest Marine Technology describe the clipping and tagging trailer which is being tested at the Iron River NFH for mass marking lake trout.



-USFWS photo by Louise Mauldin

Staff from Neosho NFH and Columbia FRO tag pallid sturgeon raised at Neosho NFH as part of the recovery plan.



-GLFC

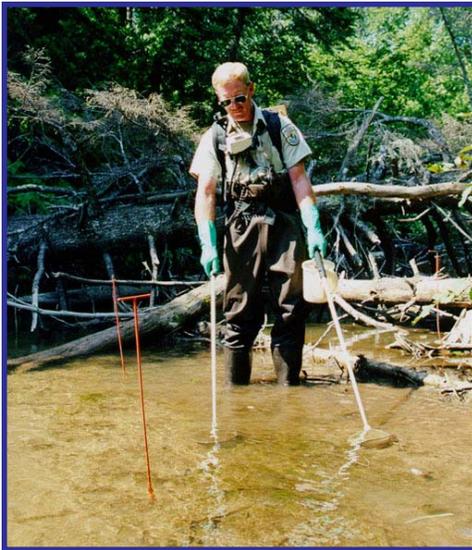
A technician from the Sea Lamprey Control program releases invasive sea lampreys with implanted PIT tags during a migratory pheromone field trial. Pheromones are chemical signals that pass between organisms of the same species to communicate. Preliminary results of this study are encouraging.

Our Objective Develop and share state-of-the-art, scientifically sound, legally defensible scientific and technologic tools with other Service programs, States, Tribes, partners, and other stakeholders.

Our Commitment

- **Regional Office will:**
 - Work with partners through the Great Lakes Fish and Wildlife Restoration Act Proposal Review Committee to identify and fund state-of-the-art science to enhance conservation of Great Lakes fishery resources (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.
 - Work with partners and stakeholders to establish an Aquatic Resource Technology Center, enhancing science capabilities in the Region.
- **Alpena Fishery Resources Office will:**
 - Investigate the use of mass marking technology for use in conducting studies of hatchery lake trout life history in Lake Huron (MI).
- **Ashland Fishery Resources 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 Fishery Resources Office will:**
 - Work with the U.S. Geological Survey 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).
 - Provide support to the U.S. Geological Survey pallid sturgeon telemetry project for determining the life history and habitat use in the Lower Missouri River (IA, KS, MO, NE).
- **Green Bay Fishery Resources Office will:**
 - 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).
 - 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).
 - Provide technical leadership in the design, construction and operation of a new offshore stocking and lake trout assessment vessel, the Spencer F. Baird, to enhance lake trout restoration in Lake Huron and Lake Michigan (IL, IN, MI, WI).
- **La Crosse Fishery Resources Office will:**
 - Work with the U.S. Geological Survey to identify the fish host species for the endangered winged mapleleaf mussel (MN, WI). (FY04 only)
 - 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). (new project in FY05)

Leadership in Science and Technology



-GLFC

A sea lamprey control employee assesses a stream for invasive sea lampreys by electrofishing larvae.



-USFWS

Smallmouth bass which serve as host fish for endangered Higgins' eye pearl mussel at the Genoa NFH, are also used in other research projects.



-USFWS

Steve Redman monitors water quality for an experimental hydrogen peroxide egg treatment at the Iron River NFH. Staff are looking at hydrogen peroxide as a replacement for formalin to treat fungus on lake trout eggs.

- **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).
 - Participate in the development of experimental pheromone release technique as an alternative sea lamprey control measure (IL, IN, MI, MN, NY, OH, PA, WI).
- **Genoa National Fish Hatchery will:**
 - Conduct practical research in cooperation with U.S. Geological Survey on topical disinfection of cool and warmwater species of eggs to prevent spread of fish diseases (IL, IN, IA, MN, MO, OH, WI).
 - Culture largemouth bass, northern pike, rainbow trout, smallmouth bass, walleye, and yellow perch for U.S. Geological Survey and university research (WI).
 - Investigate the effects of fish therapeutants on mussel glochidia infested on fish gills in cooperation with U.S. Geological Survey (IL, IN, IA, MN, MO, OH, WI).
- **Iron River National Fish Hatchery will:**
 - Complete and publish results of a study on the use of peroxide to control pathogens on lake trout eggs (IL, IN, MI, WI).
 - 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).
- **Jordan River National Fish Hatchery will:**
 - Provide technical leadership in the design, construction and operation of a new offshore stocking and lake trout assessment vessel, the Spencer F. Baird, to enhance lake trout restoration in Lake Huron and Lake Michigan (IL, IN, MI, WI).
 - 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).
- **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:**
 - 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:**
 - Assist Bozeman, Montana Fish Health Center and National Conservation Training Center to help teach the fish health management short course.
 - 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).

National Fish Habitat Initiative: A Start to a Solution

The National Fish Habitat Initiative (Initiative) is a nationwide strategy that harnesses the energies, expertise and existing partnerships of state and federal agencies and conservation organizations to focus national attention and resources on common priorities to improve aquatic habitat health.

In response to recommendations from the Sport Fishing and Boating Partnership Council, the Fisheries Program recognized Aquatic Habitat Conservation and Management as one of seven focus areas for the program. The Fisheries Program also committed to work with Federal, State, Tribal and other partners and stakeholders to explore the benefits of a National Aquatic Habitat Plan and determine the appropriate Service role. On September 13, 2003, the International Association of Fish and Wildlife Agencies endorsed the concept and indicated they would take the lead in developing a comprehensive national fisheries habitat plan/strategy and initiate coordination with other existing fisheries habitat activities.

Fisheries leaders met at five locations throughout the U.S. between May and August 2004 to develop strategies and goals for the Initiative. Recommendations from these meetings include fostering geographically-focused, locally-driven, scientifically-based partnerships to protect, restore and enhance the aquatic habitats across the nation. The Initiative is often compared to the highly successful North American Waterfowl Management Plan. The Waterfowl Plan was implemented in the 1980s to forge partnerships for restoration or protection of millions of acres of wetland breeding areas for waterfowl.

December 2003 Midwest Meeting, Kansas City, Missouri: The kick-off meeting for the Initiative focused on the Midwest region and covered the Initiative's relationship to a number of multi-state organizations including the Mississippi Interstate Cooperative Resource Association, Great Lakes Fishery Commission and Southeast Aquatic Resources Partnership.

To date, the Service's Fish Passage Program has helped fund projects that removed 200 barriers, restored access to 2,936 river/stream miles and 60,182 acres of habitat.

Table 1. Current Fish Passage projects funded in Region 3.

State	Project Title	Project Type	Year Funded	Lead FRO
IA	Stream Stabilization MO River Watershed	Grade control structures	2003	Columbia
MI	Northern-Lower MI Watershed	Culvert renovation	2003	Alpena
MN	Ottertail Dam Removal	Dam removal	2003	La Crosse
MO	Water Control Structure (Ditch 5)	Refuge water control structure modification	2003	Cartersville
MO	Water Control Structure (Ditch 3)	Refugewater control structure modification	2003	Cartersville
OH	Two Ohio Streams Culvert	Culvert renovation	2003	Alpena
WI	Bark River Culvert	Culvert renovation	2003	Ashland
WI	Bad River Watershed Fish Passage	Culvert renovation	2003	Ashland
MN	Heiberg Dam	Notch dam, and rock ramp	2004	La Crosse
IL	Big Rock Creek	Rock ramp below dam	2004	Cartersville
MO	Mingo National Wildlife Refuge	Refugewater control structure modification	2004	Cartersville
MO	Hickory Road crossing	Low water crossing	2004	Columbia
WI	Vaughan Creek culvert	Culvert renovation	2004	Ashland
WI	Pike River Dam removal	Dam removal	2004	Green Bay
MI	Lower Michigan Watersheds - culverts	Culvert renovation	2004	Alpena
MI	Carp River culverts	Culvert renovation	2004	Green Bay
IA	Shellrock River Dam removal	Dam removal	2004	La Crosse

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.

Aquatic Habitat Conservation and Management

Our 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.

Our Objective Facilitate management of aquatic habitats on national and regional scales by working with States, Tribes, partners and other stakeholders.

Our Commitment

– Regional Office will:

- Work with partners and stakeholders through the Great Lakes Fish and Wildlife Restoration Act Proposal Review Committee to identify and fund aquatic habitat enhancement proposals (IL, IN, MI, MN, NY, OH, PA, WI).
- Work with partners and stakeholders to support and develop the National Fisheries Habitat Initiative (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 Fishery Resources Office will:

- Develop 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 DNRs 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 counties of Michigan's northern Lower Peninsula (MI).
- Work with the Michigan and Ohio DNRs and U.S. Geological Survey to identify and describe juvenile rearing and adult spawning habitat for lake sturgeon in the Saginaw River, St. Clair River and Maumee River (MI, OH).

– Ashland Fishery Resources Office will:

- Develop a systematic aquatic habitat information and evaluation approach for use in prioritizing habitat restoration activities in the Lake Superior watershed, in coordination with the Michigan, Minnesota and Wisconsin DNRs 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 U.S. Environmental Protection Agency's Binational Program and Superior Coastal Initiative under the North American Wetlands Conservation Act (MI, MN, WI).



This culvert on Hardwood Creek in Michigan was too small and dark to allow fish to pass under this road (upper). The culvert was replaced with a new structure (below) using funds from partners and the Fish Passage Program.



-USFWS photos



-USFWS

Bottomless culverts are designed to allow uninhibited passage of native fish such as brook trout.

Aquatic Habitat Conservation and Management



-USFWS

Fishery Biologist Nate Caswell from the Carterville FRO holds a shovelnose sturgeon. Carterville FRO is working in partnership with the Ohio DNR to reintroduce shovelnose sturgeon to the upper Ohio River Basin.



-USFWS

Sandbar habitat at Cranberry Bend Unit of the Big Muddy National Fish and Wildlife Refuge on the Missouri River. Columbia FRO staff monitor fish use of restored and newly created aquatic habitat.



-photo by Robert J. Hurt

Islands constructed in Polander Lake by the U.S. Army Corps of Engineers are part of a Habitat Rehabilitation and Enhancement Project on the Upper Mississippi River. La Crosse FRO and Upper Mississippi River National Wildlife and Fish Refuge staff are studying fish usage at the site.

- 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).
- **Carterville Fishery Resources Office will:**
- Evaluate pallid and shovelnose sturgeon habitat use on the Middle Mississippi River NWR to develop habitat restoration plans (IL, MO).
 - Provide technical assistance on habitat restoration projects with State and Federal partners within the U.S. Army Corps of Engineers – St. Louis District (IL, MO).
 - Serve on interagency teams to develop, prioritize and monitor habitat improvement projects as part of the Upper Mississippi River Environmental Management Program (IL, MO).
- **Columbia Fishery Resources Office will:**
- Coordinate and evaluate Missouri River habitat projects with U.S. Army Corps of Engineers, DeSoto NWR, Big Muddy NF&WR, 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 Fishery Resources Office will:**
- Work with the Illinois, Indiana, Michigan and Wisconsin DNRs to develop a systematic approach to evaluating and prioritizing 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 Program and Coastal Program, working with the Illinois, Indiana, Michigan and Wisconsin DNRs and other partners (IL, IN, MI, WI).
- **La Crosse Fishery Resources Office will:**
- 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 as constructed as part of the Upper Mississippi River Environmental Management Program (IL, IA, MN, WI).

Aquatic Habitat Conservation and Management



-USFWS

This fish passage project, located on the White Earth River in Minnesota, replaces a dam with cascading riffles and pools allowing lake sturgeon and other native species access to White Earth Lake.



-USFWS

Thunder Bay Power near Alpena, Michigan has a working committee that assists with meeting Federal Energy Regulatory Commission license requirements. Alpena FRO staff represent the Fish and Wildlife Service on the committee and provided guidance for fish passage and other aquatic issues.



-photo by Duane Raver/USFWS

Carterville FRO worked with the Mingo NWR, using funds from the Fish Passage Program, to develop water control structures that are friendly to alligator gar movements. Partners in this project hope to restore alligator gar on this Refuge.

- Participate in planning and evaluation of fish passage improvements at Locks and Dam 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).
- **Jordan River NFH will:**
 - Work with the Friends of the Jordan River and Michigan DNR to monitor the status of the Jordan River watershed and take action as needed to conserve aquatic habitat quality (MI).
- **Pendills Creek and Sullivan Creek NFHs will:**
 - Work 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 Sullivan Creek watersheds and take action as needed to conserve aquatic habitat quality (MI).

Our Objective Develop and expand the use of Program expertise to assist in avoiding, minimizing, or mitigating impacts of habitat alteration on aquatic species and monitor and evaluate completed projects.

Our Commitment

- **Alpena Fishery Resources 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 assistance to the Saginaw Bay Natural Resource Damage Assessment for restoration planning and implement aquatic habitat rehabilitation projects (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 Fishery Resources 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).
- **Carterville Fishery Resources Office will:**
 - Work with the Service's Ecological Services and National Wildlife Refuge 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, MO, OH).

Aquatic Habitat Conservation and Management



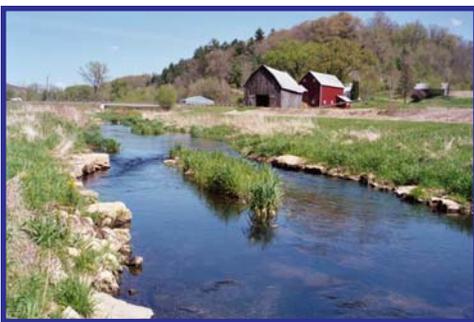
-USFWS

Plano Dam is one of two dams on the Big Rock Creek that blocks 69 miles of river habitat. Funding was secured from the State of Illinois and through the Fish Passage Program. A design is being developed.



-USFWS

The Threatened Niangua darter occurs in 11 counties within the Osage River Basin in Missouri. Columbia FRO partners with Federal, state, and local agencies to merge funds and effort to increase fish passage for this native species.



-USFWS

The La Crosse FRO worked with the Vernon County Land Conservation Office, Trout Unlimited, and private landowners to restore fish habitat in 8.3 miles of stream in Vernon County, Wisconsin. Partners contributed \$375,000 to match \$25,000 funded through the Department of the Interior's Cooperative Conservation Initiative Program.

- Provide technical assistance to the Illinois DNR with ramping projects to restore fish passage at two dams on Big Rock Creek (IL).
- **Columbia Fishery Resources Office will:**
 - Work with the Service's Ecological Services and National Wildlife Refuge 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).
 - Implement aquatic habitat restoration projects for Niangua darters in the Osage River watershed in Missouri and for Topeka shiners in Western Iowa (IA, MO).
- **Green Bay Fishery Resources 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).
 - 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).
- **La Crosse Fishery Resources Office will:**
 - Work with the Service's Ecological Services and National Wildlife Refuge Programs to monitor and evaluate aquatic habitat restoration efforts in the Illinois and Mississippi Rivers associated with Corps activities (IL, IA, MN, WI).
 - 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 trout in Southwest Wisconsin and Northeast Iowa and 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 National Wildlife Refuge 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).

Aquatic Habitat Conservation and Management



-USFWS

Biologist Susan Wells and volunteers stabilize the bank at a habitat restoration site along Crane Creek at Ottawa NWR.



-USFWS

Fishery biologists from Carterville FRO electrofish in Crab Orchard Lake as part of an evaluation on the effectiveness of polychlorinated biphenyl (PCB) remediation at the Sangamo National Priorities List site under the Crab Orchard Superfund Project in Southern Illinois.



-USFWS

Ashland FRO coordinated the Griffin Wetland project that restored two wetland acres and has a positive impact on wildlife in the surrounding 80 acres. This Iron River watershed project was funded through the Partners for Fish and Wildlife program and benefits the American black duck, American woodcock, and gray wolf.

Our Objective Coordinate with the National Wildlife Refuges System that contain priority species or key habitats to identify and implement opportunities for increasing the quantity and improving the quality of aquatic habitat.

Our Commitment

- **Alpena Fishery Resources Office will:**
 - Provide technical assistance to Shiawassee and Ottawa NWRs and the Detroit River International Wildlife Refuge for planning, designing and implementing aquatic habitat restoration projects (MI, OH).
- **Ashland Fishery Resources Office will:**
 - Provide technical assistance to Whittlesey Creek and Rice Lake NWRs for planning, designing and implementing aquatic habitat restoration projects (MN, WI).
- **Carterville Fishery Resources 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).
 - Provide technical assistance to Two Rivers, Crab Orchard, Cypress Creek, Mingo, Mark Twain, Illinois River, Big Oaks, and Patoka NWR's for planning, designing and implementing aquatic habitat restoration projects (IL, IN, MO).
 - Provide technical assistance to Mingo NWR with replacement of screw gates to allow fish passage as part of the Refuge's alligator gar restoration program (MO).
- **Columbia Fishery Resources Office will:**
 - Provide technical assistance to the Big Muddy National Fish and Wildlife Refuge and DeSoto, Swan Lake, and Port Louisa NWR's for planning, designing and implementing aquatic habitat restoration projects (IL, IA, MO).
- **Green Bay Fishery Resources Office will:**
 - Provide technical assistance to Seney NWR for planning, designing and implementing projects to enhance brook trout habitat in the Upper Driggs River (MI).
- **La Crosse Fishery Resources Office will:**
 - Provide technical assistance to the Upper Mississippi River NW&FR, Minnesota Valley, Necedah, Horicon, and Tamarac NWRs for planning, designing and implementing 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 under management of the Iron River NFH (WI).
- **Pendills Creek and Sullivan Creek NFHs will:**
 - Assist Green Bay FRO in implementing aquatic habitat evaluation and restoration projects at Seney NWR (MI).
- **Neosho NFH will:**
 - Work with the Service's National Wildlife Refuge and Ecological Services Programs and other partners to manage 244 acres of Service land under management of the Neosho NFH (MO).

Workforce Management



Our 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.

Our Objectives

- Identify critical staff and functions needed to support various types and sizes of Program offices and be able to fill critical vacancies and gaps in the current workforce with well-qualified individuals.
- Train and develop employees for the most effective utilization of their skills and positions.
- Ensure Program employees and facilities are equipped with the technology, tools, and equipment to effectively and to efficiently conduct their jobs.

Our Commitment

- Develop business management plans for each office.
- 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.

-USFWS

Training is an important component for Workforce Management. These students attended a Fish and Wildlife Service sponsored short course titled "Introduction to Fish Health." Employees from the La Crosse FHC serve as trainers for this very popular course.



-USFWS

Each year the La Crosse FRO and the La Crosse District of the Upper Mississippi River National Wildlife and Fish Refuge honor their volunteers with a banquet.



-USFWS

The 2004 Conservational Career Diversity Intern Program participants were: (left to right) Carlos Lozano, Anne Bolick, Ashley Umberger, and Melissa Cheung. The Genoa National Fish Hatchery (NFH), La Crosse FHC, La Crosse FRO, and Neosho NFH each supported one of the interns to work over a 12 week period.

List of Acronyms

ANS - Aquatic Nuisance Species
 Commission - Great Lakes Fishery Commission
 Consent Decree - U.S. District Court Consent Decree
 CORA - Chippewa Ottawa Resource Authority
 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
 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



**Fisheries Program Operational Plan
Region 3, Great Lakes - Big Rivers
FYs 2004 and 2005**

**U.S. Fish & Wildlife Service
Region 3
Division of Fisheries
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Questions or comments concerning the report should be addressed to Dave Radloff, 612/713-5158 or email at david_radloff@fws.gov

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