



Restoring and Protecting Great Lakes Fish and Wildlife Resources

The U.S. Fish and Wildlife Service is focusing resources from 43 field stations in two regions—encompassing all program areas—on protecting and restoring natural resources in the Great Lakes basin. The Great Lakes Basin Ecosystem Team is developing binational partnerships and initiatives that include coastal habitat restoration, invasive species control, islands conservation, lake sturgeon restoration, migratory bird conservation, endangered species recovery and enhancing sustainable fisheries.

Why is the Great Lakes Basin Important?

The Great Lakes basin ecosystem is the largest body of freshwater in the world. It holds 18 percent of the world's supply of fresh water; covers 95,000 square miles with 9,000 miles of shoreline; includes 5,000 tributaries; contains more than 30,000 large and small islands; and has a drainage area of 288,000 square miles. More than 35 million people live in the basin and depend on its natural resources.

The wealth of resources in the Great Lakes basin provide drinking water, hydroelectricity production, industrial power supply, water disposal and commercial navigation, as well as numerous opportunities for fish and wildlife related activities and

recreation. Water-related outdoor recreational activities in the Great Lakes basin are valued at \$15 billion annually, to which sport fishing alone contributes \$4 billion.

The Great Lakes basin supports a variety of fish and wildlife. Fish species of special interest include trout, sturgeon, whitefish, walleye and landlocked Atlantic salmon. A recent survey of biological diversity identified 130 endangered or rare plant and animal species inhabiting the Great Lakes basin ecosystem. Examples of animals and plants in the Great Lakes basin that are listed by the federal government as threatened or

resting areas—as well as migration corridors—for waterfowl, colonial nesting birds, neotropical migrants and many other migratory bird species including 31 migratory non-game birds of special concern to the U.S. Fish and Wildlife Service.

What is the Great Lakes Basin Ecosystem Team?

The Great Lakes Basin Ecosystem Team brings together Service programs dealing with fisheries, national wildlife refuges, law enforcement, migratory bird conservation and external affairs. Through the team and its partners in the Great Lakes basin ecosystem, the

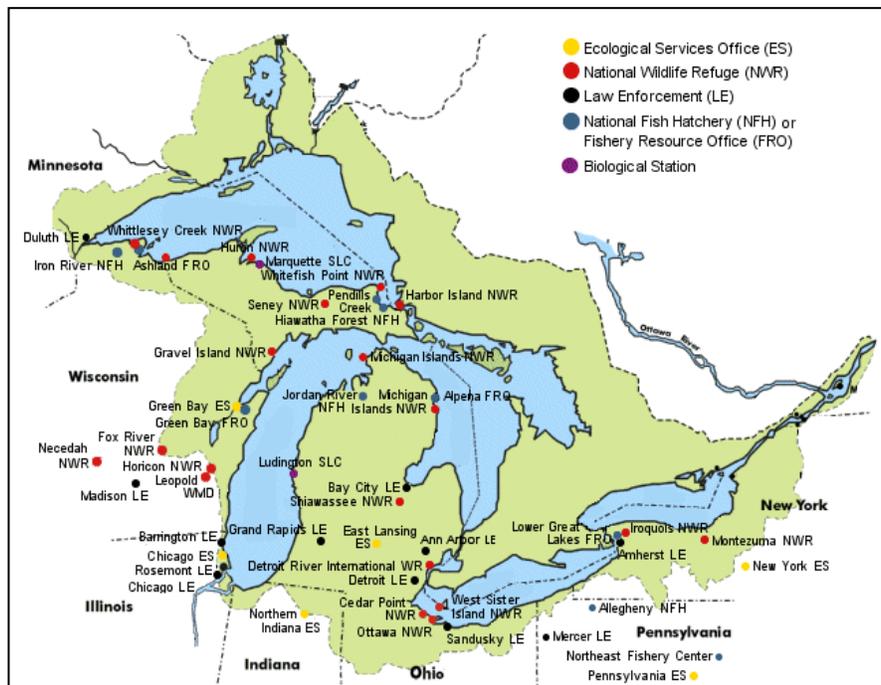
Service addresses landscape-scale resource issues.

Working across regional and programmatic lines and in partnership with others, the team has achieved considerable success in lake sturgeon restoration, islands conservation and Great Lakes GIS/decision support.

Lake Sturgeon Restoration and Management

Once abundant in the shallows of the Great Lakes, these ancient

fish have suffered population losses because of over-harvesting, habitat loss and pollution. The Great Lakes Basin Ecosystem Team and partners are working to foster communication and exchange of information relating to the study, management, and restoration of



endangered include: bald eagle, Kirtland's warbler, Karner blue butterfly, Canada lynx, Indiana bat, gray wolf, Lake Erie watersnake and Eastern prairie fringed orchid.

The Great Lakes basin ecosystem also provides critical breeding, feeding and

lake sturgeon in the Great Lakes basin, and to develop and implement a Lake Sturgeon Rehabilitation Plan for the Great Lakes.

The team continues to partner with commercial fishermen across the Great Lakes basin to collect information on lake sturgeon and has developed a



Web-based interagency lake sturgeon database and companion GIS map.

The Lake Sturgeon Committee

of the Great Lakes Basin Ecosystem Team has taken a leadership role in coordinating and standardizing lake sturgeon genetics activities. The committee sponsored a genetics workshop that provided a forum for biologists, resource managers and geneticists to discuss current knowledge, identify needs and standardize collection of lake sturgeon genetic samples.

The lake sturgeon Web site, <http://midwest.fws.gov/sturgeon/>, consolidates information from a variety of sources.

Great Lakes Islands Conservation

An international coalition has assembled under the auspices of the



Great Lakes Basin Ecosystem Team to spearhead conservation efforts on Great Lakes islands. This group has already collaborated with the ecosystem team's GIS/DSS (Decision Support Systems) committee to create

an inventory of Great Lakes islands. A pilot Decision Support System will facilitate decision-making for land acquisition, environmental review and management planning for the islands. With a grant from the EPA's Great Lakes National Program office, the islands conservation group will develop a framework for binational conservation of the islands.

Geographic Information Systems and Decision Support Systems

Geo-spatial data can assist management efforts in the Great Lakes basin at many scales--ranging from small site-specific projects to basin-wide examinations. Geographic Information Systems and Decision Support Systems are tools that can provide managers with information needed to make sound resources management decisions.

The Great Lakes GIS/DSS committee has developed a strategic plan for using these tools across the basin. The group continues to improve the Lake Michigan Islands Pilot DSS developed by the U.S. Geological Survey, and has consulted with the team's Islands Committee to determine ease-of-use, identify further needs, and update the functionality of the system. The GIS/DSS committee has begun developing islands decision support systems for each of the other four Great Lakes.

In conjunction with the Lake Sturgeon Committee and the USGS Upper Midwest Environmental Science Center, GIS/DSS committee members have developed a lake sturgeon tributary database to track these imperiled fish in the Great Lakes Basin.

Public Outreach and Education

The Great Lakes Basin Ecosystem Team's Outreach Committee supports all team activities by helping to communicate key Great Lakes conservation messages to the media, the public and stakeholders. The Outreach Committee assists other committees in developing printed and audiovisual products, Web pages and

other communications tools and determining appropriate audiences for distributing those products.

The Great Lakes Basin Ecosystem Team Web site is a compendium of current team activities, strategic and action plans for committees, and links to a variety of other Great Lakes Web sites.

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Great Lakes Basin Ecosystem Team Web site:

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