

Agenda – Terrestrial / Wetland Call

March 5, 2015 2:00 – 3:30

- Purpose, overview, and introductions
- Logistics for March meeting
- Process for Science Needs and Science Delivery
- Overview of current projects
- Discussion of science needs and additional phases of existing projects



North Atlantic LCC - Governance



- Steering Committee
- Technical Committee
 - 3 Subteams: aquatic (freshwater), coastal & marine, and terrestrial & wetland (> 40 members)
- Science Delivery Team
- Project Teams (Principal Investigators plus oversight team)
- Staff



North Atlantic  Landscape Conservation Cooperative



Overview of LCC Science Needs Process

- Technical Committee recommends highest priority science needs + continued phases of existing projects
- Steering Committee considers recommendations (typically, April meeting)
- As needed, Technical Committee advises/assists LCC staff in translating science needs into science projects
 - RFP or directed funding
- Steering Committee approves projects (typically, summer or October meeting)



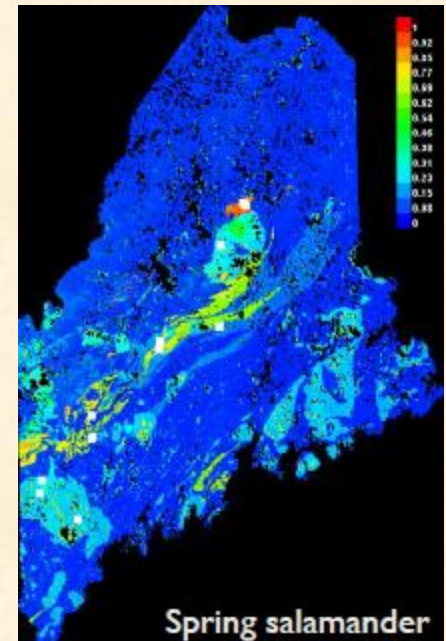
Criteria for Prioritizing Science Needs

- Address LCC Strategic Plan and Northeast Conservation Framework
- Foundational needs (building blocks, modeling frameworks, information management tools)
- Address major threats and uncertainties (land use, climate impacts, energy)
- Needed to inform applied conservation decisions
- Priorities for existing partnerships
- Regional or multi-state (“landscape”) scale



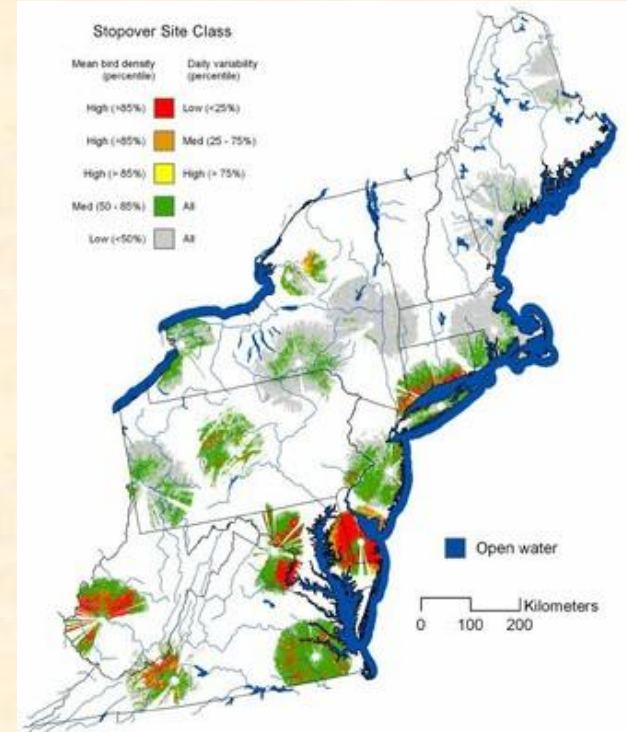
March 2015

Status of North Atlantic LCC Projects *Terrestrial & freshwater wetlands*



Foundational Mapping: Important Migratory Landbird Stopover Sites

North Atlantic LCC Role	Co-sponsoring with USFWS, MD, USGS, U. of DE (lead), VCU, TNC, NASA
Products	Improved models of important fall migration stopover sites, based on weather radar and field surveys
Available Now	6 years of analyzed radar data; initial field survey results
Available within 3-6 months	
Longer Term	Complete report and maps (Dec. 2015)



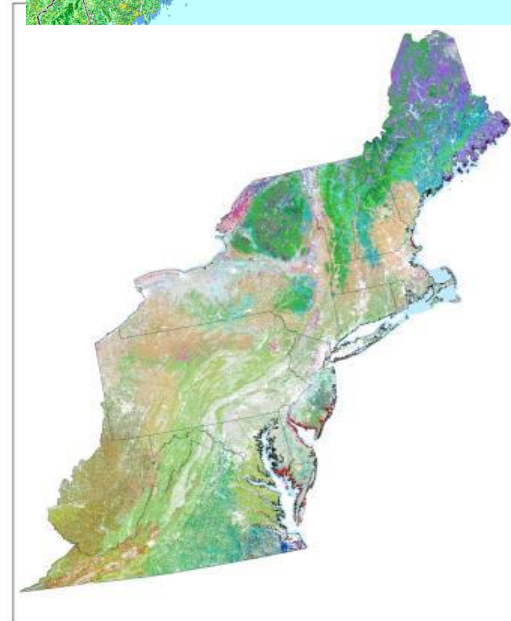
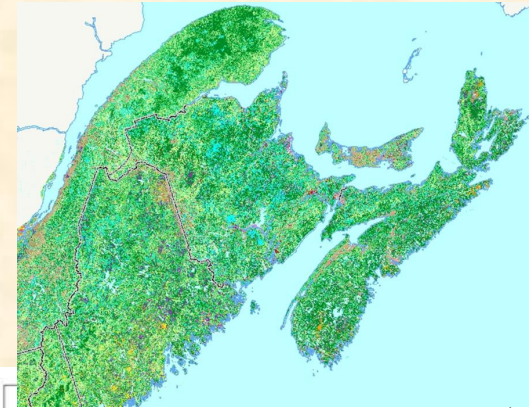
Foundational Mapping: Compilation of Regional Vernal Pool Data

North Atlantic LCC Role	Sponsoring project by Vermont Center for Ecostudies and UVM (initiated Jan. 2014)
Products	Regional GIS dataset of locations of potential or documented vernal pools
Available Now	Unified database structure
Available within 3-6 months	Remote sensing demonstrations
Longer Term	Complete report and dataset on NALCC Conservation Planning Atlas (Dec. 2015)



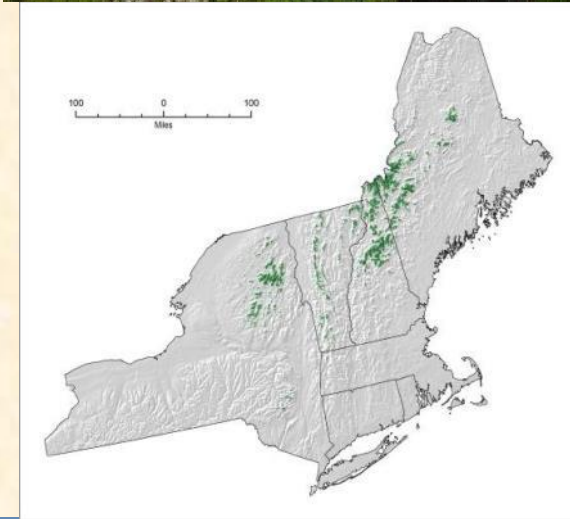
Foundational Mapping: Northeast Terrestrial Habitat Map

North Atlantic LCC Role	Support revising NEAFWA-sponsored project by TNC and UMass
Products	Classified terrestrial habitat map
Available Now	Virginia revisions (2012) March 2014: UMass enhancements to reflect roads, streams, 2006 development, and revised coastal NWI
Available within 3-6 months	Expansion to Canadian portion of LCC (2015)



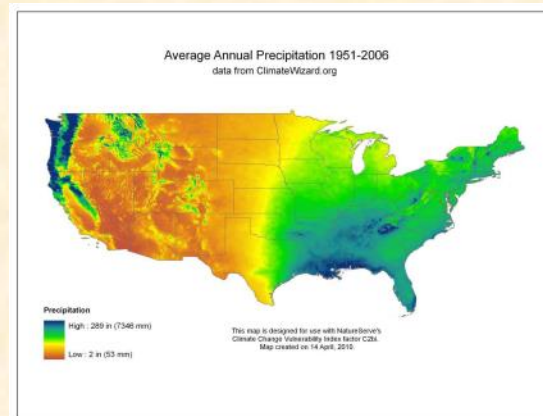
Vulnerability Assessments: Habitat Vulnerability to Climate Change

North Atlantic LCC Role	Completing NEAFWA-sponsored project by Manomet/NWF
Products	3 reports: terrestrial/wetland; cold water; and coastal habitats
Available Now	Reports completed; northeast climate database (neclimateus.org) developed in collaboration with NOAA and other partners



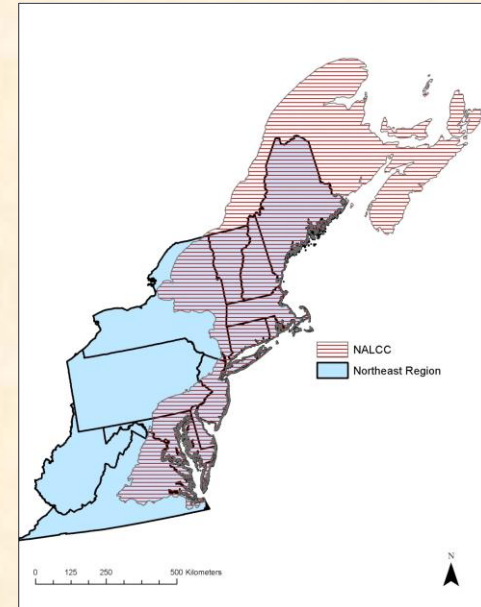
Vulnerability Assessments: Species Vulnerability to Climate Change

North Atlantic LCC Role	Supporting assessment by NatureServe using Climate Change Vulnerability Index (CCVI)
Products	Report on vulnerability of 64 high regional concern, representative, and foundational species
Available Now	Draft report (in peer review)
Available within 3-6 months	Final report



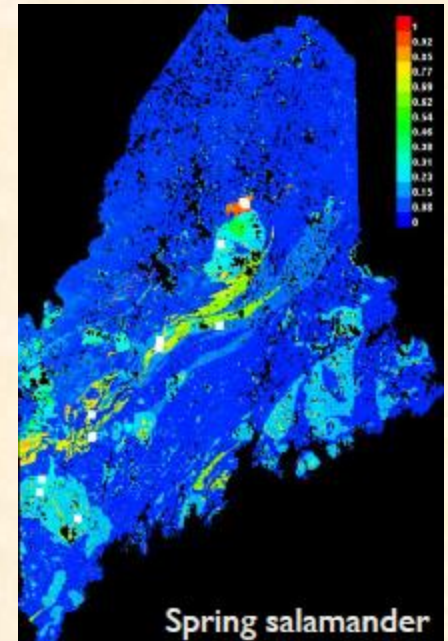
Conservation Design: *Designing Sustainable Landscapes*

North Atlantic LCC Role	Sponsoring project led by UMass Amherst
Products	Extensive spatial datasets, current and future species capability and ecological integrity, decision support tool for landscape design
Available Now	Many spatial datasets for entire Northeast
Available within 3-6 months	<ul style="list-style-type: none">• Additional regional spatial data• Regional models for 30 rep. species• Pilot design effort in CT River watershed
Longer Term	Work will enhance coastal components and use of tools by partners; pilot regional design is proposed



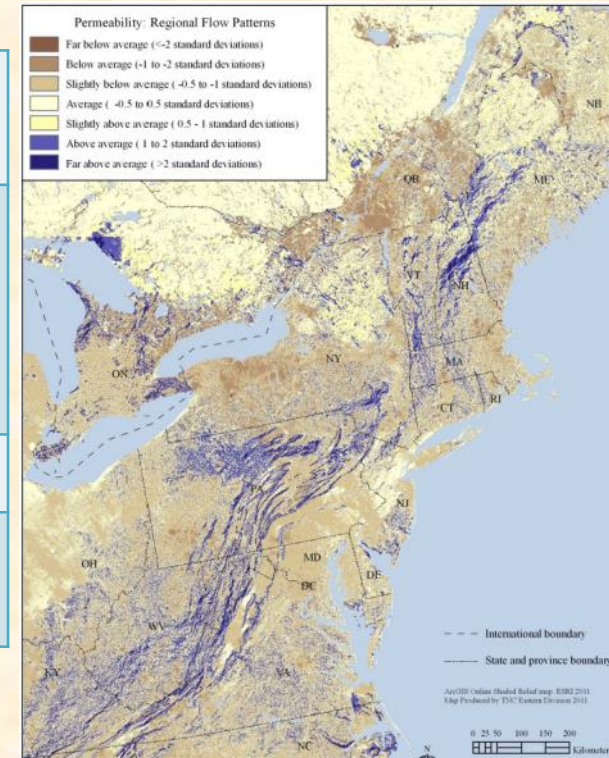
Conservation Design: Priority Amphibian and Reptile Conservation Areas (PARCAs)

North Atlantic LCC Role	Sponsoring project led by U. of Maine and others
Products	Species models for 60+ priority herp. species; report with priority areas identified
Available Now	Climate niche models for 61 species
Available within 3-6 months	<ul style="list-style-type: none">• Projected loss of climate envelope for species• C.C. Vulnerability reviews• Pilot PARCAs for Maine
Longer Term	Full PARCA report and recommendations (2016)



Conservation Design: Permeable Landscapes for Wildlife

North Atlantic LCC Role	Sponsoring project by TNC
Products	Report and dataset on relative permeability (connectivity) of landscape for wildlife, accounting for climate change
Available Now	
Available within 3-6 months	Final report and data



Potential Science Needs and Project Continuation

- Completion of PARCA project
- Regional wildlife-road crossings partnership
- Landscape-scale planning for species of regional concern – e.g., Monarch butterfly, endangered species
- Extension of LCC work into Canada, e.g. habitat guides for terrestrial ecosystems in Canada
- Forest road (outside public system) mapping
- Mapping and prioritization for wetland restoration
- Effects of climate change on freshwater wetlands
- Regional mapping of habitat and prioritization for grassland birds
- Consistent floodplain characterization and mapping
- Better information on structure and condition of Northeast forests; e.g., regional LiDAR
- Compilation of lands managed for young forest / shrublands
- Landscape change detection
- Integrating economic and social information (incl. ecosystem services) into conservation planning
- Regional conservation designs
- Better integration of regional, spatial conservation products

