U.S. Fish And Wildlife Service

Digital Wetlands Data

Interagency Cooperation

Shared Agency Interests

The U.S. Fish and Wildlife Service (the Service) is the principal Federal agency that provides information to the public on the extent and status of the Nation's wetlands. The Service is often asked to provide scientific information on wetlands to other Federal agencies, industry and the public. These types of analyses rely on digital map information to provide fast, efficient and scientifically sound mechanisms for resolving resource management issues.

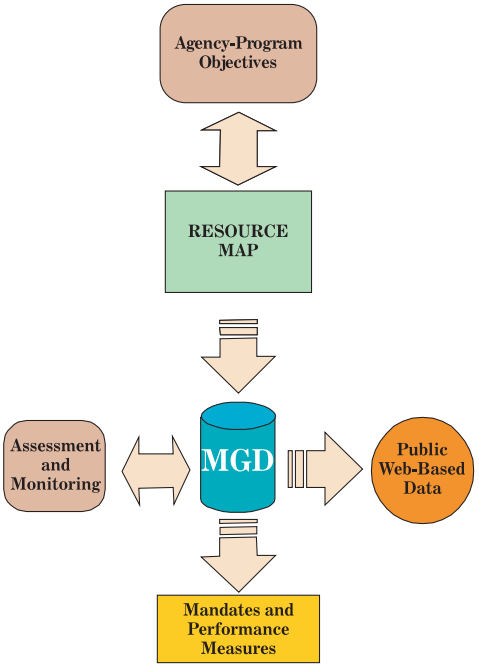
The U.S. Geological Survey (USGS) Water Resources Discipline provides reliable, impartial, timely information needed to understand the water resources of the United States. The USGS maintains expertise in technical areas of digital cartography, computer assisted mapping, geographic information systems and publications.

Through an active partnership, both the Service and the USGS are actively engaged in the system design and implementation of new tools and techniques to create, analyze and store wetlands map data. This partnership has yielded benefits to both agencies. The two agencies have entered into a multiyear interagency agreement to redesign and improve wetlands mapping capabilities.

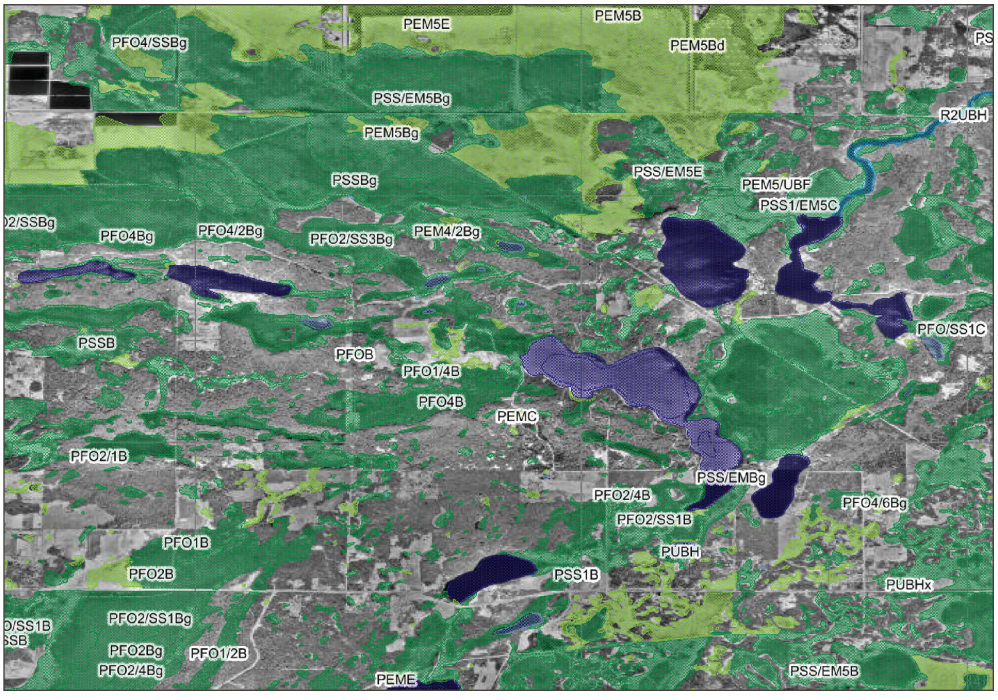
The Wetlands Master Geodatabase

The concept for a comprehensive Wetlands Master Geodatabase (MGD) stems from past successes in producing and distributing wetlands maps and wetlands status and trends information. With the advent of computer technologies that now allow the integration of large relational databases with spatial information and display, the MGD provides the Service an opportunity to capitalize on years of data collection effort by developing scientifically sound, technologically relevant tools for data analysis, distribution, archiving and updating aquatic resource information.

The creation of a Master Geodatabase for the national wetland dataset was an ambitious and very involved undertaking. The MGD provides a standardized map updating process, the creation of a wetlands relational database with temporal version capability, the incorporation of nondigital data, and a truly seamless data-storage and retrieval system. By implementing modern database technology, the MGD permits client-server database access with greatly improved interface to the Service users as well as the public. These improved capabilities, combined with enhanced access, help the Service realize the objectives of providing scientifically based applications for wetlands and water resource data.



Wetlands in Aitkin County, Minnesota



Web-Based Tools for the Nation

The development of the **Wetlands Mapper** stems from the Service's need to expand and improve the availability of digital wetlands data. The Service's strategic plan for digital wetland data is focused on the development, updating, and dissemination of wetlands data and information to Service resource managers and the public. The **Wetlands Mapper** responds to the need to integrate digital map data with other resource information to produce timely and relevant management and decision support tools.

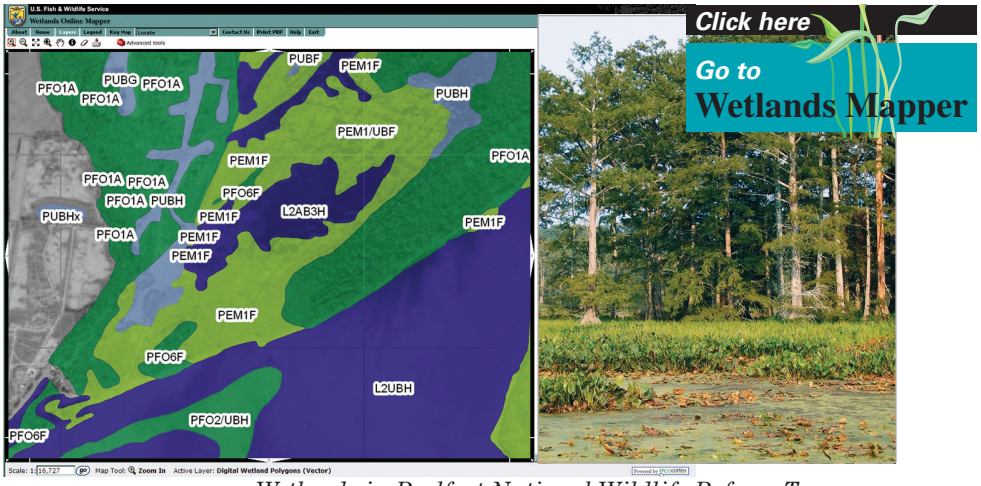
The **Wetlands Mapper** is designed to promote greater awareness of wetlands map data applications and deliver easy-to-use, maplike views of America's wetland resources in a digital format. It has been developed in collaboration with the USGS. This Federal partnership has yielded tremendous benefits in ongoing efforts to configure, improve and distribute the wetlands map information using newer technologies in computerized mapping and web-serving capabilities.

Geography and The National Map

Governments depend on base geographic information that describes the Earth's surface and locates features. They use this information for economic and community planning, land and natural resource management, education and delivery of public services. It is also the foundation for studying and solving geographically based natural resource issues. Geographic information underpins an increasingly large part of the Nation's economy.

The USGS is developing *The National Map* as a seamless, continuously maintained and nationally consistent set of online, public domain, geographic base information. *The National Map* is designed as a network of digital databases that will provide a consistent geographic data framework for the country. This base geographic information will be the foundation for integrating, sharing and using natural resource information such as wetlands information.

For the Service, an important goal is to improve the Internet delivery of updated digital data to keep pace with growing demand for wetland resource information and to support the Administration's Electronic Government initiatives to achieve operational efficiencies and enhance customer service. Incorporation of the digital wetlands data as part of *The National Map* and the Geospatial One-Stop has been instrumental in achieving this goal. Wetlands map information can be viewed on *The National Map* viewer as part of the hydrography data layer at: http:// nationalmap.gov/



Wetlands in Reelfoot National Wildlife Refuge, Tennessee

Sound Science and New Technologies

The Service's Division of Resource and Habitat Conservation and the U.S. Geological Survey have a close working relationship and are collaborating on a number of wetland projects and scientific reports, including national reports on wetland resources. The USGS tests and applies emerging technologies in cartography. The USGS also develops and maintains information databases that support the Office of Water Information and provides cartographic and geographic information systems support within the USGS and to other Federal agencies.

Additional Information

Information about the U.S. Fish and Wildlife Service is available at http://www.fws.gov/

Information about the U.S. Geologcal Survey is avaialble at http://www.usgs.gov/

Information about the Fish and Wildlife Service's wetlands maps and the Wetlands Mapper is available at http://www.fws.gov/wetlands/data/

More information about *The National Map* is available at http://www.nationalmap.gov/

Program Contacts

U.S. Fish and Wildlife Service

Gary Frazer
Assistant Director, Fisheries and Habitat Conservation
U.S. Fish and Wildlife Service
1849 C Street NW
Washington, D.C. 20240

David Stout
Chief, Division of Resource and Habitat Conservation
U.S. Fish and Wildlife Service
4401 North Fairfax Drive
Arlington VA 22203

Martin Kodis
Chief, Branch of Resource and Mapping Support
U.S. Fish and Wildlife Service
4401 North Fairfax Drive
U.S. Fish and Wildlife Service
Arlington VA 22203

Thomas Dahl
Chief, National Standards and Support Team
U.S. Fish and Wildlife Service
505 Science Drive
Madison, WI 53711

U.S. Geological Survey

Charlie Peters
Chief, Wisonsin Water Science Center
U.S. Geological Survey
8505 Research Way
Middleton WI 53562-3586

Gary Latzke
Project Lead
U.S. Geological Survey
505 Science Drive
Madison WI 53711-1061

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