



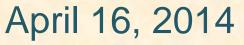




State of the North Atlantic LCC A Review of Progress and Next Steps

Andrew Milliken
North Atlantic Landscape Conservation Coordinator
U.S. Fish and Wildlife Service

North Atlantic LCC Steering Committee Meeting Portland, Maine







North Atlantic Landscape Conservation Cooperative

Headlines: Where We Are

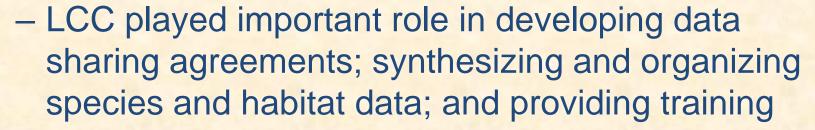
- LCC has developed the partnerships and capacity to achieve our mission
- LCC has the capacity and network to communicate with a variety of key audiences
- LCC and partners has supported priority projects consistent with the northeast conservation framework and strategic plan
- LCC and partner projects are at the stage where information and tools are available to support conservation decisions

Headlines: Where We Are Going

- Information Management
 - Information is being made easily available and useful through data portals and websites
- Science Delivery
 - Information and tools are being delivered through translation and synthesis, training, supporting delivery networks and demonstrating applications
- Conservation Design
 - Conservation designs are being facilitated to assess how much of what conservation actions are needed where to sustain natural and cultural resources across the region and landscapes within the region

Headlines: Other 2013 Highlights

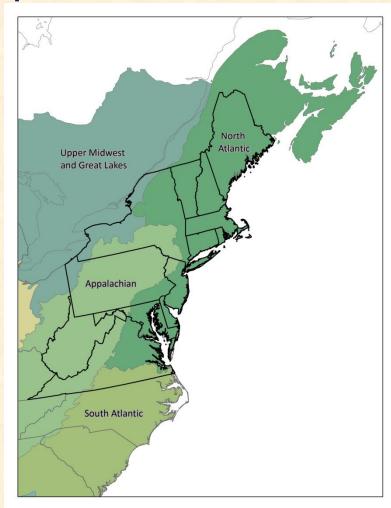
- Hurricane Sandy
 - LCC played key role in helping to integrate among Hurricane Sandy resiliency science projects
 - LCC (through FWS) was awarded \$5.2 million to address resiliency of streams, marshes and beaches
- Support for State Wildlife Action Plan Updates





The North Atlantic Landscape Conservation Cooperative

- Mission, Components, Framework
- Partnership Development & Operational Capacity
- Science Needs & Projects
- Science Delivery
- Conservation Design
- Communications & Information Management
- Hurricane Sandy
- Evaluation
- Next Steps



North Atlantic LCC - Mission

The North Atlantic Landscape Conservation Cooperative provides a partnership in which the conservation community works together to address increasing land use pressures and widespread resource threats and uncertainties amplified by a rapidly changing climate.

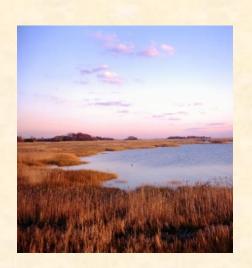
The partners and partnerships in the cooperative address these regional threats and uncertainties by agreeing on common goals and jointly developing (and delivering) the scientific information and tools needed to prioritize and guide more effective conservation actions by partners toward those goals.



North Atlantic LCC Components of Mission

- Ecological Planning/Assessment
- Conservation Design
- Science Translation and Conservation Adoption (Science Delivery)
- Monitoring and Evaluation
- Research
- Information Management
- Communication and Outreach
- Coordination and Organization







GOAL-SETTING

Which species/habitats to conserve?

At what levels?

Who decides?

Albany II 2011



BIOLOGICAL ASSESSMENT

What do we know about the status of priority wildlife?

INFORMATION MANAGEMENT

How will we manage the demand for and creation of data?

CONSERVATION DESIGN

What should landscapes look like to conserve species at goal levels

SCIENCE TRANSLATION

How do we make science solutions useful?

MONITORING, EVALUATION AND RESEARCH

PRIORITIES
Which species and

immediate attention?

issues demand

What new information will we gather to support conservation?

CONSERVATION ADOPTION

How do we get communities and landowners engaged in conservation?

CONSERVATION DELIVERY

How will we most efficiently put conservation on the ground?



LCC Partnership































LANDSCAPE CONSERVATION COOPERATIVE

















MANOMET

Center for Conservation Sciences

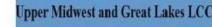


















Steering Committee



- 32 Members (14 State, 1 Tribal, 8 Fed., 1 Canadian, 8 NGO, CSC)
- 2013 average meeting attendance = 46 attendees,
 average S.C. attendance 86%
- 2013 average call attendance = 30 attendees, average
 S.C. attendance 44% (not a quorum)
- Meeting frequency quarterly (2 in-person, 2 calls)



- Science Technical Committee
 - 43 members (7 State, 24 Fed., 1 Can., 8 NGO, 3 LCC)
 - subteams aquatic (12), terrestrial/wetland (16) and coastal/marine (15)
 - Project oversight teams, proposal review teams, peer reviewers
 - In 2013 provided strong input and consensus recommendations on science needs
- Science Delivery Team
 - 30 members (8 State, 10 Fed., 9 NGO, 3 LCC) formed in 2013
 - In 2013, supported overall delivery recommendation, development of RFP and review and recommendation
- SWAP Synthesis Team led by NEAFWA with LCC support
 - Completed synthesis of information and report, workshops, training
 - Tools and information now ready for next steps



Staff Dedicated to LCC

Position	Agency/Organization	Person
Coordinator	U.S. Fish & Wildlife Service	Andrew Milliken
Science	North Atlantic LCC	Scott Schwenk
Coordinator		
Science Delivery	North Atlantic LCC (part-	Steve Fuller
Coordinator	time)	
Geographer/GIS	North Atlantic LCC	Lori Pelech
Analyst		
GIS Data	North Atlantic LCC (part-	Renee Vieira
Technician	time)	
Student Interns	U.S. Fish & Wildlife Service	Allison Ludtke



Staff Providing Partial Support to LCC

Position	Agency	Person
Communications	U.S. Fish and Wildlife Service	David Eisenhauer
Coordinator		
GIS Coordinator	U.S. Fish and Wildlife Service	B.J. Richardson
Administrative	U.S. Fish and Wildlife Service	Heather Zackaricz
Assistant		
Assistant Regional	U.S. Fish and Wildlife Service	Ken Elowe
Director		
Regional Scientist	U.S. Fish and Wildlife Service	Rick Bennett
Liaison to Northeast	U.S. Environmental Protection	Tai-ming Chang/
LCCs	Agency	Bill Jenkins
Coastal Landscape	National Park Service	Amanda Babson
Adaptation		
Coordinator		
GIS Analyst	The Nature Conservancy	Alex Jospe
		+ details

- Project and contractor administration with WMI
- LCC provided partnership support
 - Support for meetings, workshops and partner travel
 - LCC Meetings as needed
 - SWAP Planners Meeting
 - GIS Staff Training
- Annual process, admin. & meetings aligned with NEAFWA to facilitate participation & collaboration

- Budget Allocation within LCC
 - Balanced among:
 - Organizational capacity
 - Ongoing and new science projects
 - Science delivery capacity and projects
- FY 2013 and draft FY 2014 allocations

FY	Capacity	Projects	Total
2013	\$805,365	\$1,135,881	\$1,941,246
2014 draft	\$825,000	\$720,000	\$1,545,000

Science Needs & Projects

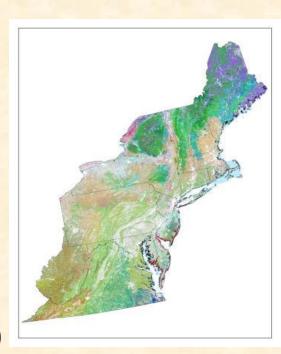
Criteria for prioritizing needs

- Foundational needs for organizing landscape conservation (consistent mapping, decision frameworks)
- Needs that address major threats and uncertainties to sustaining natural or cultural resources in the North Atlantic LCC (land use change, climate impacts, energy)
- Needs that address threats and uncertainties to multiple species or habitats.
- Needs that will inform applied conservation decisions and actions
- Needs that are priorities for existing partnerships in the North Atlantic LCC (NEAFWA, JVs, FHPs, NEPARC etc.)

Science Projects - Foundational Needs

- Terrestrial Habitat Map Revisions (complete)
 - Extension into Canada (ongoing)
- Aquatic Map Revisions (complete)
- NWI Coastal Updates (complete)
- Coastal and Marine Classification
 & Map (complete, peer review)
- Compilation of Regional Vernal Pool Data (underway)
- Road Stream Crossings (underway)

Plus many foundational data layers being as part of assessment and design projects



Science Projects - Assessments

- Regional Habitat Vulnerabilities to Climate Change (complete)
- Regional Species Vulnerabilities to Climate Change (peer review)
- Piping Plover-Beaches Vulnerability to Sea Level Rise & Increased Storms (ongoing)
- Brook Trout-Cold Water Streams Vulnerability to Changing Flow and Temperature (ongoing)
- Marine Bird Mapping and Risk Assessment (ongoing)
- Designing Sustainable Landscapes
 - linking together landscape change (urban growth, climate change), assessment and design

Science Projects - Design

- Designing Sustainable Landscapes (ongoing)
- Permeable Landscapes (ongoing)
- Decision Support Tool to Assess Aquatic Habitats and Threats (ongoing)
- Forecasting Changes in Aquatic Systems and Resilience of Brook Trout (ongoing)
- Priority Amphibian & Reptile Conservation Areas (ongoing)
- Priority Migratory Bird Stopover Areas (underway)
- Aquatic Connectivity and Resiliency of Road Stream Crossings (LCC and Hurricane Sandy - underway)
- Increasing Beach Resiliency in the Face of Sea Level Rise and Storms (Hurricane Sandy - underway)
- Increasing Tidal Marsh Resiliency in the Face of Sea Level Rise & Storms (Hurricane Sandy - underway)

Demonstration Projects (ongoing)

- White Mountains to Moosehead Lake Initiative
 - Parcel Level Planning, Progress Tracking and Stakeholder Engagement to Advance Resilient Landscape Conservation
- Integrating Science into Policy
 - Local Adaptation for Marsh Migration
- Amplify Landscape Scale Conservation Efforts in the Appalachian Forests of the North Atlantic LCC
 - Meetings and workshops with state conservation groups

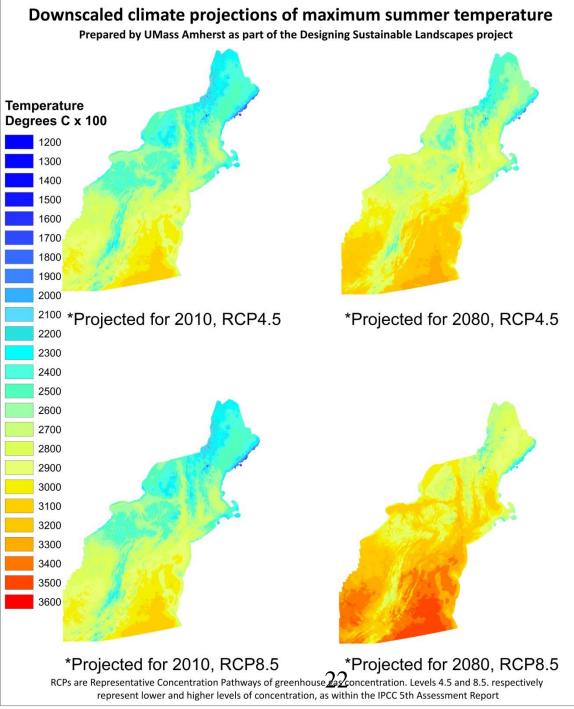
Project Management

- All projects posted on website <u>http://www.northatlanticlcc.org/projects</u>
 - Summaries, quarterly reports and products
- Spatial data products compiled and synthesized
 - Available on Data Basin and LCC nested data website
- All projects get quarterly review and approval by WMI and LCC staff
- Projects include technical and decision-maker input
 - e.g. monthly calls with Downstream Strategies
- LCC role in bringing together project P.I.s to increase coordination and reduce redundancy
 - Among similar projects e.g. stream temp. and EBT P.I.s example
 - Across assessment and design projects e.g. conservation design, resiliency, sea level rise P.I.s (UMass, TNC, USGS)

Consistent data layers

 As a result of LCC, RCN and other regional conservation science projects There are now > 100 regionally consistent spatial data layers available





Information Management

- Information Management Needs Assessment completed 2012
- Development of Information Management System – Data Basin, nested websites 2013

LCC Information Management http://nalcc.databasin.org/



ScienceBase Catalog

About Communities Add Item My Items My Tasks Help Lori Pelech

North Atlantic Landscape Conservation Cooperative **Conservation Planning Atlas**

Search North Atlantic LCC CPA





powered by DATA BASIN

Get Started Browse Create My Workspace

What is the North Atlantic LCC **Conservation Planning Atlas** (CPA)?

What is the North Atlantic LCC?

What can I do?

How do I start exploring?

The North Atlantic LCC Conservation Planning Atlas is a platform for easy access to high-quality geospatial datasets, maps and information to facilate partner-driven conservation.

Learn more



Get started quickly with the North Atlantic LCC Conservation Planning Atlas

Northeast Terrestrial

Habitat and Secured

Lands Map

Take a Tour

North Atlantic LCC Galleries...

Terrestrial



Aquatic



Coastal and Marine





Dataset

Northeast Secured Lands 2011 Gap

Status 1 and 2 only

Northeast Terrestrial Habitat and Secured Lands Map



This is a pilot map for the North Atlantic LCC to begin using DataBasin.

ities - LC MAP - Landscape Conservation Management and Analysis

rn Tallgrass Prairie and Big Rivers Landscape Conservation Coopera

Basin Landscape Conservation Cooperative

Northern Landscape Conservation Cooperative

Plains Landscape Conservation Cooperative

Coast Prairie

Coastal Plains and Ozarks Landscape Conservation Cooperative

scape Conservation Cooperative (LCC) Boundaries for the US

Network Boundaries

nal Data: Links and GIS Services

al Resource Data Analysis Tools

America Spatial Data

Atlantic Landscape Conservation Cooperative

Pacific Landscape Conservation Cooperative

and Prairie Potholes Landscape Conservation Cooperative

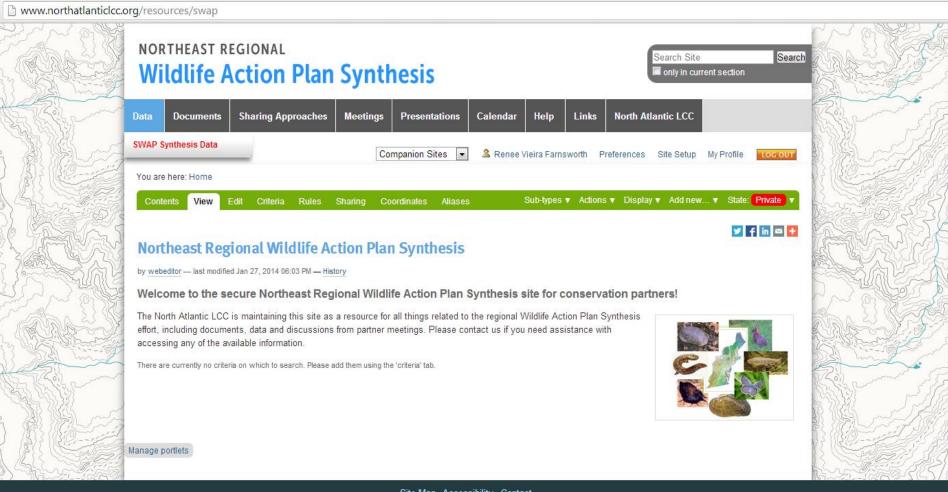
ern Rockies Landscape Conservation Cooperative

Midwest and Great Lakes Landscape Conservation Cooperative

ern Alaska Landscape Conservation Cooperative



Synthesis of Regional Information and Work Space for State Wildlife Action Plan Updates



Site Map Accessibility Contact

Science Delivery: Capacity and Grants

- Capacity to Deliver Science
 - Information management and synthesis
 - Workshops for managers
 - Training for GIS staff
- FY 13 and 14 RFP for Science Delivery
 - Science Delivery Partner Support Grants
 - Demonstration Projects
 - 13 proposals received

Science Delivery Capacity: Northeast Regional Synthesis for SWAPs

- Support for State Wildlife Action Plan Updates
 - Data sharing agreements for element occurrences
 - Synthesizing and organizing species and habitat data and tools
 - Contributing to synthesis report
 - Conducting workshops and training on information and tools
 - Preparing for regional
 Conservation Opportunity Areas

TAKING ACTION TOGETHER: NORTHEAST REGIONAL SYNTHESIS FOR STATE WILDLIFE ACTION PLANS Prepared for the Northeast Fish and Wildlife Diversity Technical Committee Terwilliger Consulting, Inc.

Conservation Design

- Products and Discussions to Set the Stage for Conservation Design
 - A collaborative planning process among partners, which includes agreeing on common priorities
 - A set of spatial planning products (models, maps and decision support tools) that prioritize conservation actions and guide conservation decisions towards common goals based on current and predicted future conditions
 - Will integrate spatial data and tools from multiple LCC, RCN and partner projects
 - Pilot at regional and landscape scales in 2014



Communications

- Completed draft LCC Communications Framework and incorporated LCC partner input
 - Engage standing communications team in 2014
- Initiated regular quarterly electronic newsletters
- Worked closely with the NE CSC and other regional LCCs to coordinate messaging and leverage capacity
- Working closely with USGS, NPS and NFWF on Hurricane Sandy project communications.

Communications: North Atlantic LCC Website

- Dynamic Knowledge Management Website
- North Atlantic LCC partners work together to identify common science needs, shared scientific capacity and information and coordinate natural resource conservation

 North Atlantic LCC partners work together to identify common science needs, shared scientific capacity and information and coordinate natural resource conservation

 Participate in the North Atlantic

 Participate in the North Atlantic
- Web community all staff and partners can post and share documents
- Currently supporting 12 groups
- Companion sites e.g. Atlantic Salmon partnership, App. LCC
- Nested website for State Wildlife Action Plans
- Announcements, meetings, webinars, newsletters, meetings
- Project information, tracking, online RFPs
- Link to Data Portal

Communications: Outreach with Tribes



- 12 federally-recognized tribes in LCC
- North Atlantic LCC brought together LCCs and CSCs for joint participation at United South and Eastern Tribes (USET) meetings
- FWS tribal forums in Maine in 2013, Southern New England in 2014
- FWS and BIA support for tribal travel and participation in LCCs
- Supporting (FWS funds) NE CSC College of Menominee Nation Shifting Seasons Climate Summit

Hurricane Sandy

- Significant investment in LCC staff time coordinating among FWS Programs and DOI bureaus and LCC partners to help integrate proposed science proposals and develop LCC proposals
- All three LCC proposals funded with \$5.2 million in DOI Hurricane Sandy funds through FWS for three major projects focused on understanding storm impacts and increasing resiliency for:
 - Tidal marsh habitats and species
 - Beach habitats and species
 - Streams, road stream crossings and fish passage
- Integrated science projects database developed - USGS, FWS, NPS, NOAA
- Supported partner proposal development for competitive grants



Self-Assessment, What we Heard November

- 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.
 - Basic summary information in Annual Report and Highlights documents, website and other forums;
 - One on one meetings with LCC staff and leadership in states with staff and partners from that state.

Self-Assessment, What we Heard November

- Tools that are developed should be as simple and flexible as possible
- Tools need to be relevant to and reach partners making decisions on the ground
 - Engage more managers and decision makers earlier in tool development and in pilot areas for conservation design
 - Program of science delivery to reach partners on the ground
- Information and tools need to more fully incorporate other elements including plants and natural communities and cultural and socioeconomic needs
 - Engage plant partners and natural heritage programs and include natural communities in regional synthesis and designs
 - Include cultural and socioeconomic elements in future iterations
- LCC should take advantage of delivery networks and reinforce existing partnerships
 - Check in with major regional partnerships to assess LCC progress is meeting their needs and
 - Use science delivery support to take better advantage of existing networks

Self-Assessment, What we Heard November

- LCC needs to be more focused/LCC needs to address a broader set of environmental concerns
- LCC needs to include a broader range of partners such as coastal zone managers/don't need everyone at the table
 - Keep focus but engage partnerships to reach broader audiences; e.g. Northeast Regional Oceans Council
- Up to the partnership to make things happen and make sure things are on the right track, not just the staff; partners need to provide more of the funding toward common priorities
- Need more transparency and steering committee involvement in decision-making between meetings
 - Ensure that Steering Committee members have the information that they need to leverage opportunities and funding within their agencies and organizations;
 - More steering committee involvement in standing and ad-hoc teams;
 - Consider Executive Committee or other mechanisms for broader involvement between meetings

Science Invest. and Account. Schedule

Activity Area	Metrics	Score
Organization	Engagement and Coordination	1/1
al Operations	Leveraging Resources	2/4
	Evaluating Progress – Strategic Plan	2/2
	Evaluating Progress – Steering Committee Evaluation	2/2
	Engaged Technical Committee and Dedicated Technical Staff	2/2
Landscape	Assess Existing Conservation Efforts	4/4
Conservation	Identify Priority Resources	2/2
Planning	Collate and Establish Conservation Goals and Measureable	3/4
Foundation	Objectives	
	Refining Landscape Conservation Planning Foundation –	1/1
	Process and Timeline	
	Refining Landscape Conservation Planning Foundation –	1/1
	Adaptive Management Framework	
	Refining Landscape Conservation Planning Foundation –	1/1
	Assess Assumptions	

Science invest, and Account. Schedule				
Activity Area	Metrics	Score		
Landscape	Vulnerability and Landscape Assessments	4/4		
Conservation	Adaptation Strategies	4/4		
Design	Integration of Multiple Priority Resources into Landscape	4/4		
	Conservation Designs			
nforming	Provide Decision Support	4/4		
Conservation	Information Delivery	4/4		
Delivery	Assessment of Information Delivery	4/4		
	Collaborative conservation delivery to realize resource object.	3/4		
	Tracking Delivery on the Landscape	1/4		

Monitoring Change of the Landscape and Priority Resources

Function as Part of Integrated Network of LCC Partnerships

Research to Support Adaptive Management: Testing Underlying

3/4

4/4

4/4

3/4

3/4

3/4

Collaborative Monitoring

Data Management and Integration

Participation in the LCC Network Enterprise

Assumptions

Decision

Monitoring

Research

Data

LCC

Network

2014 – Issues to Address and Key Next Steps



- Partnership Development and Operations
 - Consider Executive Committee
 - Maintain 2-day fall meetings to enhance discussions
 - Address challenge of participation on conference calls
- Science Needs and Projects
 - Technical committee focus on assessment of ongoing and completed projects and considerations of next phases
 - Coordination with neighboring LCCs & Network
- Develop cultural resource science needs
 - Engage with Appalachian LCC Cultural and Human Dimensions Workshop Planning Team

2014 - Issues to Address and Key Next Steps



- Science Project Implementation & Tracking
 - Science seminars and feedback on ongoing projects
 - Continue Peer Review Process
 - Manager/User groups for additional projects
 - RFPs online
 - Consider option for linking to partner actions
- Science Delivery
 - Track progress on demonstration and science delivery projects
 - Support continued capacity and grants for science delivery
- Conservation Design
 - Support regional Conservation Opportunity Areas for SWAPs
 - Facilitate landscape scale conservation design in Connecticut River Watershed
 - Apply lessons learned to other landscapes

2014 - Issues to Address and Key Next Steps



- Hurricane Sandy Science Coordination
 - Collaborate on implementation of LCC Hurricane Sandy Projects
 - Ensure that products are delivered to key partners
 - Facilitate coordination among funded and competitive science projects
 - Facilitate common metrics for evaluating success of restoration projects
- Communications and Information Management
 - Webinars on ongoing and completed projects
 - Congressional outreach
 - Engage standing communications team in 2014 and/or Communicators Community of practice

2014 - Next Steps



- What else?
- Questions?
- Ideas?