

State & Municipal Case Studies: Northeast Region



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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, & case studies, as well as fostering collaborative actions



Municipal Resilience Initiative

- NROC & GOMC awarded \$285,000 through NOAA Climate Program Office in 2011
 - Best practices & case studies (Roger Williams University)
 - Communications (Clean Air-Cool Planet & StormSmart Coasts Network/Blue Urchin)
 - Municipal technical assistance grants



Gulf of Maine
Council on the
Marine Environment



StormSmart



Maine: Ogunquit Sewer District



- Assessment of adaptation strategies to protect sewage treatment plant from sea level rise & storm surge:
 - elevate existing plant
 - enhance dune retention systems
 - relocate plant & infrastructure
 - connect to neighboring facilities in Wells
- Preliminary engineering report available at ogunquitsewerdistrict.org

New Hampshire: City of Portsmouth

- Assessing impacts of sea level rise & storm surge on municipal facilities & sensitive areas
- Completed series of inundation maps
- Compiling relevant adaptation strategies
- Providing city staff, boards, & community members with opportunities to discuss strategies
- Developing adaptation recommendations for the Master Plan



Massachusetts: Marshfield, Scituate, & Duxbury

- Assess risk & vulnerability of public infrastructure & natural resources (salt marsh & shellfish) from impacts of sea level rise
- Identify adaptation strategies & begin public dialogue around risk, vulnerability, & options



MA: Marshfield, Scituate, & Duxbury (cont.)



South Shore Coastal Hazards Adaptation Study

Funding provided by the
District Local Technical Assistance program

Prepared for the
Towns of Duxbury, Marshfield, and Scituate

December 31, 2011

Prepared by
Metropolitan Area
Planning Council
60 Temple Place, 6th Floor
Boston, Massachusetts 02111
Tel (617) 451-2770
www.mapc.org

- 3 towns received 23% (> \$73 million) of total FEMA Flood Insurance Claims for entire state
- Recommended actions:
 - Increase setbacks
 - Acquire properties
 - Site buildings outside of flood zones
 - Elevate structures

www.townofmarshfield.org

Rhode Island: Block Island Ferry Terminal

- Assessed adaptation strategies for ferry terminals & associated infrastructure at Block Island & Point Judith
- Developed (draft) short & long-term engineering solutions
 - elevate port infrastructure (piers & roads)
 - relocate/re-align roads or structures to higher elevations
 - increase height of breakwater & revetment
 - fortify structures in place
- Finalizing engineering report



Connecticut: Town of Greenwich

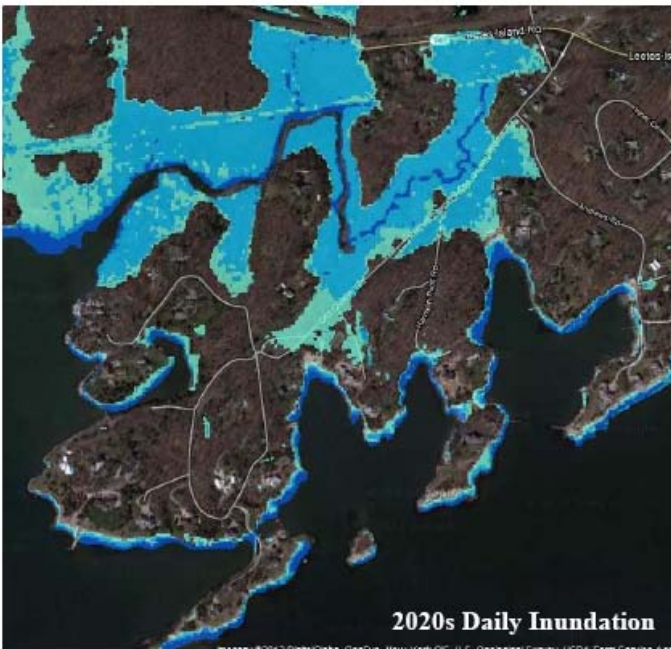
- Compiled & updated elevation certificates for coastal buildings
- Analyzed 168 elevation certificates relative to FEMA's base flood elevation (BFE): 107 structures in A or V Zone (80%) with lowest floor below BFE



- Review zoning regulations to minimize public & private losses
- Provide data to emergency responders to target areas of vulnerability during storm events

Connecticut: Town of Guilford

- Analyzed long-term impacts of sea level rise & increasing storm frequency on community, including natural resources
 - Scenarios: 2020s, 2050s & 2080s
 - Conditions: no storm, Cat. 2 hurricane & Cat. 3 hurricane
 - Projections: high, medium & conservative



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Connecticut: Town of Guilford (cont.)

- Identifying & discussing adaptation strategies
 - Infrastructure improvements
 - New regulations
 - Environmental improvements
- Developing coastal resilience action plan with short & long term strategies
 - Zoning regulations
 - Inland wetlands regulations
 - Subdivision regulations
 - Flood damage prevention section in Town Code

www.ci.guilford.ct.us/pdf/community-coastal-resilience-plan.pdf

NROC Coastal Hazards Resilience Committee

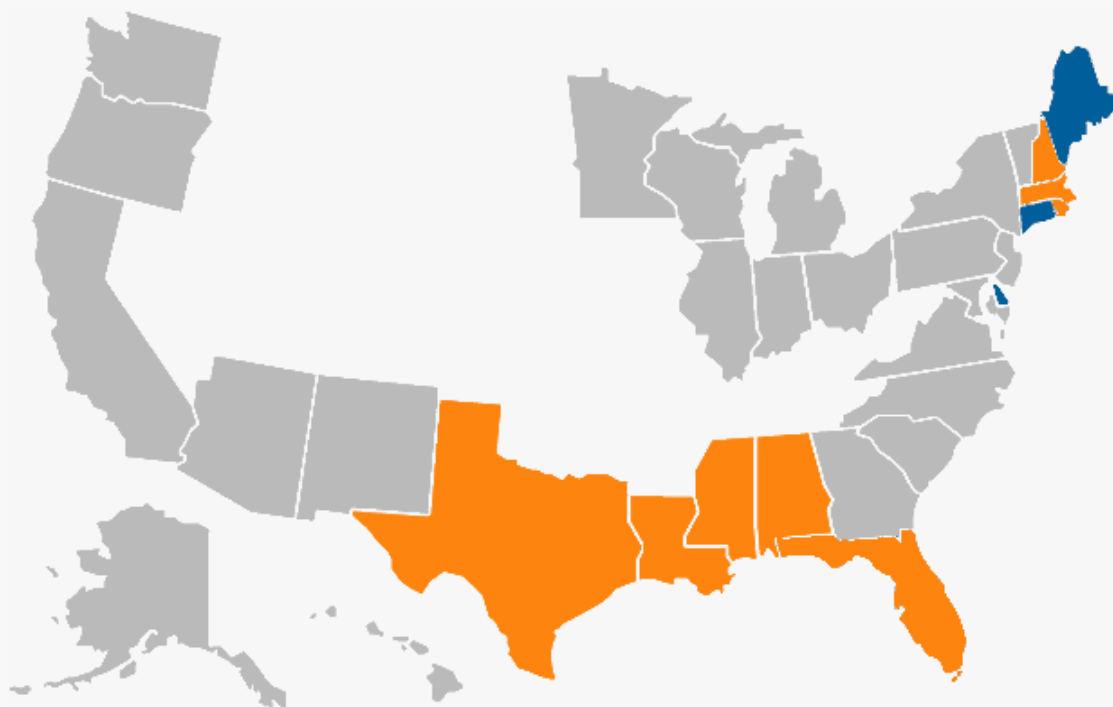


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What We Do

StormSmart Coasts is a resource for coastal decision makers looking for the latest and best information on how to protect their communities from weather and climate hazards.



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Helping coastal decision makers connect and collaborate.



Live States



Coming Soon



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