

Landscape Conservation Cooperatives Science Priority Projects for FY2010:

Forecasting Streamflow

The Northeast Region of the U.S. Fish and Wildlife Service (Service) has been working with regional partners to develop the North Atlantic Landscape Conservation Cooperative (NALCC). The NALCC is a conservation science partnership that provides the tools and resources required to plan, design and evaluate conservation. These LCC partnerships consist of federal agencies, states, tribes and non-governmental organizations. The Northeast Region has been working with the NALCC partners to synthesize regional science priority needs. In the future, the fully functioning NALCC steering committee will provide recommendations to fund the projects that best address identified science priority needs.

In fiscal year 2010, the Northeast Region received \$920,000 to fund regional science projects that address identified science priority needs. Guided by regional science priority needs previously identified by existing partnerships including Brook Trout Joint Venture, the Service has identified *Forecasting changes in stream flow, temperature, and brook trout population in the eastern U.S. as a result of climate change: what's going to happen, how certain are we, and how can we help managers help fish?* as one of three projects that meet some of those needs and will be funded in fiscal year 2010.



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Lead Investigators:

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Research Partners:

The Service, USGS, The Nature Conservancy, National Fish and Wildlife Foundation, USGS Climate Change and Wildlife Center, U.S. Forest Service.

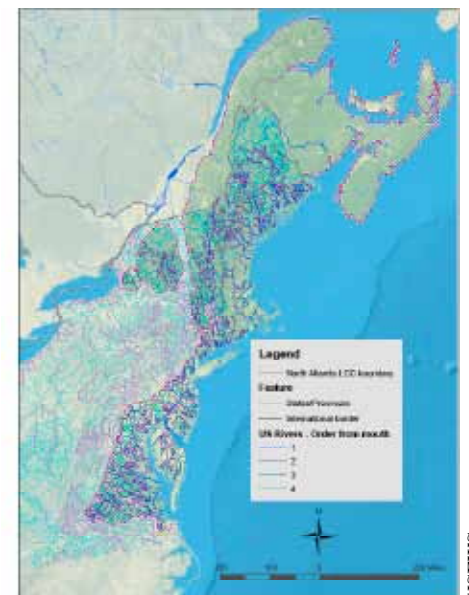
Amount of funding:

\$420,000 in fiscal year 2010

Project Description:

Forecasting changes in stream flow, temperature and salmonid populations in the eastern U.S. as a result of climate change will develop a set of tools for managers to evaluate how to manage streams for fish in the face of a changing climate. The goal is to develop a user-friendly decision-support system (DSS) that will enable managers to make the most informed decisions about conservation actions regarding stream fish. Some products will be tools such as maps of stream fish

habitat and models for eastern brook trout that conservation managers will use to evaluate the effects of different management actions on fish in stream networks as small as a 30-foot long and river basins as large as hundreds of miles. These maps and models will identify which conservation actions are going to be the most effective. Managers will be able to use the DSS



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Example of a possible project tool



and associated products to incorporate information from climate change models into existing conservation models to develop comprehensive landscape-scale conservation plans.

If you have any questions regarding this project or the NALCC, please email the NALCC at northeast_lcc@fws.gov or visit our website at <http://www.fws.gov/northeast/climatechange/lcc>

U.S. Fish & Wildlife Service
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Brook trout