

NROC Coastal Hazards Resilience Committee (CHRC)

CHRC Project Updates and Next Steps **November 13, 2024**

Joan LeBlanc, NROC
Coastal Hazards Resilience Program Director

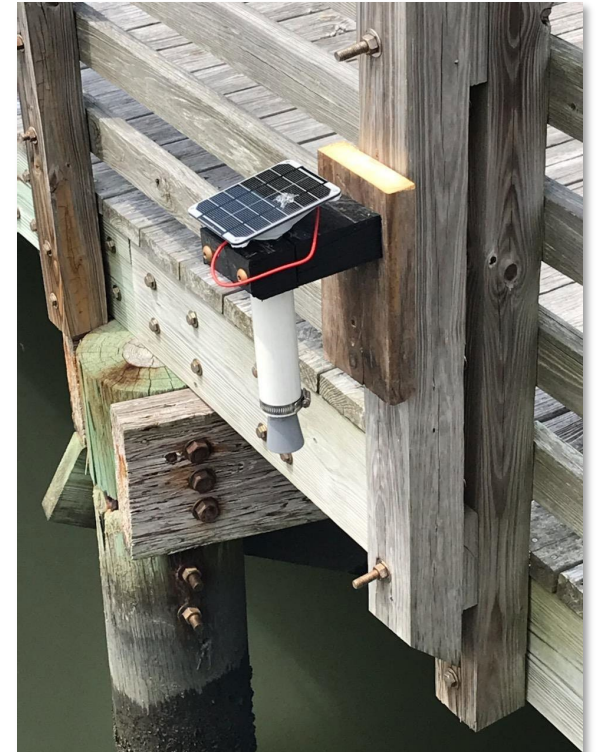
NROC Coastal Hazards Resilience Committee

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

Coastal Hazards Resilience Committee Projects

- 1. Advancing Living Shorelines in New England*
- 2. Establishing a Water Level Sensor Monitoring Network*
- 3. Hosting a Coastal Resilience Exchange*



Advancing Living Shorelines in New England

Purpose

- Advance implementation of living shorelines projects in New England by increasing shared understanding of regulatory issues, monitoring techniques, and implementation of living shorelines approaches



Advancing Living Shorelines in New England

Key Activities (complete)

- Series of interviews with regulatory stakeholders about **permitting**
- Webinar and workshop to consider regulatory challenges and mitigation opportunities (Fall 2023)
- Series of interviews with engineers and coastal managers about the **design, construction, and monitoring** of living shorelines (Summer 2024)
- Workshop with coastal managers, engineers, and practitioners to discuss lessons learned (Sept. 2024)
- Educational site visit to Wagon Hill living shorelines project in Durham, NH (Sept. 2024)



Advancing Living Shorelines in New England

Key Activities (next steps)

- Finalize Report: *Living Shorelines Permitting in New England*
- Prepare report from September 2024 workshop regarding lessons learned
- Conduct outreach and education to expand knowledge about the design, permitting, construction, and monitoring of successful living shorelines
- Compile, develop, and share resources to expand knowledge about successful living shorelines
- Incorporate living shorelines into the NE Ocean Data Portal (2025)



Advancing Living Shorelines in New England

Key Points of Feedback from Day 1

- Support for integrating living shorelines into the NE Ocean Data Portal
 - Great to include case study sites
 - Added value to show points for sites with living shorelines projects even if data is limited
- Innovative ideas for educational, awareness-building approaches such as podcasts
- Regarding the need for training of engineers, consider linking LS technical education and training with similar efforts for tidal crossings community

Developing a Regional Water Level Sensor Monitoring Network

- Provide real-time data to monitor storm surge and SLR
- Inform local planning, adaptation, and decision-making
- Create reporting tools to analyze and share data



Installations

- 8 completed so far
- 35 planned right now with about 12 to be completed in the next 6 weeks



Data Delivery

Station Hampton Harbor: HPMN3

Hampton Harbor Tide Gauge

Lat: 42.91 Lon: -70.81

[NERACOOS](#)

Last updated at: Nov 12, 08:54 AM

Mean Lower Low Water: 8.5 ft

Unit system: Metric English

Station: Hampton Harbor: HPMN3

Datum:

☐ Mean High High Water

☐ Mean High Water

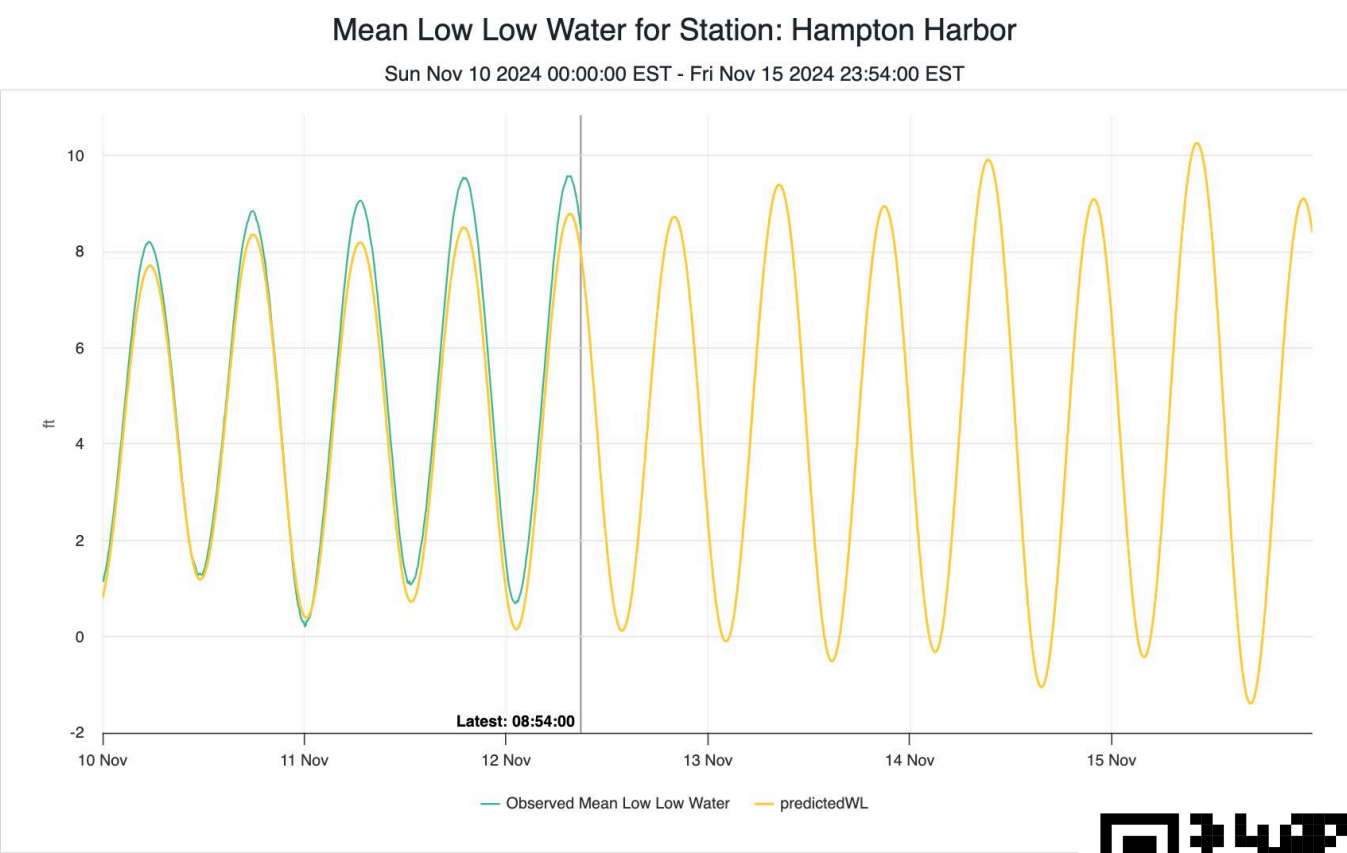
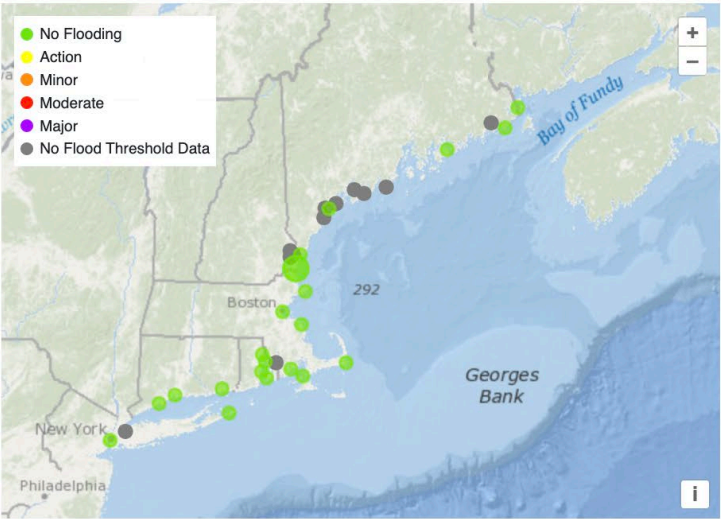
☐ Mean Tide Level

☐ Mean Sea Level

☐ Mean Low Water

☒ Mean Low Low Water

☐ NAVD88 (coming soon)



Timeframe:

Start date: 11/10/2024

End date: 11/15/2024

↺

Plot Dates

<https://mariners.neracoos.org/water-level>



Water Level Sensor Network

Next Steps

- Continue identifying potential sites and installing sensors
- Refine data viewer
- Provide support for network operations
- Workshop to share knowledge / lessons learned (2025)

Key Points of Discussion from Day 1

- Installation phase is complex, requires building local relationships
- Future challenge - team will need to prioritize which sensors receive long-term funding and support



Link to latest list of 100+ potential sites (15 highlighted in green to be funded by NROC): [List of Potential Sites](#) Suggestions for additional sites welcome!

Hosting a Coastal Resilience Exchange

Purpose

- Provide a forum to share strategies, resources, and ideas for advancing coastal resilience in the Northeast



Activities

- **November 2024 NROC Meeting:**
 - Shared resilience updates from across the region
 - Learned about **NOAA's Sea Level Calculator** (BETA) – feedback welcome
 - Discussed strategies and opportunities to advance **equitable resilience through proactive coastal relocation** (UHI, TNC, Wells NERR)

Outcomes from Session on Advancing Equitable Climate Resilience through **Proactive Coastal Relocation**

What we learned (a few themes)...

- *What are we talking about?*
 - Purposeful movement of people and assets out of harm's
 - How? Direct buy-outs, moving structures, rezoning, rolling easements, other...
- Words matter: ~~Managed Retreat~~
- Relocation efforts must be driven by communities from the bottom up
- Barriers = psychological, practical, and institutional
- Impacts of SLR are deeply emotional for residents
 - fear, anxiety, grief, loss
- Determining the tipping point for when to move is difficult
- To be viable relocation programs must prevent future redevelopment

Outcomes from Session on Advancing Equitable Climate Resilience through **Proactive Coastal Relocation**

What we learned (a few themes)...

Equity is an overarching concern

- People least able to relocate will suffer the most
- Relocation intersects with other equity concerns such as affordable housing, pollution, lack of insurance, low-income, public health, flooding
- Native communities face significant challenges – tribes must lead discussions on their land
- As insurers stop providing coverage, low-income homeowners face higher risks with no insurance

Outcomes from Session on Advancing Equitable Climate Resilience through **Proactive Coastal Relocation**

What we learned (a few themes)...

Municipal perspective

- When it comes to equity there may be a disconnect between potential community impact and the views of municipal officials
- Local officials are more concerned about
 - Lack of sites for relocation
 - Public response
 - Cost of purchasing land
 - Cost of demolishing assets
- Community needs: funding strategies, education, technical support, and regulatory approaches

Outcomes from Session on Advancing Equitable Climate Resilience through Proactive Coastal Relocation

What's Next for NROC...

- Convene regional conversations
- Provide opportunities to share knowledge, tools, strategies, and case studies
- Compile and share resources
- Collaborate with regional partners to learn from and build on other projects and initiatives
 - Example: UHI / TNC New Project – *Proactive Planning for Collaborative, Equitable Retreat and Relocation in MA*
 - Peer-to-peer learning
 - Resource sharing
 - Community outreach and engagement

Outcomes from Session on Advancing Equitable Climate Resilience through **Proactive Coastal Relocation**

Priority topics for future learning...

- Case studies – lessons learned
- Equity – understanding issues and approaches
- Reasons behind relocation
- Funding opportunities/strategies to support relocation
- Regulatory approaches
- Insurance challenges
- Multi-community collaboration
- Education and outreach
- Community engagement
- Roles of government (federal/state/local), non-profits, homeowners, etc.
- Process for determining what happens with a coastal area after homes and infrastructure move

Outcomes from Session on Advancing Equitable Climate Resilience through **Proactive Coastal Relocation**

Priority topics for future learning...

Opportunities for Hope

- Linking relocation to restoration projects that benefit community and reduce future losses
- Example: Sainte-Flavie, Quebec
- Former area of coastal homes is now an ecological park providing habitat and community recreational opportunities



Key is to transform loss into a positive, lasting benefit for the community

Questions, discussion, feedback

Joan LeBlanc, NROC
Coastal Hazards Resilience Program Director
jleblanc@northeastoceancouncil.org
978-866-7284