

Coastal Hazards Resilience Committee 2013-2014 Work Plan



The Coastal Hazards Resilience Committee is one of three NROC Standing Committees. This committee was established to inform and recommend to the Council how best to approach regional issues and coordinate activities related to coastal hazards in New England.

Goal:

Build hazards resilience to impacts of coastal erosion, flooding, storms, and climate change through region-wide dissemination of data, tools, and case studies, as well as fostering collaborative actions.

Need for Action:

New England coastal communities have experienced coastal storm events that have led to loss of life and major damage to homes, businesses, infrastructure, and shorelines. Coastal hazards information and tools can assist state and local officials to better plan for impacts of storms and sea level rise and implement strategies to prevent recurring future damages. Data such as detailed terrestrial contours, shallow water bathymetry, and mean high water positions are needed throughout the region to support efforts to identify potential inundation zones from storm surge, erosion and sea level rise. A companion to data is the need to develop user-friendly tools to access and analyze data and support management decisions and recommendations.

Strategies: The committee has determined three strategies for working toward its goal. During 2013-2014, the committee will:

1. Promote regional dialogue on broad-scale adaptation strategies for responding to the effects of sea-level rise.
2. Act on data acquisition priorities and user-friendly tools needed to support planning for and responses to coastal hazards.
3. Partner with academia, industry and public agencies to develop a plan for an Integrated Ocean Observing System (IOOS) that supports storm surge and inundation forecasting and response.

Strategies and activities: Each of the three strategies has specific associated activities that the committee members will implement.

Strategy CHR-1: Promote regional dialogue on broad-scale adaptation strategies for responding to the effects of sea-level rise.

Activities:

CHR-1.1 Continue StormSmart Coasts New England webinar series.

Organize and conduct webinars to share information on topics related to impacts of coastal hazards, sea level rise, emergency preparedness, community resilience, and climate adaptation as well as specific case studies or pilot projects from New England. The webinar series will promote engagement in the New England StormSmart Coasts Network. Topics and presenter profiles will be featured on the StormSmart New England group page. The committee will focus on advance planning of topics, broader distribution of announcements, and building participation in the webinars. The

committee will identify continuing education credit programs for each webinar to provide additional benefits to participants.

The Committee will:

- Define Topics, Presenters, and Schedule
- Identify (and apply for) Appropriate Continuing Education Credits
- Develop an Outreach Plan
- Explore Options for Recording Webinars and Generating Discussion

CHR-1.2 Recognize success of New England Municipal Coastal Resilience Grants Projects.

Organize a half-day meeting for grantees to share results of their projects and share lessons learned with each other. The committee will develop a package of materials including a summary of projects, key project deliverables (e.g., maps, guidance, and plans), and contact information. The committee will potentially link the results to the webinar series.

The Committee will:

- Organize a planning team.
- Define goals of meeting, timeframe, location and participants. Explore options for connecting to the Gulf of Maine Council meeting.
- Develop NROC webpage devoted to Municipal Coastal Resilience Grants Initiative.
- Develop agenda and meeting materials.

CHR-1.3 Maintain and Evaluate StormSmart Coasts New England Network.

Identify funding and opportunities to maintain, update, and enhance the StormSmart Coasts New England websites, including developing a new point of entry from the NROC webpage. The committee will also evaluate the impact and effectiveness of the StormSmart Coasts New England Network through tracking of web stats, contacting state site leads, and setting up a potential SurveyMonkey for site users. The committee will work with state site leads in Maine and Connecticut to launch network sites.

CHR-1.4 Create a Regional Media Toolbox for the StormSmart Coasts New England Network.

Work with Clean Air-Cool Planet to highlight and expand a media toolkit developed for New Hampshire. Specifically, develop a framework to integrate with other StormSmart Coasts New England Network sites, including media resources, hazards and climate related stories and map, and template for state and local contacts.

The Committee will:

- Organize a webinar to introduce the framework piloted in New Hampshire.

CHR-1.5 Develop Regional Funding Proposals.

Assess opportunities to partner with other organizations on funding proposals for climate adaptation and hazards resilience related projects. The Committee has specific interest in proposals that:

- Continue the Municipal Coastal Resilience Initiative and associated small grants program;
- Facilitate review of federal, state, and municipal coastal management policies and their ability to manage for climate change;
- Support aspects of the StormSmart Coasts Network and StormReporter tools;

CHR-1.6 Exchange of Information with Regional Organizations.

Provide a forum for information exchange and resource sharing with other regional organizations, including the North Atlantic LCC, Northeast Climate Science Center, Gulf of Maine Council and Mid Atlantic Regional Council on the Oceans on topics of sea-level rise modeling, data needs and decision-support tools.

Strategy CHR-2: Act on data acquisition priorities and user-friendly tools needed to support planning for and responses to coastal hazards.

Activities:

CHR-2.1 Promote the Use of StormReporter.

Assess and support opportunities for expanding the use of StormReporter across the region. The committee will also provide input on the development of a StormReporter application for iPhone and Android devices. This project builds off of the ongoing work in Massachusetts on StormReporter.

CHR-2.2 Develop Supporting Products and Information for FEMA programs.

Work with FEMA Region 1 and other partners to develop products and information that support programs such as the Community Rating System (CRS). The committee will review the new point system for CRS and provide guidance to New England coastal communities. The StormSmart Coasts Network will continue to be used as a venue for sharing products and information that support qualified activities.

The Committee will:

- Conduct a state-by-state inventory of available information to support CRS.
- Summarize the region's past and present participation in CRS and share lessons learned with FEMA and interested communities.
- Identify information, materials, and data that can be developed at a regional scale to support community participation in the CRS.
- Work with FEMA to build coastal interest and capacity to participate in CRS.

CHR-2.3 Contribute to Inundation Visualization Tools.

Provide input on the development of visualization tools for inundation, storm surge, sea level rise, and economic impacts. The committee will request presentations from tool developers to provide feedback from the state and local coastal management

perspective. The committee will also consider visualization tools that address the response of ecosystems such as marshes, dunes and beaches.

Strategy CHR-3: Partner with academia, industry and public agencies to develop a plan for an Integrated Ocean Observing System (IOOS) that supports storm surge and inundation forecasting and response.

Activities:

CHR-3.1 Increase capacity of models to incorporate modern terrain and reforecast inundation from major past events.

Work with NERACOOS and other partners to identify opportunities for supporting models and coordinating model development.

CHR-3.2 Develop hazards resilience requirements for ocean observations in partnership with NERACOOS.

Continue to assess ocean observations requirements and partnerships for hazards resilience.

Resources:

The following table shows which activities can be undertaken with existing resources, and which require additional resources.

With Existing Resources	With Additional Resources
<i>Promote regional dialogue</i>	
CHR-1.1: Webinar Series	CHR-1.2: Meeting of Resilience Grantees
CHR-1.3: Maintain and Evaluate StormSmart Coasts New England Network (evaluation)	CHR-1.3: Maintain and Evaluate StormSmart Coasts New England Network (updates and maintenance)
CHR-1.4: StormSmart Coast New England Network Media Toolbox (develop framework)	CHR-1.4: StormSmart Coast New England Network Media Toolbox (modify SSCN sites)
CHR-1.5: Regional Funding Proposals	
CHR-1.6: Exchange of Information with Regional Organizations	
<i>Data acquisition and tools</i>	
CHR-2.1: StormReporter (input)	CHR-2.1: StormReporter (expansion)
CHR-2.2: Develop Supporting Products and Information for FEMA programs	
CHR-2.3: Inundation visualization tools	
<i>IOOS partnerships</i>	
CHR-3.2: Develop hazards resilience requirements	CHR-3.1 Increase capacity of inundation models

Implementation Leads:

The following table shows the lead agency responsible for implementing each activity. While all committee member agencies are encouraged to participate in the implementation of activities, the lead agency is responsible for coordinating, monitoring, and reporting on designated activities.

Strategies and Activities	Agency Lead(s)
CHR-1: Promote regional dialogue on broad-scale adaptation strategies for responding to the effects of sea-level rise	
CHR-1.1 Continue Bimonthly webinar series	TNC
CHR-1.2 Meeting of resilience grantees	TNC, NOAA
CHR-1.3 StormSmart Coasts Network website	ME, CT
CHR-1.4 StormSmart Coast Network communications	
CHR-1.5 Write/seek/fund regional proposals	
CHR-1.6 Exchange of Information with Regional Organizations	
CHR-2: Act on data acquisition priorities and user-friendly tools needed to support planning for and responses to coastal hazards.	
CHR-2.1 StormReporter	MA
CHR-2.2 Integrate FEMA products	NOAA, MA
CHR-2.3 Inundation visualization tools	USGS
CHR-3: Partner with academia, industry and public agencies to develop a plan for an Integrated Ocean Observing System (IOOS) that supports storm surge and inundation forecasting and response.	
CHR-3.1 Increase capacity of inundation models	NERACOOS
CHR-3.2 Develop hazards resilience requirements	NERACOOS

Past Accomplishments:

Below is a summary of past accomplishments of the Coastal Hazards Resilience Committee.

- **Hazards Resilience Workshop (November 2007)** Thematic areas included determining impacts of past hazard events, learning the effects of climate change on the intensity and frequency of future events, and understanding the region's current resiliency to better gauge existing preparedness and improve future capacity. Nearly 60 stakeholders from diverse backgrounds participated in the workshop. Presenters provided important inspiration and background on issues like storm events and climate change impacts, as well as valuable opportunities and lessons learned from specific efforts to improve coastal hazards resiliency.
- **LiDAR Workshop (May 2009)** NROC and USGS sponsored a workshop to discuss regional LiDAR data needs and requirements.
- **New England LiDAR Proposal to USGS (2009)** New England states (data managers and data users) collaborated to submit a regional proposal for the USGS 'ARRA' Funding Opportunity for LiDAR acquisition. The New England states used the results of the May 2009 LiDAR workshop to inform the proposal.
- **Climate Adaptation Proposal to NOAA (September 2010)** NROC Hazards Committee Co-chairs worked with the Gulf of Maine Council's Climate Change Network to identify regional climate adaptation planning needs and submitted a successful collaborative proposal to NOAA's Climate Program Office.
- **Coastal Climate Adaptation Training (October 2010)** NROC identified the need for a regional Climate Adaptation Training for state managers. NOAA's Coastal Services Center and the Northeast States for Coordinated Air Use Management (NESCAUM) organized a training with additional support from EPA's Region 1, New England Interstate Water Pollution Control Commission, and Rhode Island Sea

Grant. More than 25 state agencies and regional organizations received training on coastal climate adaptation planning.

- **Development of the StormSmart Coasts New England Network (June 2011)**
State pages available for Rhode Island, Massachusetts, and New Hampshire.
- **StormSmart Coasts New England Webinar Series (September 2011 - October 2012)** NROC organized 6 webinars on topics related to impacts of coastal hazards, emergency preparedness, community resilience, and climate adaptation as well as specific case studies or pilot projects from New England. An average of 20 to 50 state and local officials participated in each webinar.
- **Northeast LiDAR and Sea Level Rise Impacts Workshop (July 2012)** 75 federal, state and local data managers and users participated in a 2 day workshop to discuss use of high resolution LiDAR in sea level rise and inundation mapping efforts.

2013-2014 Committee Members:

Julia Knisel, Massachusetts Office of Coastal Zone Management (State Co-chair)
Adrienne Harrison, NOAA (Federal Co-chair)
Susan Russell-Robinson, US Geological Survey (Federal Co-chair)
Kevin O'Brien, Connecticut Office of Long Island Sound (NERACOOS Co-chair)
Steve Couture, New Hampshire Coastal Program
Stephen Dickson, Maine Geological Survey
Sherry Godlewski, New Hampshire Department of Environmental Services
Edward Fratto, Northeast States Emergency Consortium
Janet Freedman, Rhode Island Coastal Resources Management Council
Regina Lyons, EPA Region 1
Ellen Mecray, NOAA
Sam Merrill, New England Environmental Finance Center
Paul Morey, FEMA Region 1 (*invited*)
Jennifer Pagach, Connecticut Office of Long Island Sound
Lisa Rector, NESCAUM
Peter Slovinsky, Maine Geological Survey
Tonna-Marie Surgeon-Rogers, Waquoit Bay National Estuarine Research Reserve
Adam Whelchel, The Nature Conservancy