

Part I: Projects in Progress

Project (and lead P.I.)	Status	Summary and recent developments	Cost
Coastal and Marine Projects			
Forecast effects of sea-level rise on the habitat of Piping Plovers and identify conservation strategies <i>Sarah Karpanty, Virginia Tech</i>	Final report in preparation	Modeling relationship between sea level rise, beaches and habitat for Piping Plover to guide management decisions. Through Hurricane Sandy Resiliency project, work is being extended across Northeast.	\$204,000
Marine bird mapping and assessment <i>Beth Gardner, NC State U.</i>	Final report in review / revision	Created comprehensive maps of annual and seasonal distributions for 24 marine bird species in the North Atlantic.	\$145,000
Resiliency of tidal wetland habitats and species <i>Andrew Milliken, USFWS, LCC and CSC Team</i>	Initiated in 2014	A coordinated effort by LCC partners to guide decisions about where to conduct tidal marsh restoration, conservation and management in the face of storm impacts, sea level rise and other stressors.	\$2,200,000 (Sandy funding)
Resiliency of beach habitats and beach-dependent species <i>Andrew Milliken, USFWS, LCC and CSC Team</i>	Initiated in 2014	A coordinated effort by LCC partners to guide decisions about where to conduct what beach restoration, management and conservation actions in the face of storm impacts and sea level rise.	\$1,750,000 (Sandy funding)
Aquatic Projects			
Forecasting changes in aquatic systems: decision-support tools for conservation <i>Ben Letcher, USGS</i>	Ongoing	Project to understand the impacts of climate change on stream flow, temperature and aquatic systems with an initial emphasis on brook trout. Linked to NE Climate Science Center-supported projects on regional stream temperatures.	\$420,000
Forecasting changes in aquatic systems: Phase 2 <i>Ben Letcher, USGS</i>	To be initiated Fall 2014		
Refine Northeast aquatic classification system <i>Arlene Oliviero, TNC</i>	Ongoing	Modifying the Northeast Aquatic Classification and map to include tidal influences on rivers and streams and to classify lakes	\$25,000
Restoring aquatic connectivity while increasing resiliency for road stream crossings to floods <i>Scott Jackson, UMass Amherst</i>	Initiated in 2014	Identify and assemble existing data on stream crossings, develop a database and online mapping application of road stream crossings, prioritize additional surveys of stream crossings, recommend field survey protocols, and sponsor further mapping and surveys.	\$150,000 (NALCC funding) + \$1,270,000 (Sandy funding)

Project (and lead P.I.)	Status	Summary and recent developments	Cost
Terrestrial Projects			
Permeable landscapes for wildlife <i>Mark Anderson, TNC</i>	Ongoing	Modeling and mapping regional permeability (connectivity) of habitats for wildlife species. Products will include regionally important movement concentrations.	\$49,868
Extend Northeast habitat classification and map to Atlantic Canada <i>Mark Anderson, TNC</i>	Ongoing	Extension of the Northeast Terrestrial Habitat Classification and Map into the North Atlantic LCC portion of Canada (New Brunswick, Nova Scotia, PEI, Southern Quebec). Co-sponsored by Northeast Climate Science Center.	\$95,238
Priority Amphibian and Reptile Conservation Areas (PARCAs) <i>Priya Nanjappa, AFWA</i>	Ongoing	Identification of Priority Amphibian and Reptile Conservation Areas through mapping and modeling of amphibians and reptiles and the impacts of climate change.	\$315,944
Identifying important migratory landbird stopover sites <i>Jeffrey Buler, University of Delaware</i>	Ongoing	Improved models and mapping of important fall migration stopover sites, using radar weather data and field surveys. Work co-sponsored by the Refuges and Migratory Bird programs of U.S. FWS as well as other partners.	\$75,000
Conserving important habitat for amphibians and other wildlife: compilation of vernal pool mapping efforts <i>Steve Faccio, Vermont Center for Ecostudies</i>	Initiated in 2014	Compile a comprehensive GIS dataset of currently mapped vernal pool locations in the North Atlantic LCC region; compile and describe the various mapping and certification approaches currently being employed; prioritize areas for future mapping.	\$100,000

Cross-cutting Projects			
Designing Sustainable Landscapes, Phase 2 <i>Kevin McGarigal, UMass Amherst</i>	Ongoing	Expanding the assessments of change and conservation decisions on representative species and ecological integrity to the entire Northeast Region; fully developing the conservation design decision model through the Connecticut River Watershed Pilot.	\$420,000
Designing Sustainable Landscapes, Phase 3 <i>Kevin McGarigal, UMass Amherst</i>	To be initiated Fall 2014	Facilitate delivery and adoption of conservation information and tools of Phases 1 and 2 by partners. Additionally, the Hurricane Sandy resiliency project for tidal wetlands (described above) will support coastal components of project.	\$230,000
Decision support tool to assess aquatic habitats and threats in North Atlantic watersheds and coastal zone <i>Fritz Boettner, Downstream Strategies</i>	Ongoing	Compilation of distribution, status and threats of aquatic and coastal fish and their habitats in the watersheds and coastal zone of the North Atlantic LCC in close cooperation with Fish Habitat Partnerships.	\$250,000
Use of a vulnerability index to assess species most likely to be impacted by climate change <i>P.I.: Bruce Young, NatureServe</i>	Peer review of final report	Regional climate change species vulnerability assessment. NatureServe developed an advisory committee, selected a list of 64 species for assessment including foundational and representative species and species of high regional concern and completed species assessments.	\$100,399

Part II: Completed Projects

Project (and lead P.I.)	Status	Summary and potential future steps	Cost
Coastal and Marine Projects			
Application of the Coastal and Marine Ecological Classification Standards (CMECS) to the Northeast <i>Mark Anderson, TNC</i>	Completed 2014	Consistent coastal and marine mapping for the North Atlantic. Regional ocean councils are considering future steps.	\$130,000
Consistent coastal mapping, National Wetlands Inventory – coastal update <i>CMI at Virginia Tech</i>	Completed 2013	162 updated National Wetland Inventory quads for the North Atlantic LCC coast (7 states) so that all coastal wetlands are mapped consistently.	\$102,600
Structured Decision Making for sea level rise <i>Andrew Milliken & Tim Jones, USFWS</i>	Complete	Completed a Structured Decision Making (SDM) Workshop on decision making for sea level rise. Results are being used to guide a sea level rise decision model funded by the Northeast Climate Science Center and being developed by USGS and Columbia University.	\$0
Terrestrial Projects			
Terrestrial wildlife models <i>Terri Donovan, UVM/USGS</i>	Completed 2011	Species-habitat models for representative species were developed and integrated into Phase I of the Designing Sustainable Landscapes project	\$90,005
Revise Northeast habitat classification map for VA & MD <i>Mark Anderson, TNC</i>	Completed 2012	Completion of the terrestrial habitat map in the coastal plain and Piedmont of Virginia and Maryland to be consistent with the Northeast Terrestrial Habitat Map.	\$14,470

Cross-cutting Projects			
Designing Sustainable Landscapes, Phase 1 <i>Kevin McGarigal, UMass Amherst</i>	Completed 2012	First phase of a project to develop a set of models and tools to guide conservation decisions in the face of regional change from urban growth, climate change and other major drivers including impacts to representative species and ecological integrity. During Phase I, the approach was developed in three pilot study areas: the Kennebec River watershed (ME), the middle Connecticut River (MA, CT, NH, VT), and the Pocomoke and Nanticoke River watersheds (DE and MD).	\$435,000
Vulnerabilities to climate change of Northeast fish and wildlife habitats, Phase II (through RCN grant program) <i>Hector Galbraith, Manomet; George Gay, National Wildlife Federation</i>	Completed 2014	Second phase of regional climate change habitat vulnerability assessment, building on 2009 RCN grant. Three reports: terrestrial and wetland; coastal, and coldwater stream. Also, database of ongoing projects by NWF as part of a collaboration on a <i>NEclimateUS.org</i> site with NOAA and other partners.	\$83,500
Information needs assessment <i>Michael Turner, Applied Geographics</i>	Completed 2012	Assessment and recommendation on an Information Management System for the LCC. Led to creation of Conservation Planning Atlas on DataBasin (nalcc.databasin.org)	\$45,600