

## NExUS Ongoing Projects and Activities Tue Oct 23 23:20:01 EDT 2018

Name	Assessment of Landscape Changes in the North Atlantic Landscape Conservation Cooperative: Decision-Support Tools for Conservation
Description	The overall purpose of this project (known colloquially as the Designing Sustainable Landscapes project, or DSL for short) is to assess the capability of current and potential future landscapes within the extent of the North Atlantic Landscape Conservation Cooperative (NALCC) to provide integral ecosystems and suitable habitat for a suite of representative species, and provide guidance for strategic habitat conservation. To meet this goal, we are developing a Landscape Change, Assessment and Design (LCAD) model for the NALCC, as described in the documents below. Phase one of this project, which began in December 2010 and was completed June 2012, focused on developing the overall modeling framework for simulating landscape change and assessing the ecological consequences of those changes (i.e., landscape change and assessment), and piloting the model in three study landscapes: 1) Kennebec River watershed in Maine, 2) middle Connecticut River watershed in Massachusetts, New Hampshire and Vermont, and 3) combined Pocomoke and Nanticoke River watersheds in Maryland and Deleware.  Phase two of this project, which began in July 2012 and will continue through June 2014, will focus on extending the landscape modeling to the entire Northeast (13 states), modeling an additional 20 representative species, expanding the ecological integrity assessment, coupling the landscape change model with a third party sea level rise model, improving the vegetation succession modeling, and developing an approach for integrating the results of the landscape change assessment into decision support for landscape design.  This project website provides links to recent presentations, results of phase 1 including a report and accompanying data for each of the pilot watersheds, detailed working technical documentation, and an online manager survey to provide feedback.
Category	- Climate-change Specific Projects - Research
Sector	- Infrastructure - Natural Ecosystems
Focus Area	- Coasts and Climate Resilience (including sea-level rise) - Changes in Extremes of Weather and Climate - Conservation/ Restoration of Sensitive Species and Habitats
Region	- Regional Or State New England Mid-Atlantic
Status	- Ongoing

Timelines	June 2014
	Department of Environmental Conservation, University of Massachusetts
Contacts	Kevin McGarigal, Department of Environmental Conservation, University of Massachusetts, mcgarigalk@eco.umass.edu