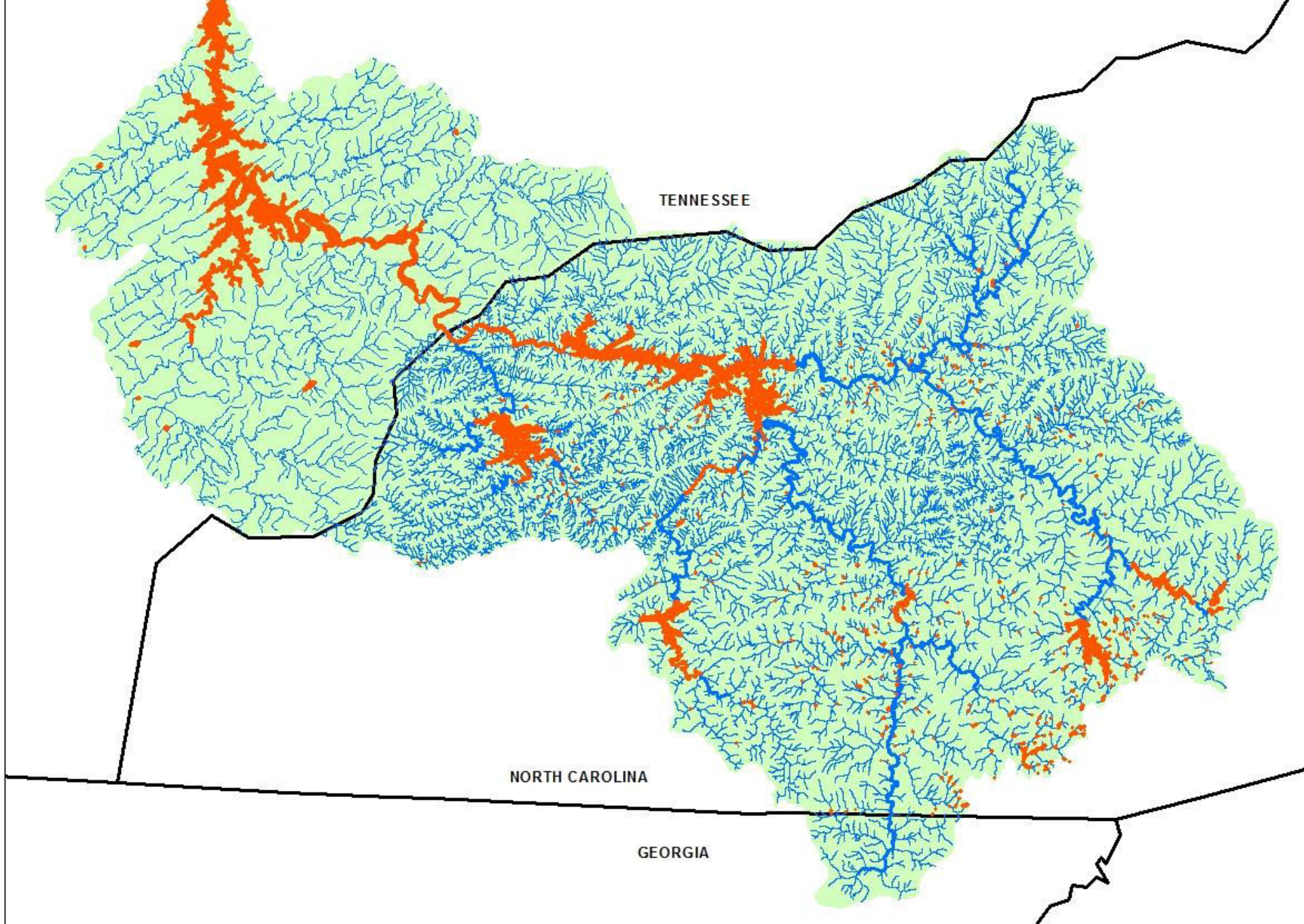


# **Little Tennessee River Native Fish Conservation Partnership**

*Aquatic Conservation on a Landscape Scale*

*Andrea Leslie*  
*NC Wildlife Resources Commission*

*Fred Harris*  
*NC Wildlife Federation*  
*Fisheries Conservation Foundation*



# Little Tennessee River Basin



nal Forest  
Smoky Mountains National Park  
lands  
Tennessee River watershed



# Native Biodiversity

Photo: JP Shute

>100 fish, 10 mussels, 12 crayfish species

32 fish, mussel, and crayfish rare or listed

Little Tennessee basin endemics:  
Citico Darter, Smoky Madtom, Little Tennessee River Crayfish, Tuckasegee Crayfish



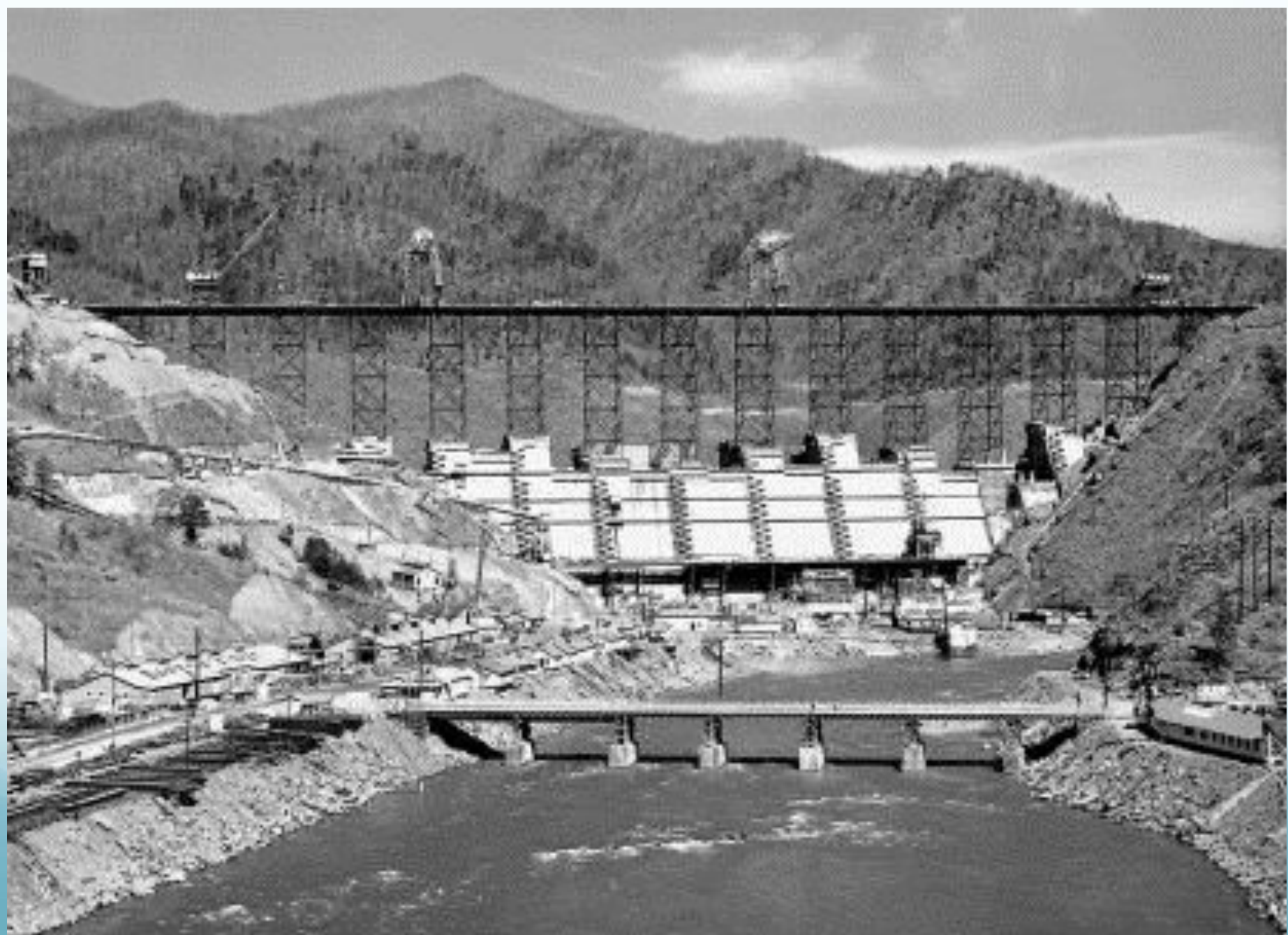
Photo: CFI

# Diverse Aquatic Habitats



# Impacts





# Native Fish Conservation Partnership

- >20 organizations – federal agencies, NC/TN/GA agencies, conservation organizations, EBCI, hydropower industry
- Steering committee, conservation teams
- Mission, goals & objectives, meetings





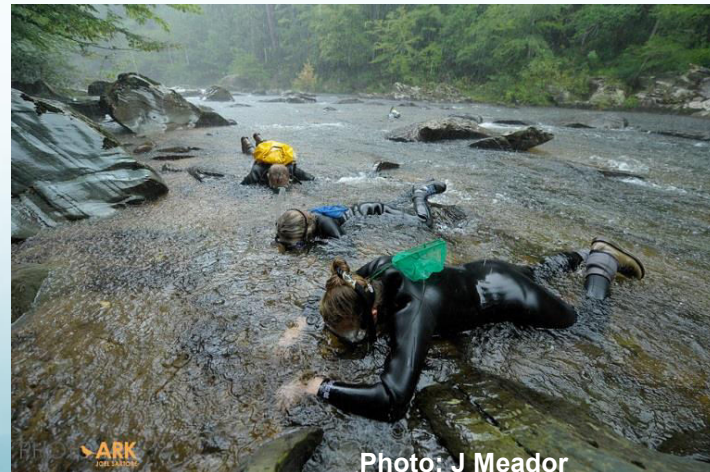
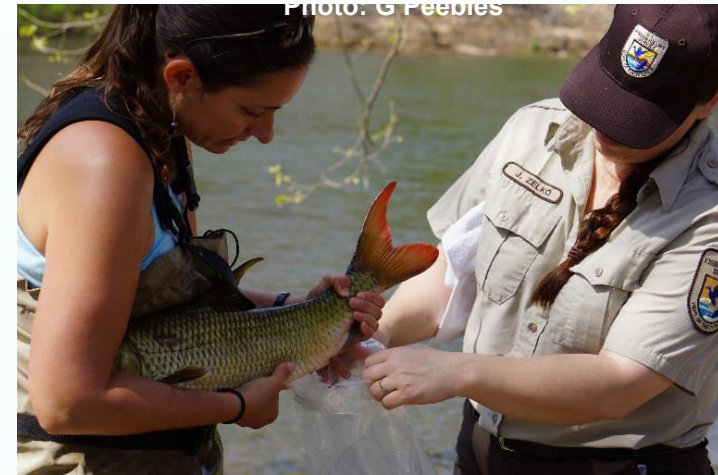
# Native Fish Conservation Area: Four Critical Elements

- (1) maintain processes that create habitat complexity, diversity, and connectivity
- (2) nurture all of the life history stages of the fishes being protected
- (3) include a large enough watershed to provide long-term persistence of native fish populations
- (4) provide management that is sustainable over time



# Partners in Action

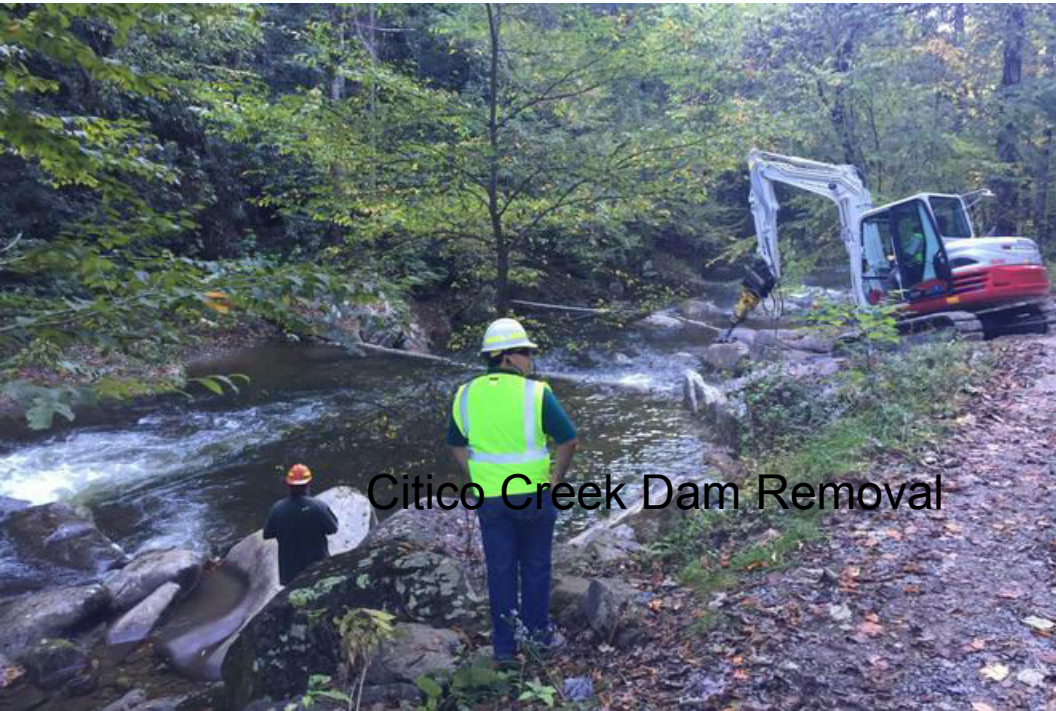
- Habitat restoration
- Land protection
- Outreach and education
- Biological community restoration



# Value Added?

- Providing Focus to Partners
- Collaborating on Priorities
- Pooling Resources

# American Rivers



Citico Creek Dam Removal



Tuckaseegee Blue Trail

# Mainspring Conservation

## Eastern Band of Cherokee Indians



# Tennessee Valley Authority



Shade Your Stream

## Why is shading important?



### Water Quality

Vegetation along stream banks keeps soil, pesticides, and fertilizers from getting into the stream.



### Roots

Roots anchor the soil, reduce flood damage, and take up excess fertilizers.



### Food & Shelter

Leaves and branches provide food and shelter for insects, fish, and other aquatic life.



### Water Flow

A healthy shaded stream slows down water, which helps maintain stable



### Cool Temperatures

Shade keeps the water cool, allowing fish and aquatic life to thrive.



### Wildlife Habitat

Shaded streams provide valuable habitat for wildlife.



## GET INVOLVED

### Upcoming Events

Mills River Stream Repair Workshop

February 17 @ 8:30 am - 4:00 pm EST

Mars Hill Stream Repair Workshop

March 30 @ 8:30 am - 4:00 pm EDT

[View All Events](#)

Have additional questions? Need to talk to an expert? [Click here](#) to contact a local expert in your area.

University of Georgia study finds value in shading your stream.

[Read the article.](#)

### Organizations



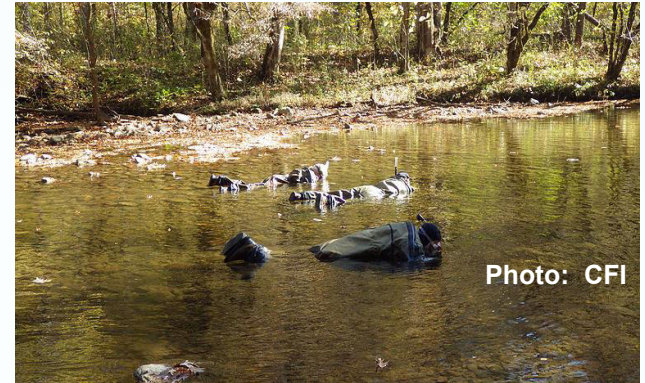
Photo: Mainspring

# Bringing in the Money

- Duke Water Resources—video project and web mapper
- Tennessee Valley Authority—riparian restoration
- Fisheries Conservation Foundation—basic support
- NC American Fisheries Society—snorkeling equipment
- NC Wildlife Federation—snorkeling equipment

# Partner Work

- Conservation Fisheries Inc: monitoring of the fab four in Citico Cr and Tellico R
- Great Smoky Mountains National Park: Blotchside Logperch reintroduction into Abrams Creek
- Mainspring Conservation Trust: barrier removal on Brook Trout stream
- EBCI: mussel reintroduction feasibility study in the Oconaluftee River





# Educational Videos

Illustrated

through photo, video, & film

HIDDEN RIVERS

HR | VIDEO

HR | GALLERY

THE LOST FISH

UPRIVER

RIVERWEBS

4 THE LOVE OF RIVERS

AMPHIBIAN DEFORMITIES

FJ ORGANIZATION

ABOUT FJ

MEMBERSHIP

IMAGE ARCHIVES

FILM PRODUCTION

WORKSHOP SERIES

DONATE TO FJ

IMAGE LICENSING

CONTACT

NAIAD.ORG

MAILING LIST

FOLLOW



# Little Tennessee Web Mapper

- House & display data

Identify data gaps

Visualize threats

Determine focal areas for management actions

The screenshot shows a web browser window displaying the 'Fish Habitat Decision Support Tool' interface. The browser's address bar shows the URL 'Little Tennessee River Basin Native Fish Conservation Area Designation | Flickr'. The page features a navigation menu with options: 'VISUALIZATION', 'FUTURING', and 'RANKING'. Below the menu, there are links for 'HOME', 'TUTORIALS', 'CASE STUDIES', 'METADATA', 'CONTACT', and 'PRESS'. The main content area is divided into two sections: 'ABOUT THE TOOL' on the left and a map area on the right. The 'ABOUT THE TOOL' section contains text describing the tool's funding and purpose. The map area displays a satellite-style map of the Little Tennessee River Basin with various colored overlays representing different data layers. An orange callout box on the map reads 'CLICK THE MAPS TO USE THE TOOL'. The Windows taskbar at the bottom shows the system clock as 12:06 PM on 2/12/2017.

File Edit View History Bookmarks Tools Help

Little Tennessee River Basin... Fish Habitat Decision Support... Fish Habitat Tool - Home USFWS Decision Support T...

Little Tennessee River Basin Native Fish Conservation Area Designation | Flickr

Most Visited Carolina Public Press... (27 unread) - jowaterg... Welcome to Laserfich... StreamStats in North... Story Maps | Story Maps On the forest cover-w... Goudreau Reg Tracker 5 Easy Rotator Cuff Ex...

**FISH HABITAT DECISION SUPPORT TOOL**

VISUALIZATION FUTURING RANKING

HOME • TUTORIALS • CASE STUDIES • METADATA • CONTACT • PRESS

**ABOUT THE TOOL**

This tool was created with funding from the United States Fish and Wildlife Service to provide resource managers and the general public with access to the extensive spatial data and results produced from multiple fish habitat assessments.

Additional assessments performed under funding and guidance from the North Atlantic Landscape Conservation Cooperative and the Atlantic Coastal Fish Habitat Partnership are also included within the same web mapping application.

**CLICK THE MAPS TO USE THE TOOL**

Photo: CFI 100% 12:06 PM 2/12/2017

