



NExUS Ongoing Projects and Activities Thu Nov 23 09:52:43 EST 2017

Name	Development of Coastal Zone Management Tools and Strategies for Coastal Ecosystems Adaptation to Climate Change and Sea Level Rise
Description	"Rhode Island's Coastal Resource Management Council (CRMC) and its partners have formed a team to study potential impacts to coastal wetland ecosystems from sea level rise and the landward movement of coastal wetlands in Rhode Island's 21 coastal communities. Coastal wetlands and abutting upland areas will be identified using recent LiDAR elevation data, existing digital Geographic Information System (GIS) data, and the Sea Level Affecting Marsh Model (SLAMM). The modeling will use sea level rise projections of 0.3, 1.0 and 1.5 meters to show short- and long-term scenarios projected for Rhode Island. The resulting outcomes will lead to revisions to Rhode Island coastal program policies and standards, new climate change adaptation strategies, and new standards for coastal buffer zones and coastal wetland restoration projects. Another potential tool is the establishment of rolling easements in order to protect these critical areas. The project will create a publicly accessible web-based mapping tool to help local and state planners and policy makers analyze potential community and ecosystem impacts from sea level rise. In addition, the research team will hold workshops to provide outreach education to coastal communities to assist in local community planning efforts. The Rhode Island project meets NOAA's Next Generation Strategic Plan objectives – improving the tools and methods for assessing the susceptibility of coastal ecosystems to climate change, and using findings to inform decision-makers. Because many coastal states are faced with the same dilemma, this project and the lessons learned from it will be widely used and transferable to other states in the country, to assist in their efforts to protect and restore coastal wetlands nationwide."
Category	- Climate-change Specific Projects - Research
Sector	- Infrastructure - Natural Ecosystems
Focus Area	- Coasts and Climate Resilience (including sea-level rise)
Region	- Regional Or State -- New England
Status	- Ongoing
Timelines	2012-2014
Lead Agencies	Rhode Island Coastal Resource Management Council, Rhode Island Sea Grant, The Nature Conservancy, and the Narragansett Bay National Estuarine Research Reserve