Advancing Coastal Resilience
What do we know from elsewhere?

Adrianne Harrison
NOAA Office for Coastal Management
COASTAL RESILIENCE

Bouncing back & building beyond.

PLAN & BUILD RESILIENCE

- Develop and implement plan to become more resilient.
  - improving forecasts, observation models, computer systems
  - getting information to decision makers faster
  - incorporating green infrastructure

DISASTER STRIKES

- Disasters can be imminent or strike unexpectedly.
  - sea level rise
  - tsunamis
  - coastal storms and hurricanes

RESPOND

- Immediately take action following a disaster.
  - pollution response
  - damage assessment imagery
  - completing hydrographic surveys to reopen ports

RECOVER

- Assess resilience and manage adaptively.
  - assessing damage to communities, economy, and environment
  - issuing grants to rebuild and restore habitat
  - providing data and tools for analysis

Assess resilience and begin planning for the next disaster.

Building resilience is an iterative process.
Advancing Coastal Resilience

Regional Coastal Resilience Grants

Coastal Resilience Network Grants

Coastal Zone Management Programs

& National Estuarine Research Reserve Programs
NOAA Coastal Resilience Grants Program

Support collaborative approaches to help coastal communities prepare for and recover from the impacts of extreme weather, climate hazards, and changing ocean conditions

www.coast.noaa.gov/resilience-grant
Building Coastal Resilience through Capital Improvements Planning: Guidance for Practitioners

$703,028 for the Association of State Floodplain Managers and the American Planning Association to develop new national planning guidelines for coastal infrastructure investments. Pilot projects are focused on Toledo, Ohio, and Savannah, Georgia.

Photo Credit: U.S.EPA
This online self assessment process is a tool to assist communities to reduce vulnerability and increase preparedness by linking planning, mitigation, and adaptation. Through this assessment you will find out how your preparedness can be worth valuable points through FEMA's Community Rating System and Sustainable Jersey.

Plan for your community's future in the face of climate change

**ENABLING COMMUNITIES TO BE PREPARED AND MORE RESILIENT.**

**ASSESS**
Use the online mapping tools to help visualize your community's exposure to current and future hazards.

**PLAN**
Complete an online assessment of your municipal preparedness, planning and public outreach activities around flood hazards.

**IMPLEMENT**
Utilize the resilience recommendations to prioritize next steps and future municipal actions.
Coastal Zone Management Program
Focus on Coastal Hazards

Mitigating Coastal Hazards
($12.4 million federal; $7.7 million matching)

Minimizing risk from coastal hazards such as storms, flooding, erosion, and sea level rise makes communities more resilient.

Credit: Bill Grabin, Kennebunk
RI Coastal Hazard Application Guidance

- Component of RI Shoreline Change Special Area Management Plan (SAMP)
- Coastal development permit applicants will be required to complete a hazard assessment
NH Setting SAIL

- Climate Adaptation Master Plan Chapters (Dover, Greenland, Newington, Stratham)
- Advisory Coastal Flood Hazard Overlay District (Durham)
- Climate in Stormwater Regs (Exeter, Newmarket)
- Culvert replacement plans (Rollinsford)

Credit: NH Coastal Adaptation Workgroup
Funding Resilience

NOAA Coastal Resilience Grants

Coastal Zone Management Programs

NERRS Science Collaborative
Questions

Contact Information

Adrianne.Harrison@noaa.gov
603-862-4272
High Resolution Coastal Inundation Modeling and Advancement of Green Infrastructure and Living Shoreline Approaches in the Northeast

$891,243 for the Northeast Regional Association of Coastal and Ocean Observing Systems and the Northeast Regional Ocean Council, to build resilience in coastal New England by improving information about storm impacts and advancing awareness and implementation of nature-based infrastructure management approaches.
Resilient Cape Cod: A Path Forward with Innovative Tool Development and Public Engagement

$522,348 for the Cape Cod Commission to develop the economic, social, and environmental information needed to develop climate change adaptation plans. The Town of Barnstable, Massachusetts, will serve as a pilot project, and information from this effort will be used as a model for other Cape Cod communities.