







## Decision Support Tools for Conservation Design in the North Atlantic

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Restore America's Estuaries 7th National Summit



November 5, 2014



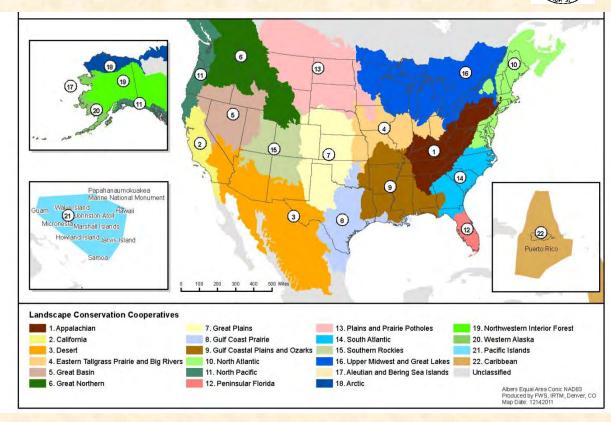
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#### Landscape Conservation Cooperatives Geographic Areas and Objective





- 22 established in 2010 by DOI
- Regional
- Self-directed partnerships
- Link science to management
- Goal: landscapes that sustain natural resources

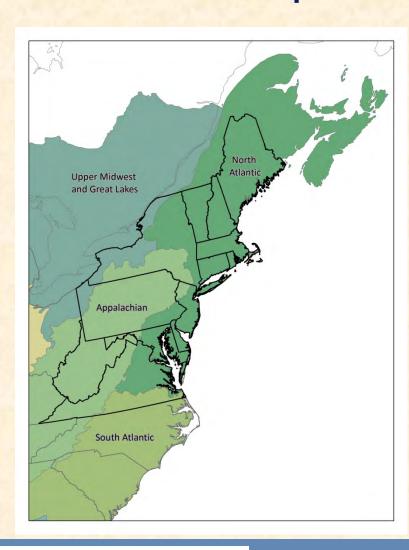




#### The North Atlantic LCC - Partnership

- 7 U.S. federal agencies,
- 1 Canadian federal agency
- 14 state agencies
- 1 tribal representative
- 6 non-governmental organizations





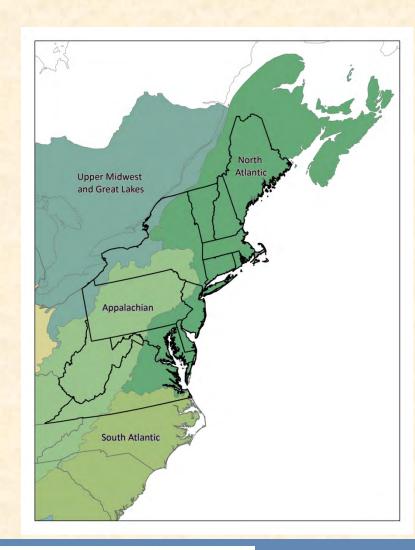
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#### North Atlantic LCC

#### Mission:

provides a <u>partnership</u> in which the conservation community works together <u>to address</u> increasing land use pressures and widespread resource <u>threats</u> and uncertainties <u>amplified by a rapidly changing climate</u>

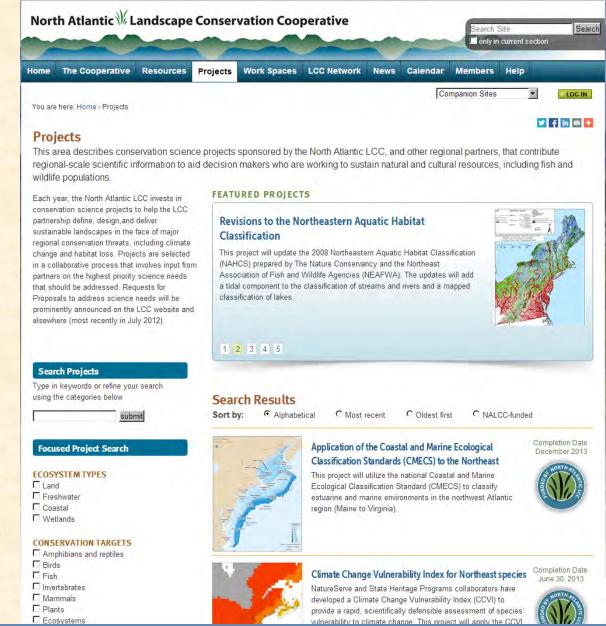
by jointly developing and delivering scientific *information and tools* needed to prioritize and guide *more effective conservation* actions towards common goals



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#### LCC Science Projects

- Over 20 completed or ongoing science projects providing foundational data, assessments and decision support for terrestrial, aquatic and coastal systems
- http://www.northatlanticlcc .org/projects



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# Examples of Decision Support Projects Related to Coastal and Estuarine Restoration

- Hurricane Sandy Resiliency Projects: Tidal Marshes and Beaches in face of storms and sea level rise
- Aquatic Connectivity and Flood Resiliency for Road-Stream Crossings



# History: Aquatic Decision Support tool for Watersheds and Estuaries

- 2012 LCC Science Needs Process, included ACFHP and other partners
- High priority: better understand distribution, threats, and status of aquatic and coastal species
- 2012 RFP



Project History, part 2

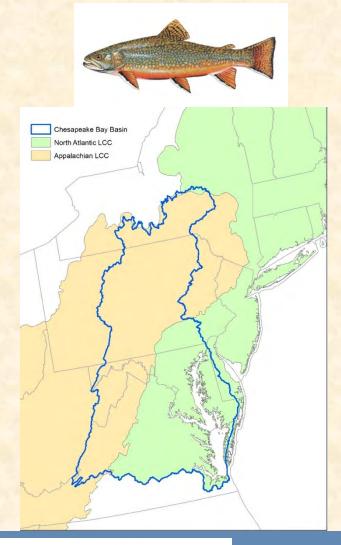
Review panel selected Decision
 Support Tool project led by
 Downstream Strategies

- Project began in 2013
- Multiple species: also includes tool for winter flounder
- Potential for river herring tool being evaluated



#### Why Brook Trout in the Chesapeake?

- Nation's largest estuary at 64,000 square miles
  - 150 major rivers and streams
  - Portions of 6 states (MD, VA, PA, NY, DE, WV) and Washington, D.C.
- Nation's most productive estuary
  - 500 million pounds of seafood harvested annually
  - Estuary health depends on upstream and upland conditions
- Brook trout as indicator of high quality headwater aquatic habitat



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### **Project Team**

Oversight and Coordination



North Atlantic LCC
U.S. Fish and Wildlife Service – Julie Devers,
Callie McMunigal, Meredith Bartron



Atlantic Coastal Fish Habitat Partnership – Emily Greene (former rep.)



Eastern Brook Trout Joint Venture - Steve Perry

Tool Development:





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