# Fisheries and Aquatic Resources Node

## **NBII** Fisheries and Aquatic Resources Node

Bringing together people and information to promote fisheries conservation

#### Background

The National Biological Information Infrastructure (NBII) <www.nbii.gov> is an electronic information network that provides access to biological data and information on our nation's plants, animals, and ecosystems. Data and information maintained by federal, state, and local government agencies; non-government organizations; and private-sector organizations are linked through the NBII gateway and made accessible to a variety of audiences including researchers, natural resource managers, decision-makers, educators, students, and other private citizens.

Implementation of the NBII is being accomplished through the development of nodes that serve as interconnected entry points to the NBII and the information held by partners. These nodes function as fully digital, distributed, and interactive systems that focus on developing, acquiring, and managing content on a defined subject area (thematic nodes) or a geographic region (regional nodes). One of the initial thematic nodes created in 2001 was the Fisheries and Aquatic Resources (FAR) Node.

#### The Node

Fisheries and aquatic resources are economically, ecologically, culturally, and aesthetically important to the nation, yet many of these resources

are in decline due to factors such as habitat alteration, degrading water quality, invasive species, water availability, and inadequate stock management. Successful conservation and restoration of these resources requires access to data and information on fish biology, population dynamics, management, hatcheries, water quality, and aquatic habitat and ecosystems. To fill this need, the FAR Node will provide an integrated, comprehensive Web-based resource that will: 1) serve and access fishery and aquatic databases, 2) link to fishery and aquatic resource information sites, and 3) act as a larger scale coordinating site for fisheries and aquatic resources standards. Essentially, the FAR Node will bring together the people and information necessary to promote successful fisheries conservation.

## Products

Initial FAR Node efforts have focused on strategic planning and the development of node infrastructure: online mapping and database capabilities and a process for cataloguing existing Internet fisheries resources.

Recent FAR Node products include:

**FAR Node strategic plan** to guide node content and application development. The Plan was created



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- Serve and access fishery and aquatic databases,
- Link to fishery and aquatic resource information sites, and
- Act as a coordinating site for fisheries and aquatic resources standards.

with the aid of a guidance committee consisting of representatives from a number of different federal, state, and non-government fisheries agencies.

FAR Data Access Wizard helps you discover and access fisheriesrelated data. Data can be searched using keywords, themes, geographic extent, and data providers. Most of the available data is in a spatial, or GIS, format and can be accessed in a variety of ways:

- Data can be directly downloaded as-is to your desktop computer.
- Multiple data sets can be added to a "data cart" to be downloaded simultaneously. Data in your data cart can also be clipped to



Sturgeon (left) and brook trout (right). FAR is currently creating information systems for both species. Images from the U.S. Fish and Wildlife Service National Image Library.

Fisheries & Aquatic Resources
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8 Total Results. <u>View All</u> Filter by Category: Addresses & Places (0) Atmosohere (0)	Search Results Return to Search Page View Your Data Cart	FTP Download - 🖺 Data Applications & Viewers - 🌑 Add To Your Data Cart For Download - 👾 Map Services (ArcMap/GoogleEarth/WMS) - 🖇		
<u>Biology (5)</u> Boundaries (0)	Title	Originator		
Economy (0) Elevation (0) Environ. Resources (0)	1996 Brood year Steelhead growth and early life-history transitions	National Oceanic and Atmospheric Administration (NOAA)	1990	
Farming (0) Geology(0) Health (0) Imagery & Base Maps (0)	Salmonid migrations at Auke Creek, Alaska	National Oceanic and Atmospheric Administration (NOAA)	1990	
inland Waters (6) Man-Made Structures (0) Military Intel. (0)	Approved Trout Water Bodies (Points)	Pennsylvania Fish and Boat Commission	2008	🗈 🛛 ÷ 🖇
<u>) Dceans (0)</u> Planning & Landuse (0)	Approved Trout Water Bodies (Polygons)	Pennsylvania Fish and Boat Commission	2008	🗈 ÷ 🖇
<u>Society &amp; Culture (0)</u> <u>Fransportation (0)</u> Jtilities (0)	Approved Trout Waters (Flowing Waters)	Pennsylvania Fish and Boat Commission	2008	🗈 ÷ 🖇
ilter by Access Type:	Warmwater/Coolwater Fisheries - Lakes points	Pennsylvania Fish and Boat Commission	2008	🗈 ÷ 🖇
<u>FTP (6)</u> <u>Clip &amp; Reproject (6)</u> nternet MapServices (6)	Warmwater/Coolwater Fisheries - Lakes polygon	Pennsylvania Fish and Boat Commission	2008	🗈 ÷ 🖇
	Warmwater/Coolwater Fisheries - Streams	Pennsylvania Fish and Boat Commission	2008	🗈 ÷ 🖇

FAR Data Accesss Wizard showing results of a theme search. Resources are available for download or for use in Web mapping applications.

a specific geographic area and reprojected on-the-fly prior to download.

 Many data sets can also be viewed online via Web mapping applications or accessed dynamically by a desktop GIS client using ArcIMS or WMS MapServices.

Live Maps and Data contains a collection of databases and mapping applications at global, national, and regional scales. The data that can be accessed include species distributions, fish disease occurrences, and water quality.

**FAR Resources** on fish and aquatic species, management, data and mapping, recreational information, and educational references of value to aquatic resource professionals.

## **Projects**

## National Fisheries Data

**Infrastructure** brings several distinct fisheries data systems under a common query structure and enables the summarization of nationwide fisheries information from different spatial scales. This effort is in collaboration with those completing the National Fish Habitat Assessment in support of the National Fish Habitat Action Plan. **FishBase for the Americas** will enhance Western Hemisphere fisheries information within FishBase by incorporating regional search capabilities, South American fisheries biodiversity maps, Columbian fisheries information, and translations from English into both Spanish and Portuguese.

**Eastern Brook Trout Data Management System** will be created to aid in updating the status maps of native brook trout encompassing the entire native range of the species.

**NBII Collaboration Portal** support is provided for Federal Fish Passage Action Plan and Eastern Brook Trout Joint Venture communities, which are linked to the Fisheries and Aquatic Resources Node Community in the portal structure to enhance future collaboration efforts.

## Partners

*Non-Government and Educational* Penn State Institutes of Energy and the Environment **■** FishBase **■** Conservation Management Institute **■** Michigan State University **■** Loftus Consulting **■** Center for Ecology of the Venezuelan Institute for Scientific Investigations **■** Association of Fish and Wildlife Agencies **■** Atlantic, Pacific, and Gulf States Marine Fisheries Commissions 

Trout
Unlimited

#### State/Federal

U.S. Geological Survey • U.S. Fish and Wildlife Service • U.S. Forest Service • NOAA-Fisheries • Indiana, Wyoming, New York, and other State Natural Resource Agencies • Aquatic GAP

#### International

UN/FAO-Fisheries 
Inter-American
Biodiversity Information Network

## **For More Information**

Andrea Ostroff Node Manager USGS-NBII Program 12201 Sunrise Valley Drive, MS 302 Reston, VA 20192 Phone: 703-648-4070 Fax: 703-648-4224 E-mail: aostroff@usgs.gov

Kelly Lotts Content Manager Big Sky Institute Montana State University Phone: 360-305-8822 E-mail: lotts@montana.edu

Find us on the Web at <http://far.nbii.gov>.