

Northeast Regional Ocean Council | Coastal Hazards Resilience Committee

2024-2028 Workplan

COASTAL HAZARDS RESILIENCE COMMITTEE

The Coastal Hazards Resilience Committee (CHRC) 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.

This work plan highlights the Coastal Hazards Resilience Committee's strategies for advancing coastal hazards resilience and the actions that will be implemented to support those strategies. Some of the IJA grant-funded actions highlighted in this work plan will begin during the fall of 2023 and continue into the period covered by this five-year plan. NROC CHRC will revisit this work plan as needed to ensure that the strategies and activities reflect the scope of work associated with NROC's latest priorities, funding levels, and emerging issues.

GOAL

Build hazards resilience to impacts of coastal erosion, flooding, storms, and climate change through region-wide dissemination of data, tools, best practices, 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. Data and tools are needed throughout the region to support efforts to identify potential inundation zones from storm surge, erosion, and sea level rise. Habitat considerations and regulatory barriers for advancing living shorelines need to be explored and best practices for overcoming these challenges need to be identified and implemented. There are many coastal resilience projects addressing these issues throughout the region and coordination is necessary to ensure management needs are identified, projects are complementary, and underserved communities are included in the development of solutions.

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

Action 1.1: Develop approaches for integrating updated sea level rise projections into planning tools and policies.

- Host roundtable on updated sea level rise projections and planning guidance, including consideration of how projections are being communicated and integrated into planning and policies. The workshop will provide an opportunity to consider and inform regional approaches to communications, planning, and policies.
- Expand knowledge and understanding about new sea level rise projections by facilitating regional dialogue, training opportunities, and sharing of resources.

Action 1.2: Organize roundtables focused on topics of regional interest to enable peer-to-peer sharing including regional landscape, experiences and lessons learned, research needs, and policy opportunities.

- CHRC anticipates hosting additional roundtable discussions and/or workshops on sea level rise adaptation topics of interest in the region. Specific topics will be flexible to address emerging needs, ensuring timeliness and relevance to the region.

Strategy CHRC-2: Facilitate data acquisition, the development of user-friendly tools, and the identification of best practices to support planning for and responses to coastal hazards.

Action 2.1: Support regional efforts to advance nature-based infrastructure and living shorelines management approaches.

- Host a workshop with federal agencies to review, consider, and discuss living shorelines regulatory challenges and potential mitigation solutions. Prepare a report highlighting findings and next steps related to living shoreline permitting, barriers, and challenges in New England.
- Host a workshop to explore habitat tradeoffs of living shorelines projects in the context of climate change. The topic of habitat conversion and habitat tradeoffs is a priority for the CHRC as it is seen as an important design and permitting consideration limiting the expansion of living shorelines in the region. The workshop will provide a forum to discuss complex permitting review elements such as project goals (restoration vs. erosion, coastal/shoreline stabilization) and consideration of future conditions of coastal systems and projects related to climate change. Following the workshop, CHRC will prepare a report documenting the process, findings, and next steps related to the science and implications of living shorelines' impact to regulated resources into the future.
- Assess the performance and impacts of living shorelines installations and pilot projects across Northeast states. CHRC will convene project managers, researchers, and experts to share/compile monitoring data and results; and discuss metrics, protocols, and best practices. Information sharing and discussion among practitioners and others will help inform practitioners of the most critical metrics to measure to determine the success of living shorelines project implementation, as well as the positive and negative environmental impacts of these approaches. This assessment will inform an update to the living shorelines site characterization and performance monitoring document.
- Conduct outreach and engagement with landowners, engineers, and communities to highlight the benefits of living shorelines and share lessons learned regarding habitat enhancement and tradeoffs, project design, and monitoring.
- Maintain a list of research questions and needs related to living shorelines and nature-based infrastructure and share it with regional partners. A shared document will be updated annually to maintain a list of current research needs. Examples of needs include:
 - More specific research around scour and rock sills at various scales on the nearshore environment;
 - Impacts of traditional structures compared to impacts of living shorelines and nature-based solutions on habitat in expected future conditions; and
 - Understanding the benefits and impacts of living shorelines and nature-based solutions on environmental justice communities in New England.

Action 2.2: Establish a water level sensor community of practice in New England.

- Host a *Water Level Monitoring in the Northeast* workshop including a showcase of water level sensors and networks and a regional discussion regarding sensor requirements and data management. Goals of the workshop:
 - Increase awareness and understanding of Northeast water level monitoring activities, priorities, and gaps;
 - Identify priority locations and associated parameters for future water level sensors;
 - Improve understanding of water level sensors that are cost-effective and suitable for New England coastal environments; and
 - Strengthen the connections between professionals in the field of water level monitoring and applications.
- Develop guidance to highlight sensor types and deployment tips.
- Deploy additional water level sensors across the region to help cover gaps in monitoring, and address regional priorities. Ensure consideration of water level monitoring priorities for tribes, environmental justice communities, and underserved communities in the decision-making process.
- Conduct outreach to coastal managers to identify data and product needs for specific management applications and pursue opportunities to address needs.

Action 2.3: Organize learning sessions on tools and data that support planning for coastal hazards and sea level rise impacts.

- Identify tools and data that support partner interests and organize opportunities to share resources via workshops, webinars, and/or other communications. Potential focus areas include coastal resilience applications for social vulnerability, climate equity, and environmental justice tools; and Benefit Cost Analysis tools and training to support community proposal development for federal funding programs such as BRIC, NCRF, etc.
- Track coastal hazards data needs to support mapping, planning, and tool development in the region. A shared document will be updated annually to maintain a list of current needs.

Action 2.4: Leverage NERACOOS data, products, and services for coastal inundation observations and forecasting.

- Coordinate with NERACOOS on topics such as storm surge, inundation, erosion forecasting, and modeling needs to inform future research and investments. Provide opportunities for dialogue among state coastal management programs, NOAA, NERACOOS, and modeling research groups. Share end-user needs and research questions, discuss gaps in current capabilities, and identify opportunities to build out capabilities in New England. Evaluate changes in needs and requirements from previous conversations.
- Coordinate with the Northeast Sea Grant Consortium (NESGC) on regional priorities, funding opportunities, and coastal resilience-related research needs. Invite the chair of NESGC to participate in Committee meetings. Share current research needs with NESGC to inform funding opportunities.

Strategy CHRC-3: Provide regional leadership, engagement, and communications.

Action 3.1: Broaden climate equity perspectives and build inclusivity through expanded outreach and engagement with tribes, and environmental justice communities and organizations.

- Work collectively to build diverse perspectives by identifying communities, organizations, and partners that should be included in discussions, regular committee communications, meetings, and planned activities.
- Participate in efforts to better define and understand equity in the NROC context, and map the NROC landscape of federal, state, regional, and local climate equity programs and partnerships.

Action 3.2: Conduct outreach and communications to expand knowledge and engagement around coastal hazards and resilience topics throughout the Northeast region.

- Convene opportunities for engagement and learning about coastal hazards and resilience as part of NROC meetings and/or as stand-alone webinars or in-person sessions.
- Utilize the NROC website, email outreach, and/or other communication tools to share informational resources, tools, and/or case studies to advance knowledge around coastal hazards and resilience topics in the Northeast.
- Explore opportunities for new sources of funding and partnerships to expand and leverage NROC CHRC efforts.

Action 3.3: Build and engage Committee membership through expanded communication and engagement.

- Co-chairs will maintain contact information for current committee members.
- Co-chairs will meet quarterly to plan CHRC activities and track progress
- CHRC will convene bi-annual Committee meetings with report-out roundtables
 - Develop a plan with members to follow up on key action items and potential funding proposals.
 - Track the action items and next steps from each roundtable.
- Regularly share updates and results for NROC-supported projects in meetings and NROC events.
 - Share updates and results from the Living Shorelines and Water Level Sensor project activities at Committee meetings and develop plan with members to share with their networks.