



## COASTAL RESILIENCY TASK FORCE (CRTF)

March 2024

### CALL TO ACTION

- Miles of Duxbury coastline and wetlands are at risk due to sea level rise and increasing frequency and severity of coastal storms.
- CRTF serves as primary advisory body regarding coastal sustainability and risks and hazards to coastal infrastructure and properties.
- Sea levels projected to rise 1-6'+ by 2070.

### HOW YOU CAN HELP!

- Support ATM 2025 budget request for Coastal Resiliency Planner to:
  - Provide expertise and research funding sources.
  - Support projects and programs such as seawall, beach nourishment, Seacoast Economic Council grant, Town sustainability goal action items, and much more.
  - Coordinate with ResilientCoasts, CZM, DCR, FEMA, MAPC, MA MVP, and other regional, state, and federal programs designed to help at-risk communities.

### CRTF ACTIVITIES

- **Inaugural meeting** held in January 2023.
- Reviewed, summarized, and discussed **10+ reports** related to Town's coastal vulnerability due to effects of sea level rise and storm surge.
- In July 2023, **stakeholders' meeting** which included Selectboard, organizations directly affected by sea-level rise, and Duxbury residents.
- Submitted **Coastal Resiliency Planner job description** to the Town's Human Resources Department. *Duxbury is one of the few towns on the South Shore that does not have a Coastal Resiliency Coordinator.*
- Coordinate with Woods Hole Group to lead **Rising Tides Signage Project** to launch public outreach and raise awareness of sea level rise, storm surge, and urgent need for coastal resiliency. Lost to state budget cuts.

### **CHARGE FROM THE SELECTBOARD**

1. Review previous Town reports related to climate change;
2. Develop recommendations to address coastal resiliency efforts;
3. Engage with stakeholders on coastal resiliency issues;
4. Conduct public outreach and education;
5. Coordinate with other municipal and non-municipal groups; and
6. Identify grants and other funding to supplement resources.

### **CRTF PRIORITIES**

1. Safeguard Duxbury Beach
2. Coastal Resiliency Planner
3. Infrastructure project

### **COASTAL RESILIENCY ADAPTATION PHILOSOPHY**

Change policies, bylaws, and regulations related to land use to promote adaptation and build resiliency to the effects of climate change.

### **ADAPTATION STRATEGIES**

- **Avoid:** prevent new development
- **Accommodate:** incorporate sea changes
- **Protect:** Develop solutions to protect coastline & wetlands
- **Retreat:** Withdraw from at-risk assets

### **MEETINGS**

All are welcome to attend. Select Mondays, 4pm, at Senior Center.

### **FOR MORE INFORMATION**

<https://www.town.duxbury.ma.us/coastal-resiliency-task-force>

### **MEMBERS**

- David Amory, Chair  
Member at Large
- Lenore White, Secretary  
Member at Large
- Daniel McGonagle  
Conservation Commission liaison
- Kristin Rappe  
Planning Board liaison
- Nancy Rufo  
Con. Comm./Staff Contact
- *Vacant*  
Selectboard liaison
- *Vacant*  
Planning Director
- *Vacant*  
Coastal Resiliency Planner

## SUMMARY OF REPORTS USED BY THE CRTF

CRTF reviewed the reports listed below to (1) gain a better understanding of the coastal challenges that the Town of Duxbury faces as well as potential solutions and (2) to inform their priorities. The *Executive Summary* and *Duxbury Climate Change Vulnerability Assessment and Adaptation Plan* provide the most recent synopses and include information learned in prior reports. All reports are available for viewing on <https://www.town.duxbury.ma.us/coastal-resiliency-task-force>.

<p><b>Executive Summary for the Town of Duxbury – Climate Resiliency Infrastructure Planning</b> Duxbury Planning, Woods Hole, Duxbury Beach Reservation 2021</p>	<p>Summary of climate change planning efforts in tandem with the Envision Duxbury Comprehensive Plan. Efforts led by both critical data analysis on the latest science and projections as well as meaningful public engagement and prioritization. Planning efforts indicate dire need to protect community of Duxbury and Duxbury Beach, a central asset ecologically, recreationally, and economically, from sea level rise and increasing frequency and severity of coastal storms. Sea level rise projected to be +/- 2' by 2050.</p>
<p><b>Duxbury Climate Change Vulnerability Assessment and Adaptation Plan</b> Woods Hole June 2021</p>	<p>Identified areas of the Town vulnerable to the combined effects of sea level rise &amp; storm surge from extreme storm events, assessed the vulnerability of municipally-owned public infrastructure &amp; natural resources, and identified strategies to help mitigate the near and long-term effects of sea level rise and storm surge.</p>
<p><b>Snug Harbor Resiliency</b> Metropolitan Area Planning Council (MAPC) December 2019</p>	<p>Engaged with the community to identify set of recommendations that can be undertaken through public and private actions and investments to bring about incremental resilience improvements to Snug Harbor. Snug Harbor is at risk and vulnerable to coastal flooding and sea level rise which will cause damage to built assets and infrastructure. This interrupts business with flooding at the boat launch, Mattakesett Ct, and Washington St.</p>
<p><b>Town of Duxbury Master Plan: Envision Duxbury,</b> MAPC, Duxbury Planning Board December 2019</p>	<p>Includes recommendations adapted from Duxbury's Climate Vulnerability Assessment and Action Plan, the Duxbury Natural Hazard Mitigation Plan, and public input and feedback the community forums and public meetings, presentations, and events.</p>
<p><b>Town of Duxbury MAPC Climate Vulnerability Assessment and Action Plan</b> MAPC April 2018</p>	<p>Summarizes latest climate risks, evaluates the vulnerability of Duxbury's critical infrastructure and resources, and creates an action for incremental steps toward greater resilience and community vibrancy in an uncertain future. Studied climate risk projections, evaluated Duxbury's vulnerability, and developed set of priorities.</p>
<p><b>Natural Hazard Mitigation Plan</b> MAPC 2018</p>	<p>Identified hazard mitigation goals for the Town and mitigation measures that can be taken to reduce dangers to life &amp; property from natural hazard events</p>
<p><b>Coastal Processes Study &amp; Resiliency Recommendations for Duxbury Beach and Bay</b> Woods Hole Group December 2017</p>	<p>Study determined the coastal processes that shape Duxbury Beach and Bay and result in the ongoing evolution of the barrier beach system. Provides recommendations for large scale beach and dune nourishment.</p>
<p><b>Massachusetts Coastal Infrastructure Inventory and Assessment Report Update for South Shore – South (Marshfield, Duxbury, Kingston, Plymouth)</b> Bourne Consulting Engineering July 2015</p>	<p>This updates the Coastal Infrastructure Inventory and Assessment to reflect current conditions, updates costs for investments required to maintain these coastal structures, and incorporates impacts from sea level rise into estimated costs to make improvement to existing structures. The man-made and publicly owned structures that protect the Town of Duxbury were investigated for their ability to provide adequate protection from major coastal storms.</p>
<p><b>Sea Level Rise Study for Towns of Marshfield, Duxbury, Scituate, MA</b> Kleinfelder July 2013</p>	<p>Studied the extent &amp; magnitude of sea level rise and storm surge vulnerability within the Towns, focusing on public infrastructure. Identified adaptation strategies to help mitigate long-term effects of sea level rise and storm surge. Produced high quality maps and graphics to show extent and magnitude of sea level rise and storm surge vulnerability.</p>
<p><b>Duxbury Seawalls Condition Survey and Study</b> Bourne Consulting Engineering 2012</p>	<p>Studied the existing shoreline conditions along Duxbury Beach to develop recommendations for repairs and improvements to the existing seawalls, and to develop a beach maintenance plan for Duxbury Beach overall</p>
<p><b>South Shore Coastal Hazards Adaptation Study</b> MAPC December 2011</p>	<p>Assessed general changes in coastal hazard impacts that could occur due to climate change. The project explored current and potential future coastal vulnerabilities, identified a range of possible adaptation options, and provided information about resources that could support local actions and strategies.</p>