

Stimulate Innovation and Increase the Pace of Municipal Responses to a Changing Climate in the Coastal Zone of The Northeast and Bay of Fundy

Institutions: Gulf of Maine Council on the Marine Environment/Association of US Delegates to the Gulf of Maine Council on the Marine Environment, Northeast Regional Ocean Council, Roger Williams University School of Law, StormSmart Coast Network, Clean Air – Cool Planet

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Introduction of problem – Coastal ecosystems and the built-environment are being impacted by a changing climate. Coastal municipalities are on the front-line and need to accelerate their efforts to adapt their land use laws, infrastructure (e.g., roads, wastewater treatment, public facilities, etc.), policies, and programs to these changing environmental conditions. There is also a growing appreciation that our coasts and people are threatened by the increased frequency and severity of coastal storms. Progressive adaptation work is underway at the local level and we will accelerate it by working in partnership with state and local officials.

Rationale – In 2010 the Northeast Regional Ocean Council (NROC) and the Gulf of Maine Council on the Marine Environment (GOMC) conducted a climate change needs assessment for the region extending from the Bay of Fundy to Long Island Sound. A top priority was to stimulate innovation and increase the pace of municipal responses to a changing climate. The rationale was that since the vast majority of land use decisions in this region are made at the local level, working directly with coastal municipalities on climate change adaptation is the most expedient way to make our coasts more resilient and hazards-ready.

Summary of work to be performed – This proposal has three primary tasks – research, hands-on technical assistance and communication/outreach.

1. Research and document best practice/innovative municipal adaptation approaches in the northeast and elsewhere. Identify, assess and compile municipal best practices. Widely disseminate through the Coastal Services Center, (CSC) the Climate Adaptation Knowledge Exchange (CAKE), the CASES Adaptation Library (CASES), the StormSmart Coast Network (SSCN) and the Canadian Regional Adaptation Collaborative (RAC). (In this way we build on existing compilations, ensure broad access to the best municipal approaches, and cost-effectively transfer this knowledge throughout the US and Canada.)
2. Provide municipal technical assistance. The region's five coastal zone management, floodplain/emergency management programs will implement and report on a New England Coastal Resiliency Initiative – a technical assistance program that enables pilot communities to make climate adaptation changes to their policies, programs and statutes.
3. Develop and disseminate adaptation/resiliency communications. Clean Air – Cool Planet, in collaboration with the Kresge Foundation, the Sea Grant Program, International Council for Local Environmental Initiatives (ICLEI) and the National Estuarine Research Reserve Coastal Training Programs will promote the exchange of communication materials and lessons-learned among municipal teams, government agency staff, scientists and non-profits. This work will also engage climate change professionals in the Canadian provinces of New Brunswick and Nova Scotia through the GOMC.