# Fisheries and Aquatic Resources Node of the National Biological Information Infrastructure

# Bringing together people and information to promote fisheries conservation

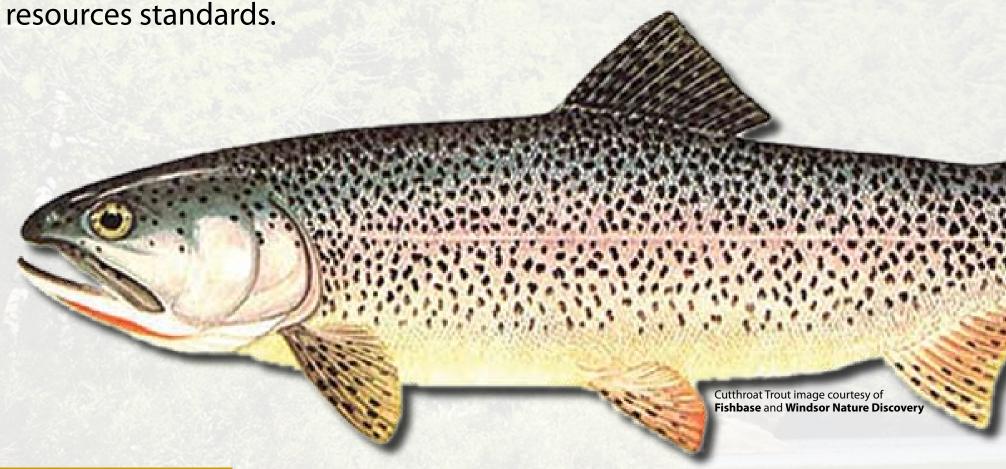
The FAR Node of the NBII serves as an integrated, comprehensive, web-based resource that aids restoration and conservation efforts.

### The FAR node has been developed with four primary goals:

- 1. Provide access to information via species and geographic approaches.
- 2. Develop a clearinghouse of FAR-related information.
- 3. Promote the development of standards for FAR-related data.
- 4. Partner with existing programs to enhance fisheries applications.

### The FAR website:

- 1. Serves fishery and aquatic databases through the development of GIS based mapping applications and database development
- 2. Links to fishery and aquatic resource information web sites databases
- 3. Acts as a large-scale coordination tool for fisheries and aquatic resources standards.



## The FAR Team:

**USGS** – The FAR Node Manager at USGS coordinates node activities and works with partners throughout the country to further to goals of the node and the NBII.

The Penn State Institutes of Energy and the Environment (PSIEE) - PSIEE is the central structure for environmental research, education, and outreach at Penn State. As the FAR technical lead, PSIE staff provide: (1) expertise needed to create FAR mapping applications, (2) integrated database development and search interfaces, and (3) servers to host FAR data and applications.

### **Project Partners:**

**Fishbase for the Americas** - Fishbase and FAR partnered to enhance the content and usability of Western Hemisphere fisheries information within FishBase.

**Multistate Aquatic Resources Information System (MARIS)** - MARIS and FAR are working together to integrate fisheries databases from state government agencies across the country.

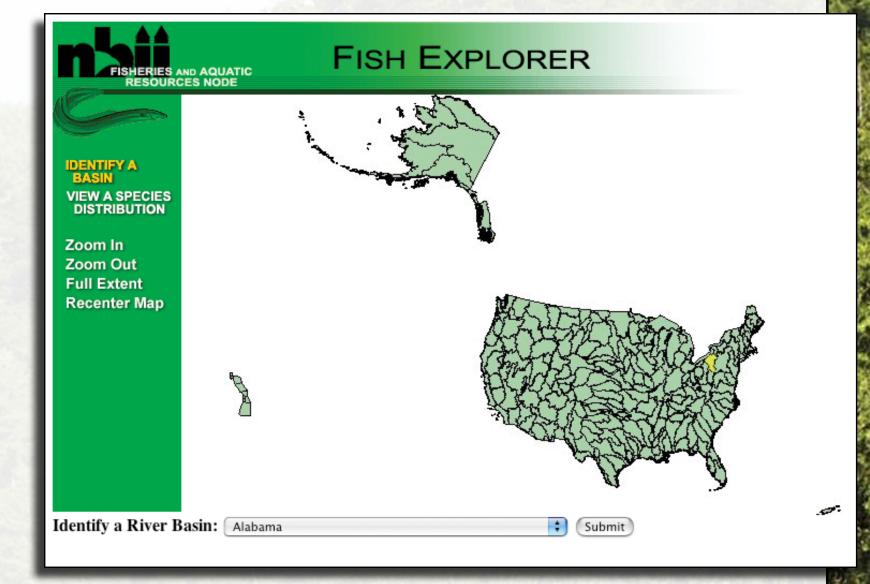
**Ocean Biogeographic Information System (OBIS)** - FAR partners with OBIS which is creating a U.S. regional pilot node within OBIS that will be an integral component of the FAR node.

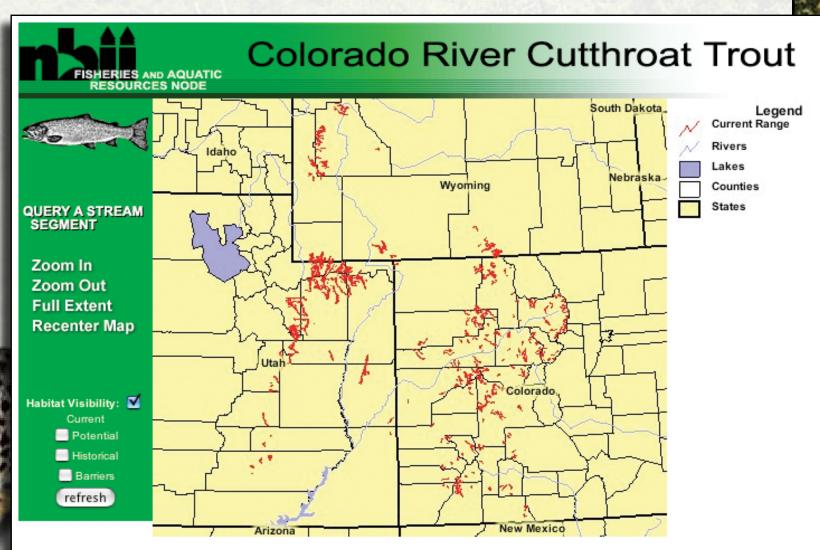
**Pennsylvania Fish And Boat Commission** - The Pennsylvania Fish and Boat Commission has provided data to the Eastern Brook Trout Initiative and the Multistate Aquatic Resources Information System and works with the FAR team share information across state borders.

**Delaware Aquatic Gap** - The Commission is working with FAR on the development of the Delaware River Aquatic GAP project.

Southeast Monitoring And Assessment Program (SEAMAP) - FAR is working with the Central Southwest/Gulf Coast Information Node and the Gulf States Marine Fisheries Commission to modernize the fisheries independent sampling database in the Gulf of Mexico and provide an internet-based interface.

New York Department of Conservation – FAR is working with NY DEC to develop GIS based tools and integrate the DEC fisheries database into the MARIS system.

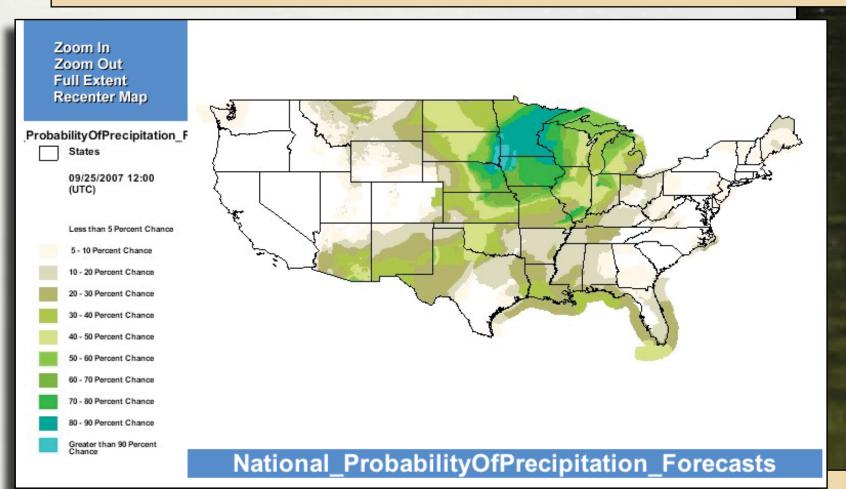




# Geospatial Applications and Clearinghouse Activities

One of the primary goals of FAR is the development of web based geospatial applications, Internet Map Services (IMS), and a clearinghouse of fisheries and aquatic resources data. Geospatial applications include the US Fisheries Explorer, the Delaware River Mapper, and the Colorado Cutthroat Trout pilot project.

Internet Map Services (IMS) available through FAR include weather and climate data such as precipitation forecasts and satellite imagery from the U.S. National Weather Service to state level streams, boundaries and aerial photography.



The FAR clearinghouse is organized into the following categories: aquatic organisms, aquatic systems, recreation, references, research and conservation, and tools.

**Descriptions of the categories are as follows:**Aquatic Organisms: This section identifies resources found within the NBII catalog that pertain to freshwater fishes, marine fishes, aquatic invertebrates, endangered species, and invasive and non-native species.

Aquatic Systems: This section identifies resources found within the NBII catalog that pertain to

rivers, estuaries, wetlands, lakes, and oceans.

Recreation: This section identifies resources found within the NBII catalog that pertain to fishing

and boating.

References: This section identifies resources found within the NBII catalog that pertain to aquatic

protocols, legal information, and reports. **Research and Conservation:** This section identifies resources found within the NBII catalog that

pertain to genetics, aquatic species and ecosystem health, the restoration of aquatic species and habitats, aquatic system monitoring, and dams and fish passage. **Tools:** This section identifies resources found within the NBII catalog that pertain to modeling,

aquatic indices, and information systems.