



State of the LCC

A Review of Progress and Next Steps

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North Atlantic LCC Steering Committee Meeting
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North Atlantic  Landscape Conservation Cooperative



Headlines: Where We Are

- LCC has developed the partnerships and capacity to achieve our mission
- LCC and partners have supported priority projects consistent with the northeast conservation framework and strategic plan
- LCC and partner projects are at the stage where products (information and tools) are supporting conservation designs & decisions
- LCC has increased the capacity and network to communicate with and deliver science to a variety of key audiences

Headlines: Where We Are

- *“Why does this magnificent applied science which saves work and makes life easier bring us so little happiness? The simple answer: because we have not learned to make sensible use of it.”* Albert Einstein
- Partners need to be aware of what information and tools are available; how to access them; how to use them; (how not to use them); how to provide feedback to improve them; why they are relevant; how to integrate them; and and how they can effectively distribute them through their networks.
- Our partnership will be critical for these next effective communications and science delivery steps

Headlines: Where We Are

- Information Management
 - Information is being made more easily available and useful through improved data portals, websites and online tools
- Science Delivery
 - Increased focus on delivering information and tools through translation and synthesis, training, workshops, supporting delivery networks and demonstrating and collaborating on applications
- Conservation Design
 - Delivery through increased focus on collaborative conservation designs to integrate information and assess how much of what conservation actions are needed where to sustain natural and cultural resources across the region and landscapes within the region -- Connect the Connecticut, Regional Conservation Opportunity Areas (RCOAs).

Headlines: Where We Are Going

- A fully developed science delivery network that is guided by partners, proactive and responsive to partner needs
- A first iteration of a regional conservation design – Regional Conservation Opportunity Areas that is used, tested and improved upon
- Science projects and partnership building that continues to address key gaps and needs
- A strategic planning update process that engages partners and incorporates all of the components of our work

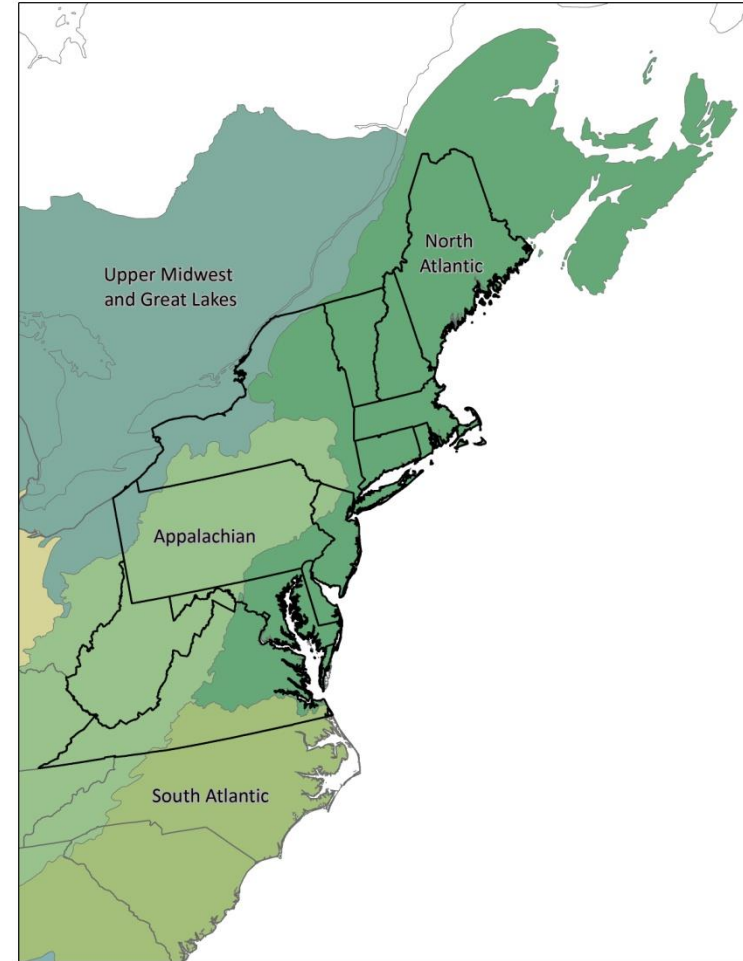


The North Atlantic Landscape Conservation Cooperative

- Partnership Development & Operational Capacity
- Science Projects & Products
- Science Delivery
- Conservation Design
- Communications

- Issues Identified & Next Steps for 2016

- National Academy of Sciences actions needed



Partnership

Development &

Operational Capacity

Steering Committee



- 33 Members (14 State, 1 Tribal, 8 Fed., 1 Canadian, 8 NGO, CSC)
- 2015 average meeting attendance = 45 attendees, S.C. attendance 91%
- 2015 average call attendance = 27 attendees, S.C. attendance 55%
- Decisions on priority projects; critical guidance on conservation design, delivery and strategic directions; support to Congress

North Atlantic  Landscape Conservation Cooperative



Partnership Development & Operational Capacity



- Science Technical Committee
 - 54 members (10 State, 28 Fed., 2 Can., 10 NGO, 4 LCC)
 - Sub teams: aquatic (12), terrestrial/wetland (16) and coastal/marine (15)
 - Provided thorough input and recommendations on science needs
 - Also, project oversight teams, proposal review teams, peer reviewers
- Science Delivery Team
 - 30 members (8 State, 10 Fed., 9 NGO, 3 LCC)
 - Met jointly with technical teams
 - Provided feedback on existing delivery projects, developed consensus recommendations on additional needs
- Regional Conservation Opportunity Area (RCOA) Team with states
 - NEFWDTC appointed RCOA team of states and NGOs
 - Reviewing alternative methodologies for mapping RCOAs
 - Expanded to include other partners now 64 members and 5 sub teams
 - Implementing Version 1.0



Partnership Development & Operational Capacity

Our Staff

Andrew Milliken

North Atlantic LCC

Coordinator

Scott Schwenk

Science Coordinator

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Science Delivery

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Assistant to Science

Coordinator

Bridget Macdonald

Communications Specialist

Stephanie Cuenoud

Science Delivery Assistant

Emily Powell

Coastal Resilience

Research Associate



Partnership Development & Operational Capacity: Budget

- Budget Allocation within LCC
 - Balanced among:
 - Organizational capacity
 - Ongoing and new science projects
 - Science delivery capacity and projects
- FY 2013-2016 allocations

FY	Capacity	Projects	Total
2013	\$805,365	\$1,135,881	\$1,941,246
2014	\$825,000	\$720,000	\$1,545,000
2015	\$800,047	\$744,953	\$1,545,000
2016	\$807,696	\$637,922	\$1,445,618

Plus
Hurricane Sandy
& National LCC



LCC Science Projects

- Nearly 30 completed or ongoing science projects providing **foundational data, assessments and decision support** for terrestrial, aquatic and coastal systems
- Projects and Products tabs of LCC website

The image displays two screenshots of the North Atlantic Landscape Conservation Cooperative (LCC) website. The top screenshot shows the 'Projects' tab highlighted in red in the navigation menu. The main content area features a 'Projects' section with a description of conservation science projects and a 'FEATURED PROJECTS' section. The featured project is 'Forecasting Changes in Aquatic Systems and Resilience of Brook Trout', which aims to develop tools for protecting and restoring streams for brook trout and other aquatic resources. The bottom screenshot shows the 'Products' tab highlighted in red. The main content area features a 'Products' section with a description of a searchable database and a 'Search Results' section. The search results show a product titled 'Brook Trout in the Chesapeake Bay Watershed: On-line Decision Support Tool to Assess Current and Future Habitat', which provides a decision support tool for assessing the status of aquatic species and their habitats.

How Projects and Products Fit Together

- These **science projects and their resulting products** fit together and build towards information, tools and capacity needed to make more informed conservation decisions. The projects include those that develop:
 - **foundational information** providing the basis for assessing condition of and threats to priority resources;
 - **assessments** of the condition, major threats and vulnerabilities to these resources; and
 - **decision support tools** including conservation designs that use the foundational information and assessments to help partners prioritize and decide how much of what conservation actions are needed where to sustain these resources
- **Science delivery** projects make information and tools available, understood and used by decision makers and demonstrate their applications.

Regional Information on Data Basin

Resource Category	# of Datasets
Climate change	65
Terrestrial	53
Aquatic	19
Coastal and marine	36
Conservation Design	59
TOTAL	232

The screenshot shows the homepage of the North Atlantic Landscape Conservation Cooperative Conservation Planning Atlas. The header includes the site name, a search bar for "North Atlantic LCC CPA", and navigation tabs for "Get Started", "Browse", "Create", and "My Workspace". A central banner features a video player with the text: "The North Atlantic LCC Conservation Planning Atlas is a platform for easy access to high-quality geospatial datasets, maps and information to facilitate partner-driven conservation." Below this is the URL nalcc.databasin.org and a "Take a Tour" button. The main content area is divided into sections: "North Atlantic LCC Galleries..." with sub-sections for Terrestrial (fox), Aquatic (flower), and Coastal and Marine (wetlands); "Recommended Items" with links to "Chesapeake Bay region sea-level rise modelling" (Gallery), "USGS National Land Cover Database (2006, 2001, 1992)" (Dataset), "Northeast Terrestrial Habitat and Secured Lands Map" (Map), and "Northeast Secured Lands 2011 Gap Status 1 and 2 only" (Dataset); and "Northeast Terrestrial Habitat and Secured Lands Map" with a map and the text: "This is a pilot map for the North Atlantic LCC to begin using DataBasin."

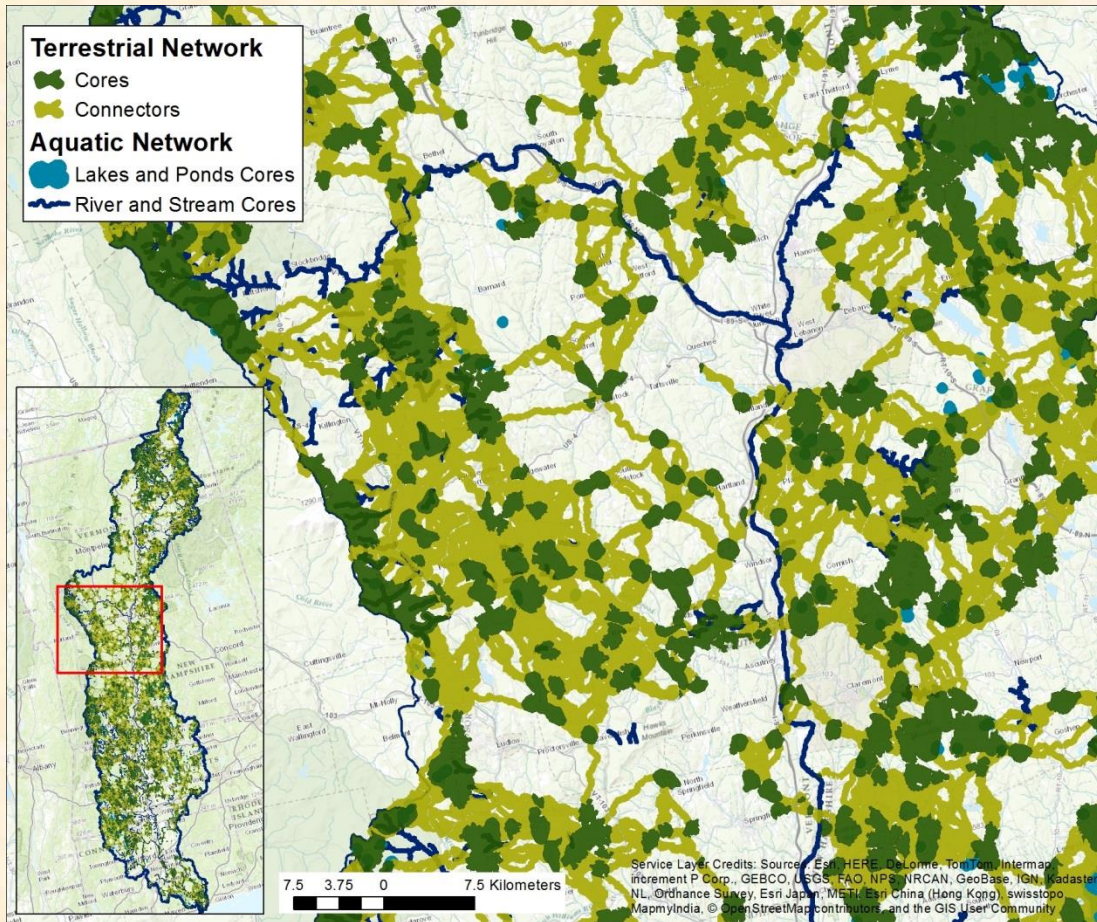
Why is this Information Relevant? Landscape/Regional Context to Guide Conservation Planning and Actions

- Where should we invest in **land protection**, and how much?
- How should we **manage** protected lands?
- Where should we invest in ecological **restoration**?
- Where/how should we focus **species protection and restoration**?
- Where and how should we influence local **land use / open space planning**?
- Where should **infrastructure** go to have least impact?



Where should we invest in land protection, and how much?

Connected Core Area Network



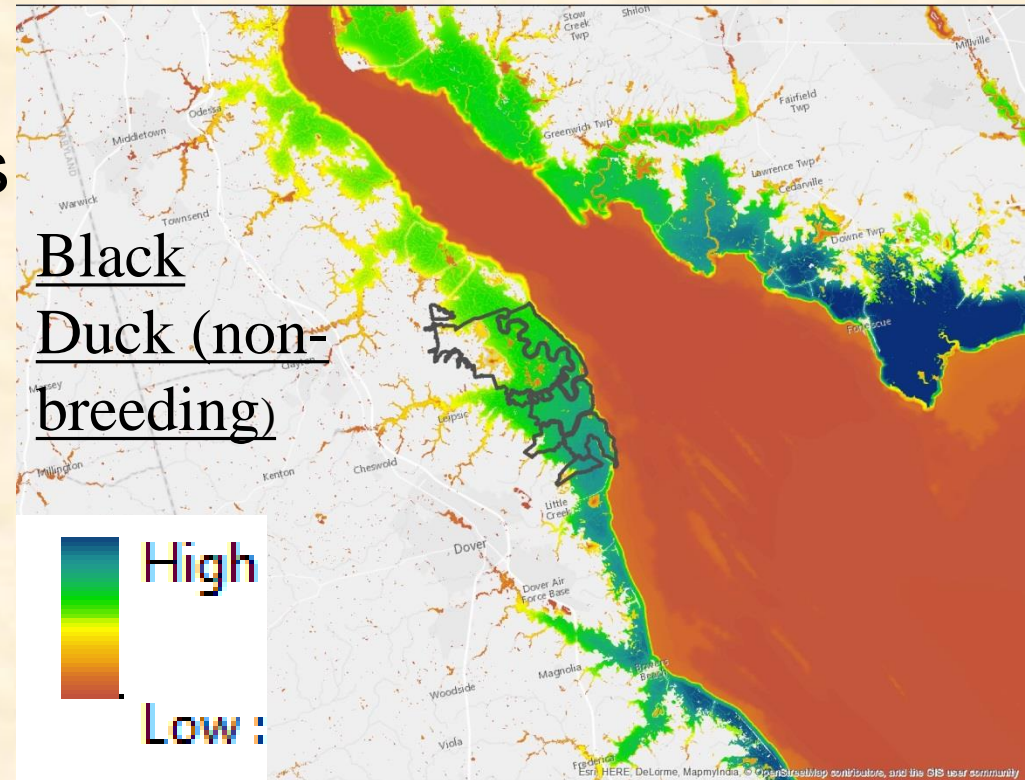
Strategic starting point for land conservation and stewardship

Compare to priorities identified at other scales to further rank areas for protection and connect across boundaries

How should we manage protected lands?

NWR Habitat Management Plans

- All 70 Northeast NWRs now trained and using
 - Regional habitat maps
 - Ecological integrity
 - Representative spp. Models
 - + other assessments
- to guide habitat planning and management





Where should we invest in ecological restoration?



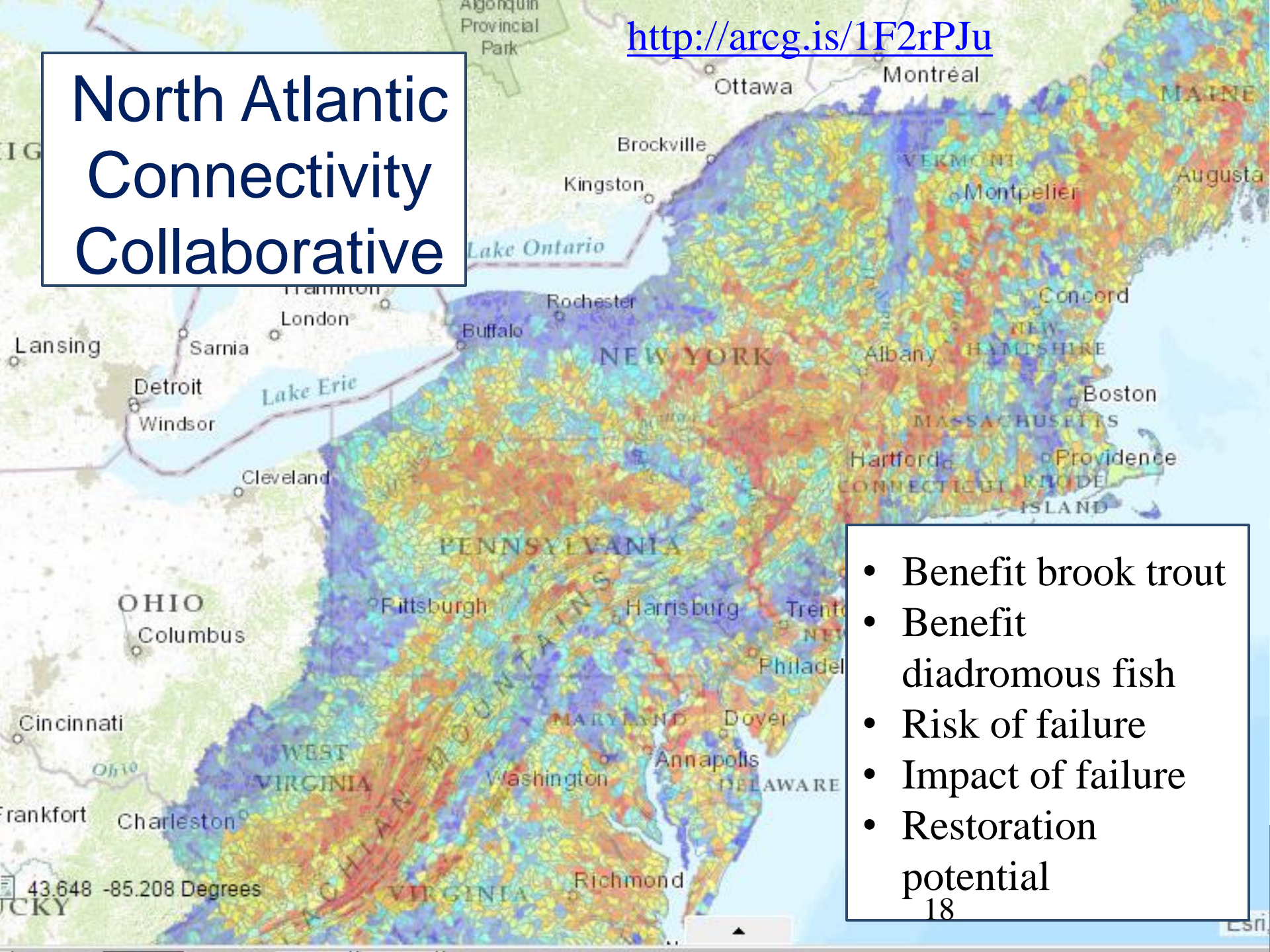
North Atlantic Aquatic Connectivity Collaborative

Products/Outcomes

- Regional network of practitioners
- Linking natural resources, transportation, emergency management sectors
- Standard road-stream crossing survey protocol and training
- Regional online database
- Support for targeted crossing assessments
- Tools to score and prioritize crossings for upgrade based on increasing ecological benefit and resiliency to floods

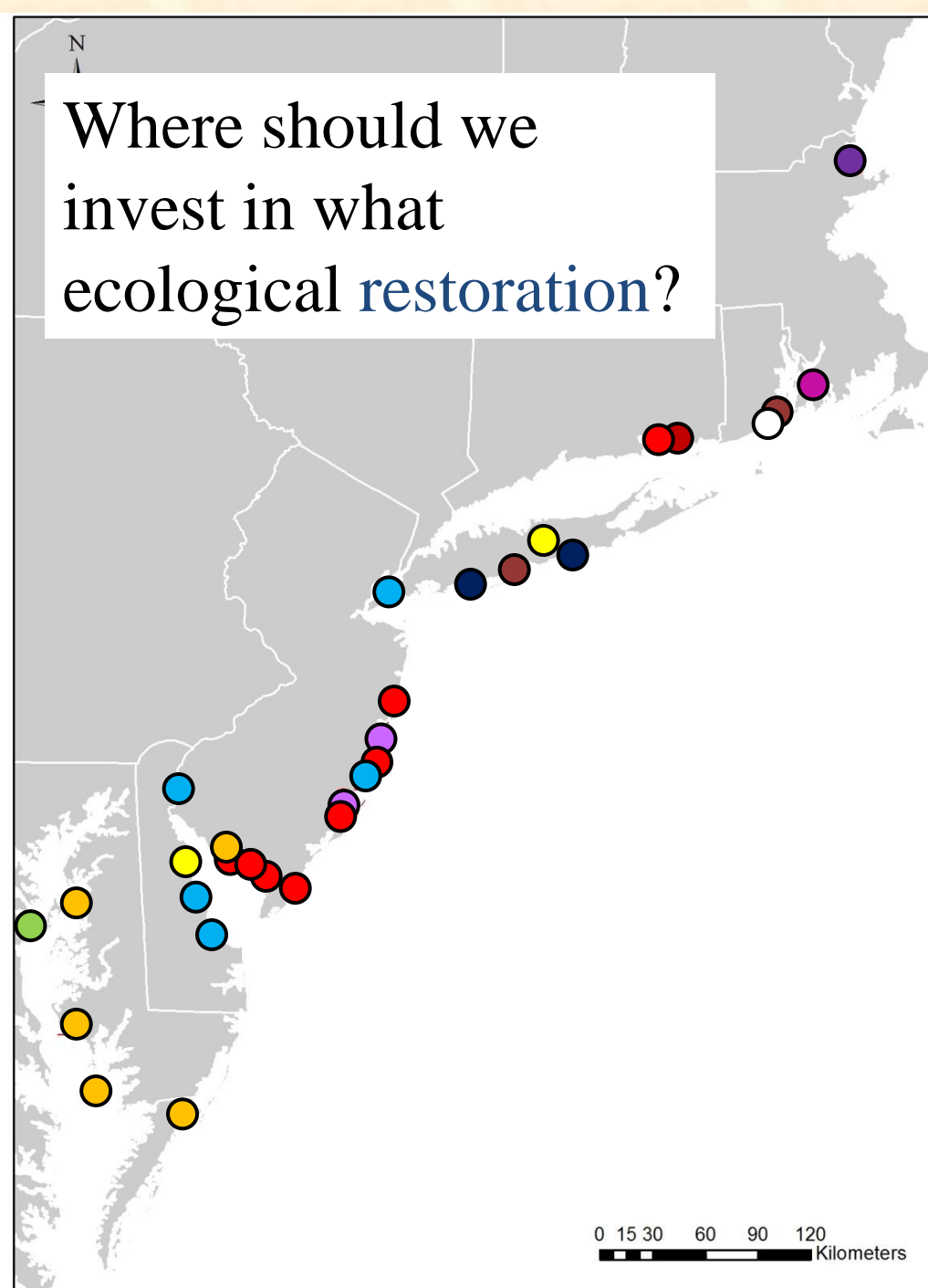


North Atlantic Connectivity Collaborative



- Benefit brook trout
- Benefit diadromous fish
- Risk of failure
- Impact of failure
- Restoration potential

Where should we invest in what ecological restoration?



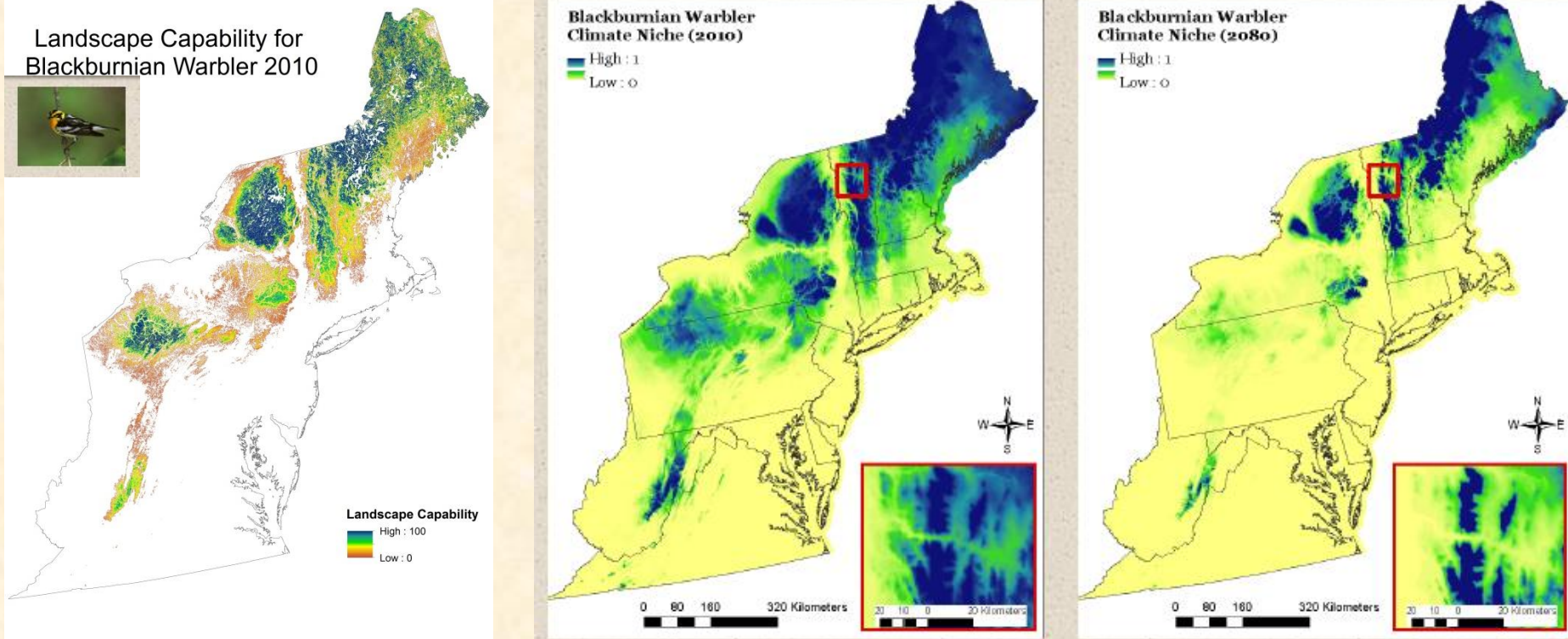
LCC/DOI Hurr. Sandy Projects

- Identifying resilient marsh systems
- Assessing effectiveness of tidal marsh restoration approaches

- *alter hydrology*
- *sediment additions*
- *living shorelines*
- *assisted migration*⁹

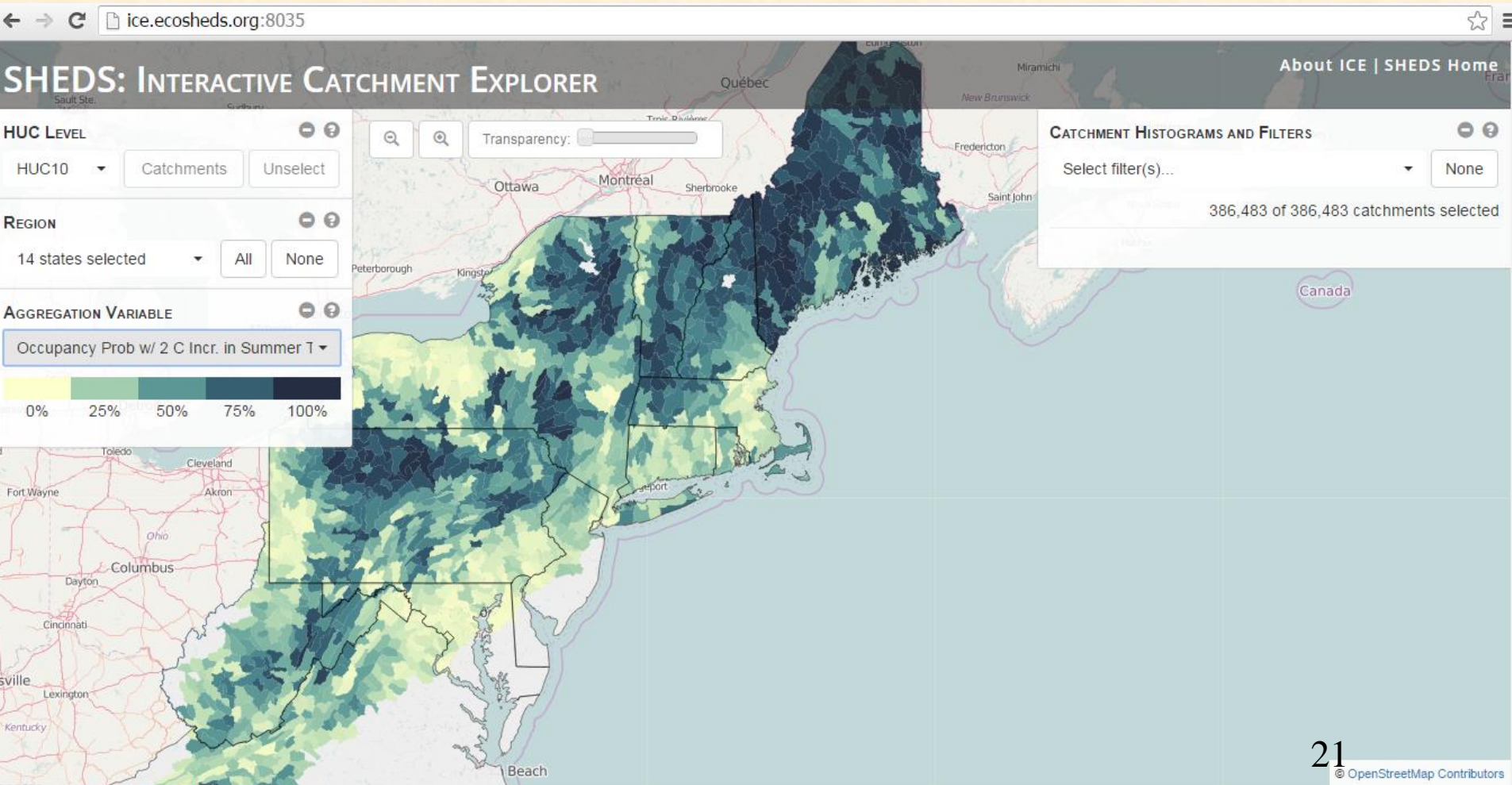
Where/how should we focus species protection and restoration?

Where is most suitable habitat for a representative species (and other species using similar habitats) now and in the future?



Where/how should we focus species protection and restoration?

Where is most suitable habitat for brook trout (and other species using similar habitats) now and in the future?



Where and how should we influence local land use / open space planning?

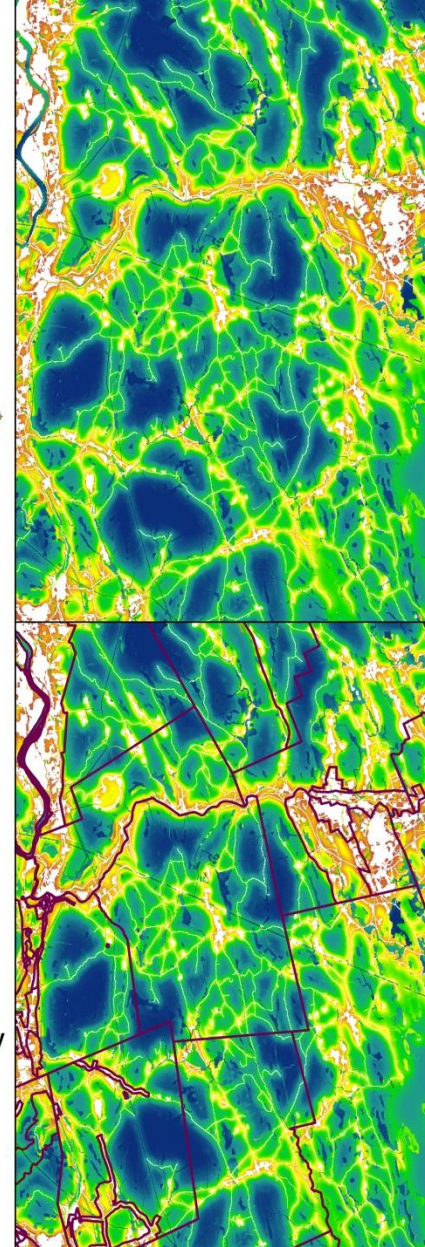
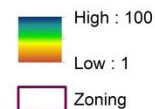
- LCC Partners using LCC information with land trusts and towns



Index of Ecological Integrity at Regional and Local Scales

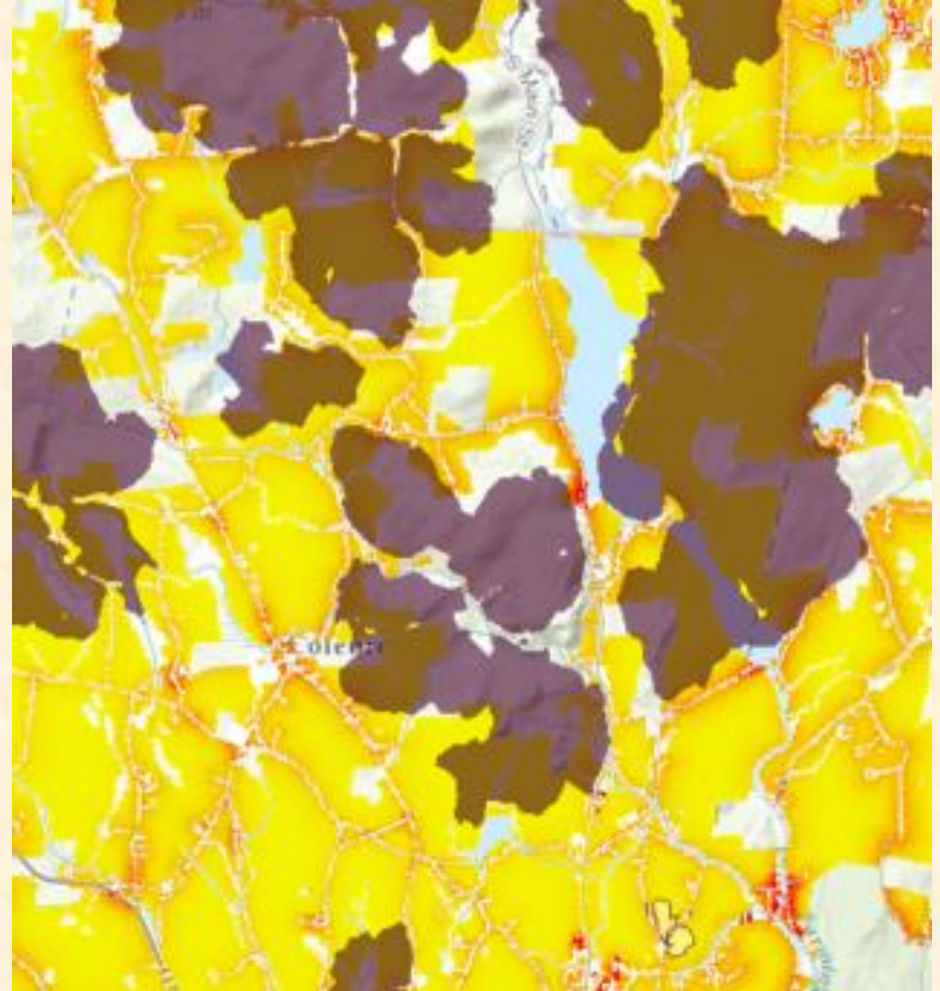


Index of Ecological Integrity



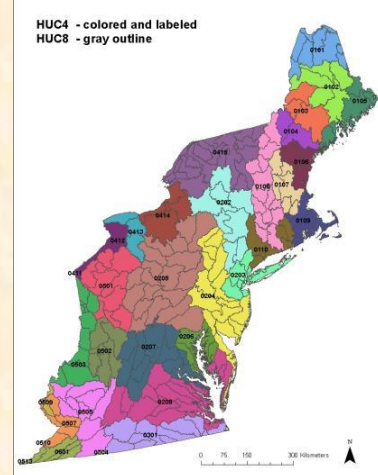
Where should infrastructure go to have least impact?

- Look at ecosystem and species core areas and predicted development (along with local information)
- Use to guide infrastructure and mitigation along with state and local info.



Conservation Design

- Implemented approach and LCC role for conservation planning and design at multiple spatial scales
 - Initial **landscape scale** conservation designs should be focused on **large watersheds** or other similar scale ecoregions where there are **active partnerships** working with an initial pilot in the Connecticut River Watershed (*complete*)
 - Initial focus at the **regional scale** should be a collaboration with state fish and wildlife agencies to support the development of **Regional Conservation Opportunity Areas (RCOAs)** (*ongoing*)

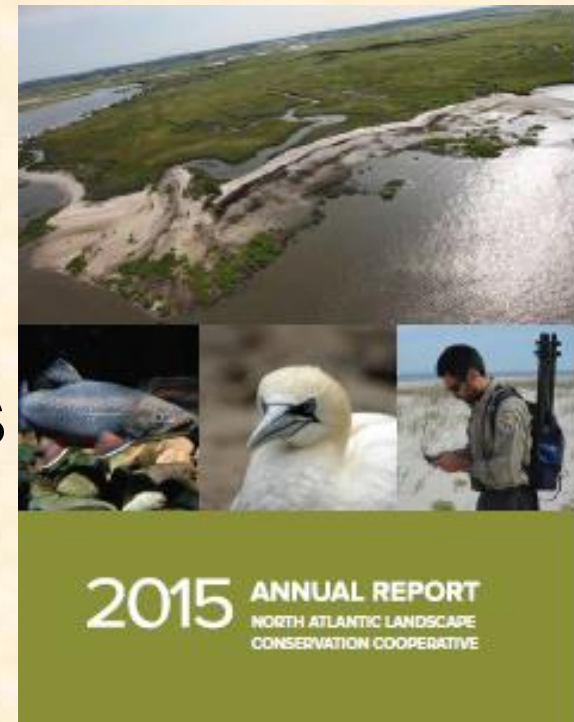


Science Delivery

- Expanded Capacity to Deliver Science including:
 - Information management: improved web/portal access to data/products
 - Significant increase in training, technical assistance and workshops and informal meetings with agency leadership
 - Development of specific science applications to support management decisions
- Grants to partners
 - Completing and learning from science delivery grants for partner networks

Communications

- State fact sheets
- Quarterly electronic newsletters
- *Connect the Connecticut* website
- More project webinars
- Improvements to LCC website
- Coordinating communications with other LCCs, CSCs, partnerships and partners



Self-Assessment, What we Heard Previously

- Overall, LCC is on the right track, is helping accomplish what agencies and organizations could not do on their own; is developing sound science; is providing an important role in developing and integrating science with a broad network of partners.
- Steering committee members need help in getting key messages and information from LCCs to other staff in their states and organizations including basic messages on LCCs and more detailed training.
- Up to the partnership to help make things happen and make sure things are on the right track, not just the staff; partners need to provide more resources toward common priorities and engagement in delivery.

Issues Identified and Next Steps Needed

Using Products, Science Delivery and Communications

- Need to continue to articulate how projects and products fit together in larger framework and link to specific conservation objectives (*ongoing; objectives need work*)
- Need to catalogue products by resource, application, and target users (*products database complete*)
- Need clear documentation on models and tools so that partners can evaluate and use them (*available, ongoing*)
- Need basic info., fact sheets of products including any links to socioeconomic issues for SC and other to use for communications (*ongoing, need review*)

Issues Identified and Next Steps Needed

Using Products, Science Delivery and Communications

- Develop and assess communication alternatives to meet LCC agency and organization needs (*ongoing*)
- Continue workshops and training for states, Service, partnerships and partners *and* assess what works best for workshops and training (*ongoing*)
- Consider strategic use of online training (*in development*)
- Learn from completed/ongoing demonstration and science delivery grant projects (*ongoing*)
- Explore options for “extension agents” to help deliver info. and respond to questions (*not yet*)
- Working together to target delivery and applications to staff and programs within agencies (*this meeting in part*)

Issues Identified and Next Steps Needed

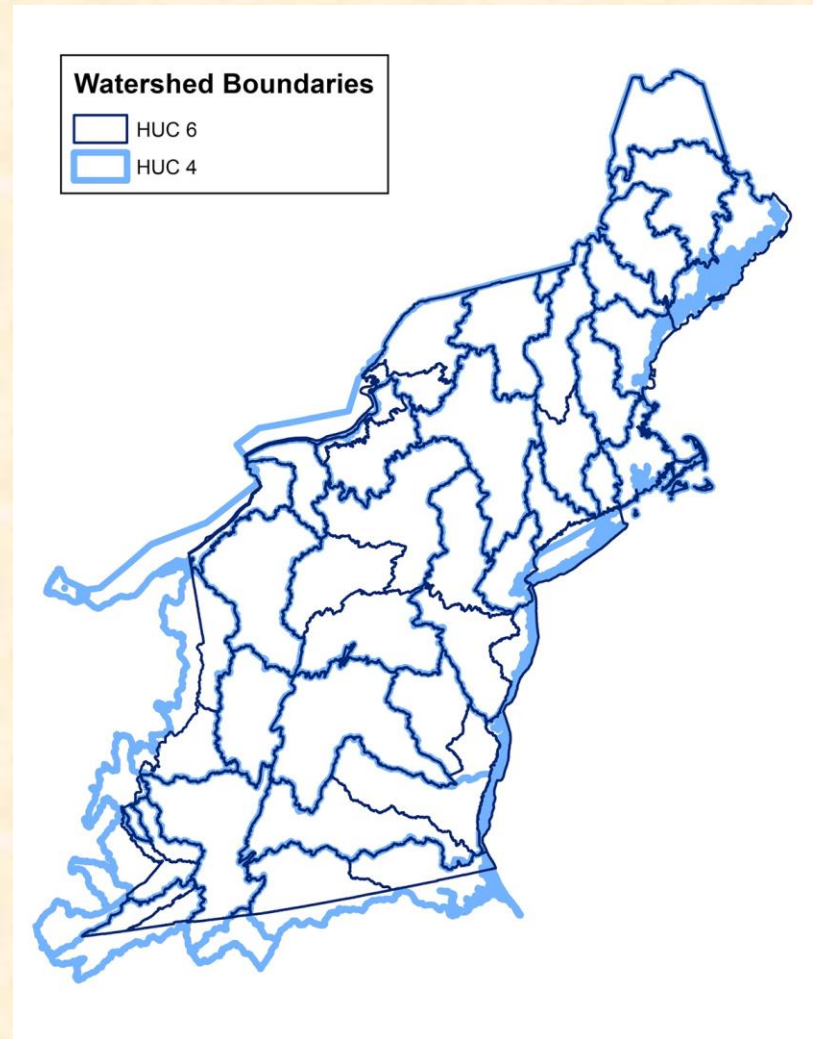
Conservation Design

- Use Connect the Connecticut to learn about the implementation part of the process with stakeholders in the watershed (*ongoing*)
- Complete first iteration of a Regional Conservation Opportunity Areas (*July*)
- Articulate alternatives considered (*RCOA documentation, ongoing*)
- Conduct parallel review process (*ongoing*)
- Support additional partnerships to customize designs in their geographies (*conversations underway*)

Issues Identified and Next Steps Needed

Conservation Design

- Use regional information and designs as starting point for additional collaborative designs within watersheds
- Support additional partnerships to customize designs in their geographies (Gulf of Maine, Susquehanna, Chesapeake Bay discussions)



Issues Identified and Next Steps Needed

LCC Network

- Coordinated efforts on conservation design, aquatic connectivity and coastal resilience **with neighboring LCCs & Network**
- Support network and National Wildlife Refuge efforts for common approaches for conservation design

National Academy of Sciences

- Further articulate LCC conservation targets and objectives and intermediate outputs
- Explore options for tracking actions by LCC partners
- Articulate LCC/Climate Science Center relationship/roles
- Reaffirm relationships with JVs, FHPs, etc.



Issues Identified and Next Steps Needed

Strategic Planning Process

- Re-initiate scoping process for additional/revised components with partners
- Consider focused/facilitated Steering Committee call or meeting
- Revisit timing to match up to SWAP/RCN schedule
 - June 2017 workshop?



LCC Partnership



North Atlantic  Landscape Conservation Cooperative