

Hull Hazard Mitigation Plan Update

Public Meeting #1

November 28, 2023
Hull High School

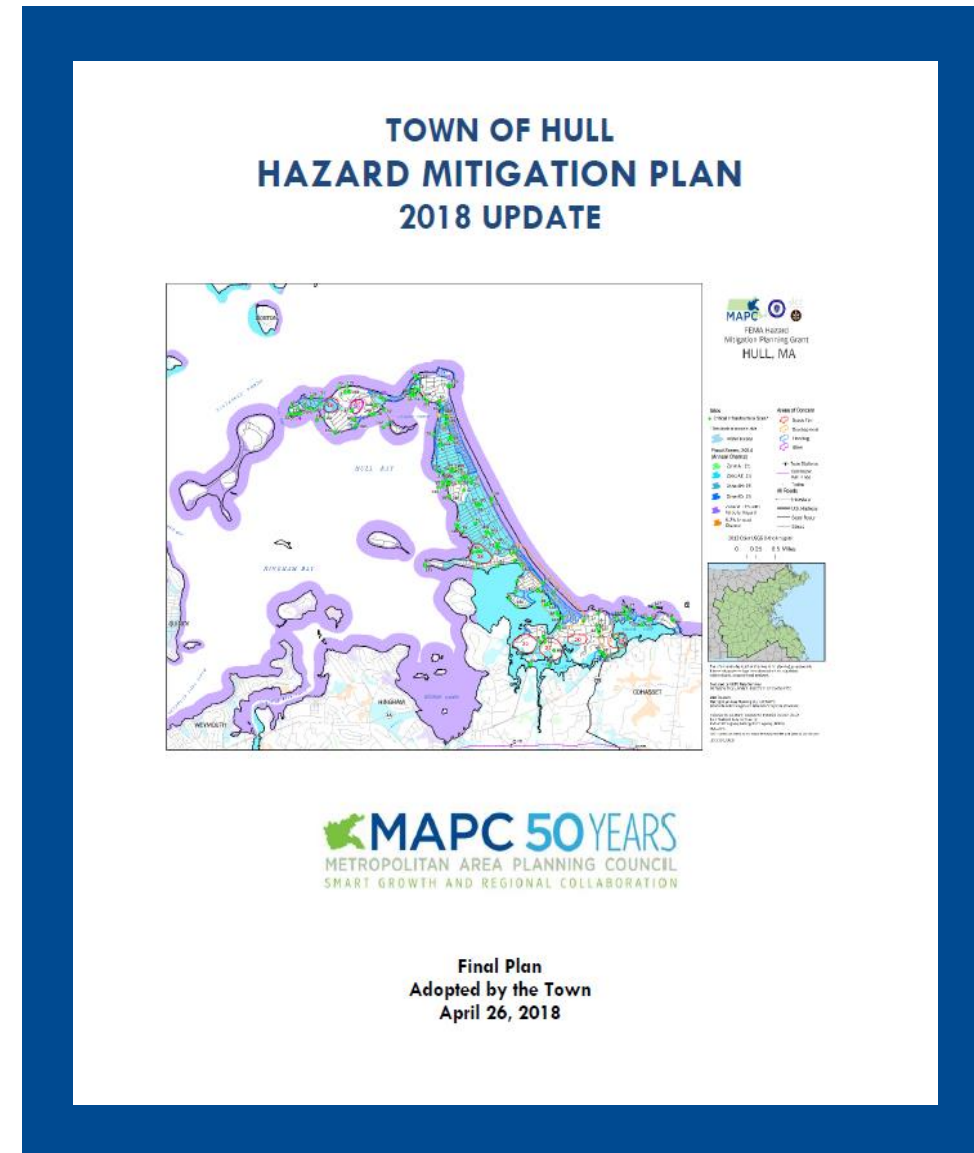
Martin Pillsbury
Metropolitan Area Planning Council



Background: What is Hazard Mitigation?

Overview of Hazard Mitigation Planning

- **Disaster Mitigation Act of 2000:**
FEMA guidelines for local & state Hazard Mitigation Plans
- **Pre-Disaster Mitigation:**
*Plan for resilience **before** disaster*
- **5-year plan update cycle:**
Update plan data and community mitigation strategies
- **FEMA grant eligibility:**
Approved plan makes the Town eligible for FEMA project grants



Overview of Hazard Mitigation Planning

Mitigation: Reducing impacts of natural hazards through strategies including policy, projects, and programs.

1. What preventative actions are being taken **now** to reduce risks and damages?
2. What **additional** actions can be taken in the future to increase resilience?

A plan for Multiple Natural Hazards



Flooding (coastal and inland)



Wind events (thunderstorms, hurricanes, tornadoes)



Winter hazards (blizzards, nor'easters)



Geologic hazards (earthquakes, landslides)



Wild Fires



Extreme temperatures and drought

Breaking the Cycle of Disaster & Rebuilding



Techniques for Hazard Mitigation

Prevention (*planning and zoning*)

Property Protection (*building elevation*)

Public Education (*public outreach*)

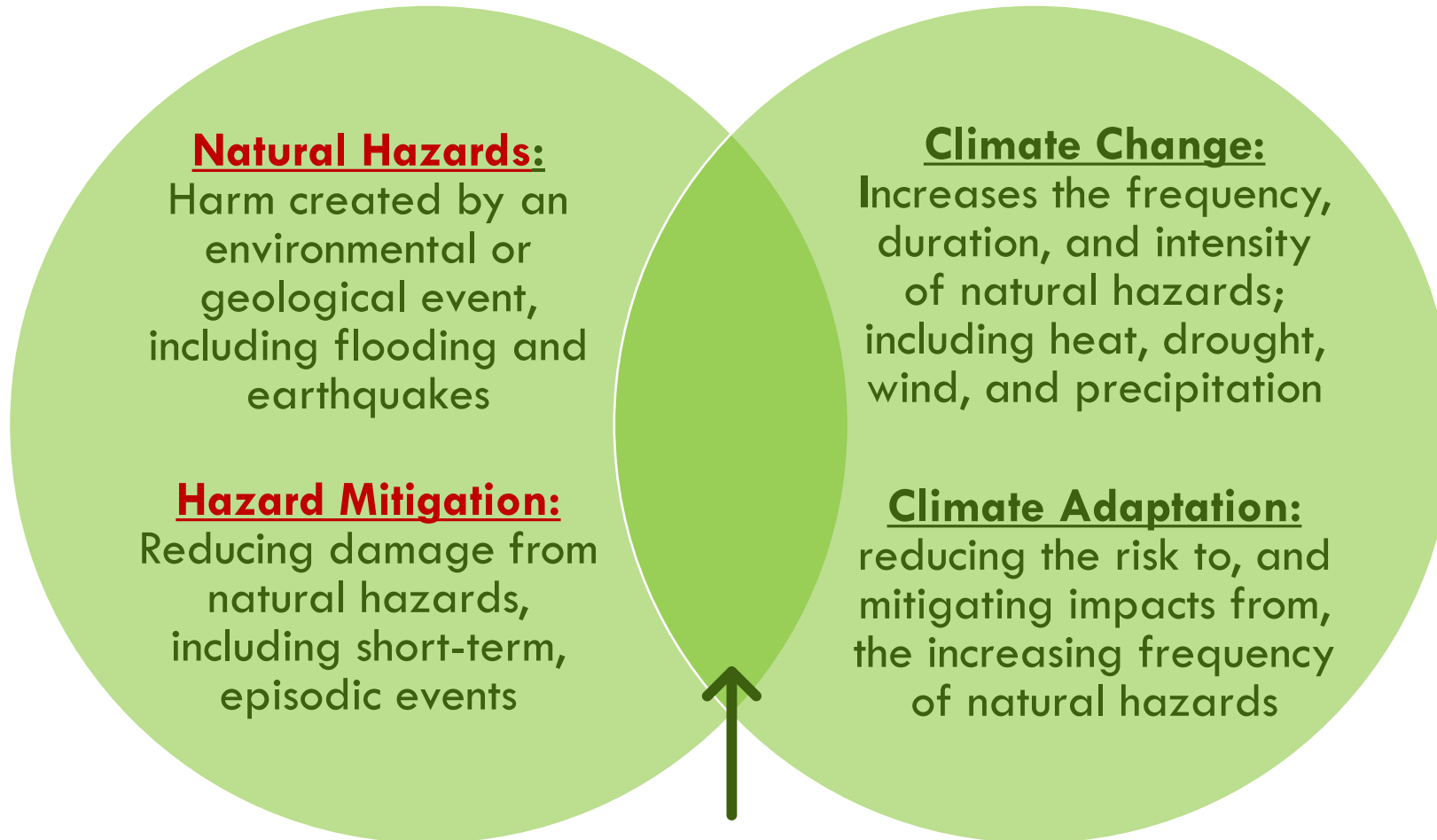
Protect Natural Resources (*wetlands, floodplains*)

Structural Projects (*culverts, pumps, drainage*)

Emergency Services Protection
(*protection of emergency facilities & infrastructure*)



Natural Hazards and Climate Change



**Adapting to the expected impacts
of climate change is a form
of hazard mitigation**

The Planning Process

Plan Development Process

**Hazard
Identification &
Mapping**

**Assessment of
Risks &
Vulnerabilities**

**1st Public
Meeting**

**Prepare
Draft Plan**

**MEMA/FEMA
Plan Approval
Town Adoption**



We are here!

**TEAM#1:
Update & Map
Critical Facilities**

**TEAM#2:
Review Existing
Mitigation**

**TEAM #3
Review Mitigation
Goals & Strategies**

**TEAM #4
Prepare Updated
Mitigation Strategy**

**2nd Public
Meeting**

Process Guided by the Local Hazard Mitigation Team

Local Team Role:

- Participate in four meetings
- Review and endorse plan goals
- Provide local data/expertise on critical facilities and hazards
- Review & endorse the updated mitigation strategy for the plan

Representatives from:

- Town Manager
- Conservation
- Climate Adaptation
- Harbormaster
- Fire Department
- Council on Aging
- Police Department
- Resident rep.
- Public Works
- Planning Dept.
- Hull Light Dept.
- Building Dept.

What We've Heard

What We've Heard: Examples of Critical Facilities & Infrastructure

Municipal Facilities

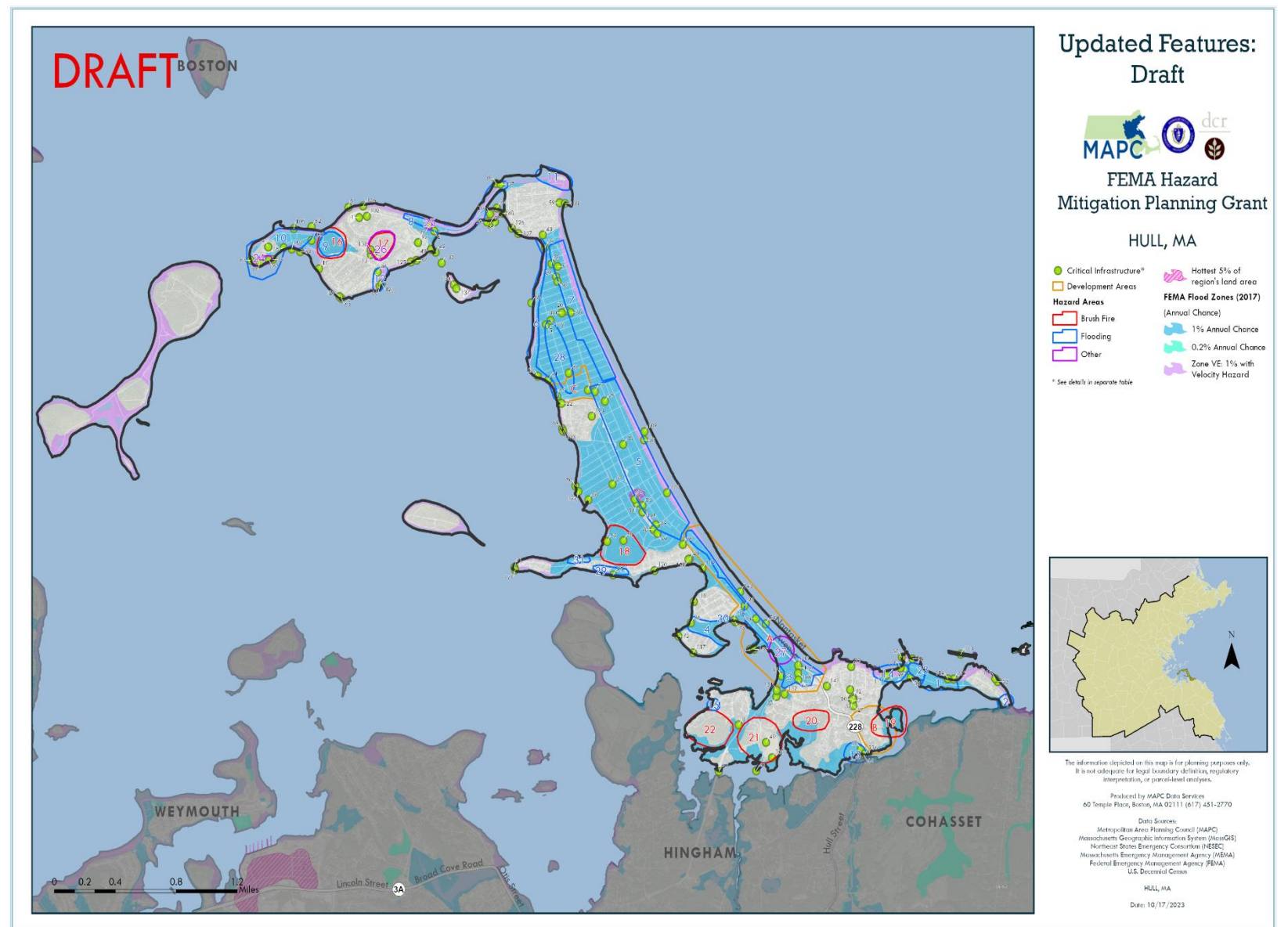
- Town Hall
- Public Safety Facilities
- DPW Facility
- Hull Light Dept.

Infrastructure

- Sewer Plant
- Pump Stations
- Seawalls (multiple)
- Bridges (multiple)

Community Facilities

- Hull Public Schools
- Hull Public Housing
- Senior Center
- Neighborhood housing



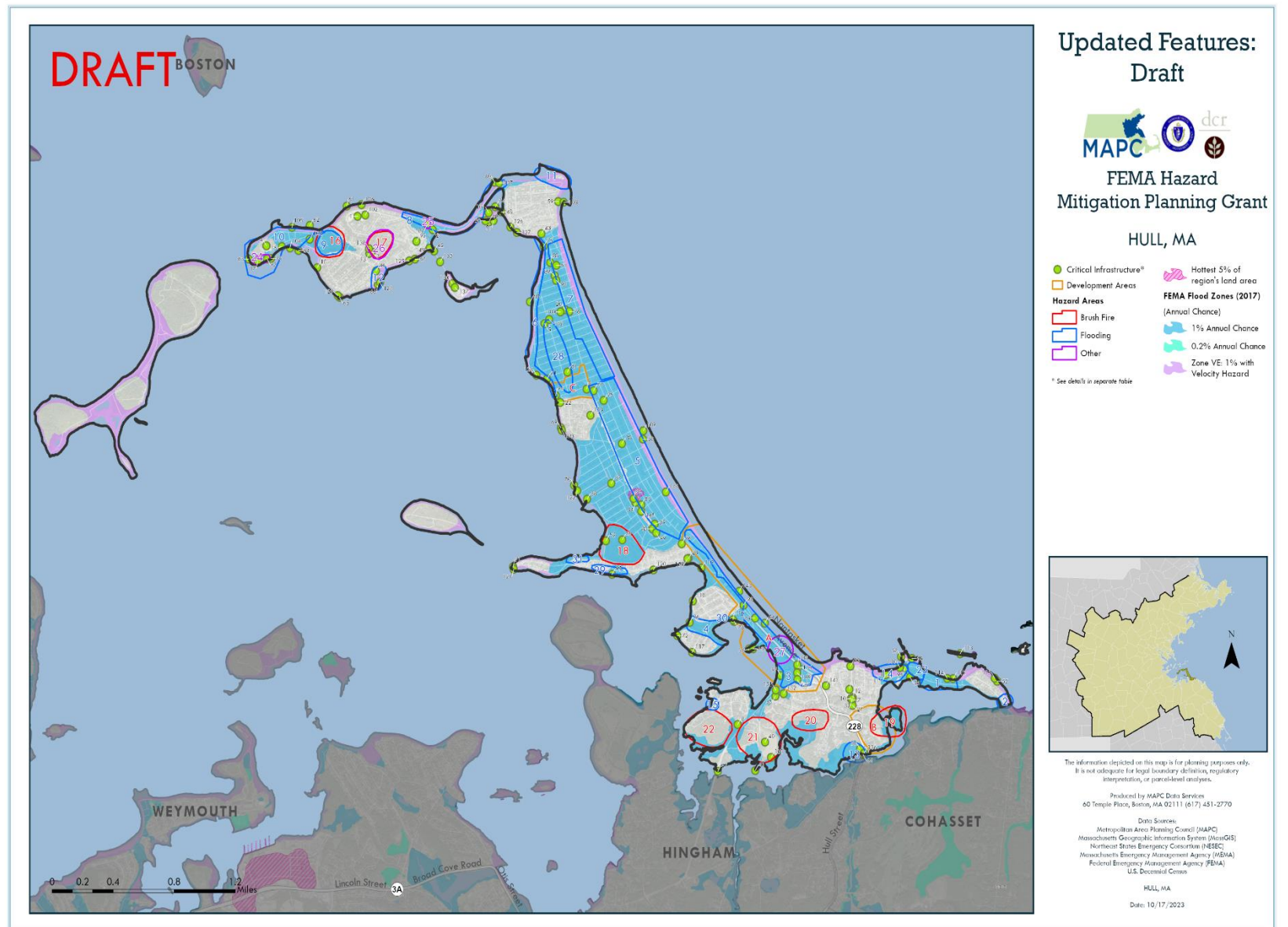
What We've Heard: Examples of Local Hazard Areas

Flooding area examples:

- Atlantic Ave.
- Hampton Circle
- Beach Ave./Ocean Ave.
- Alphabet Streets
- Point Allerton
- Channel Stret
- Edgewater Rd/Bay Street

Brushfire Hazards:

- Ocean Ave. marsh
- Fort Revere
- Straits Pond Island



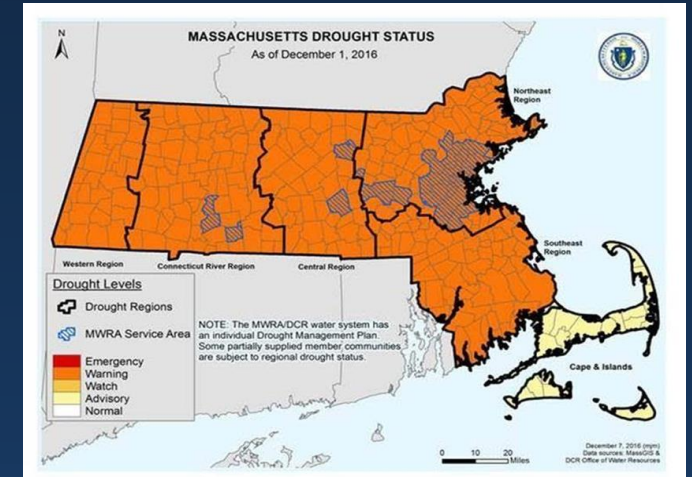
Other Natural Hazards

Extreme Heat

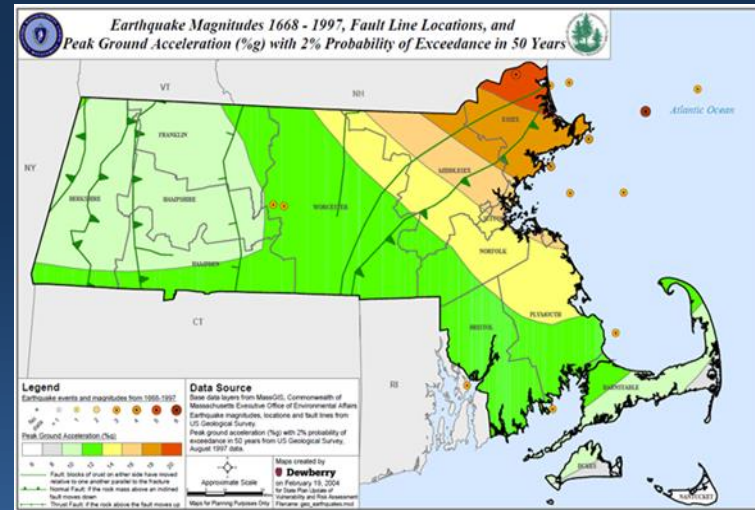
		Temperature (°F)															
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
Relative Humidity (%)	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55	81	84	86	89	93	97	101	106	112	117	124	130	137			
	60	82	84	88	91	95	100	105	110	116	123	129	137				
	65	82	85	89	93	98	103	108	114	121	128	136					
	70	83	86	90	95	100	105	112	119	126	134						
	75	84	88	92	97	103	109	116	124	132							
	80	84	89	94	100	106	113	121	129								
	85	85	90	96	102	110	117	125	135								
90	86	91	98	105	113	122	131										
95	86	93	100	108	117	127											
100	87	95	103	112	121	132											

Category	Heat Index	Health Hazards
Extreme Danger	130 °F – Higher	Heat Stroke or Sunstroke is likely with continued exposure.
Danger	105 °F – 129 °F	Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Extreme Caution	90 °F – 105 °F	Sunstroke, muscle cramps, and/or heat exhaustions possible with prolonged exposure and/or physical activity.
Caution	80 °F – 90 °F	Fatigue possible with prolonged exposure and/or physical activity.

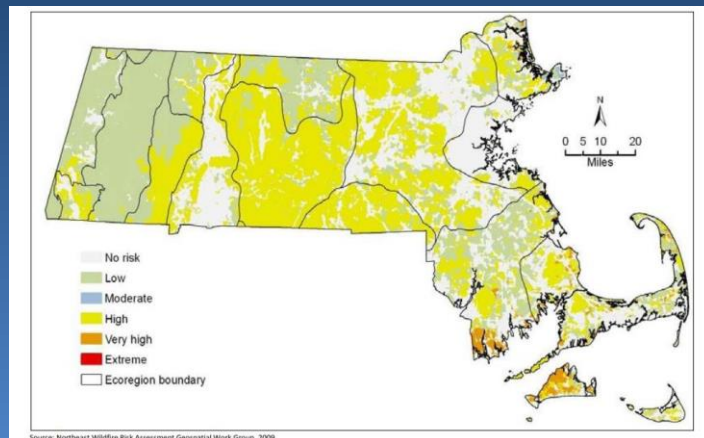
Drought



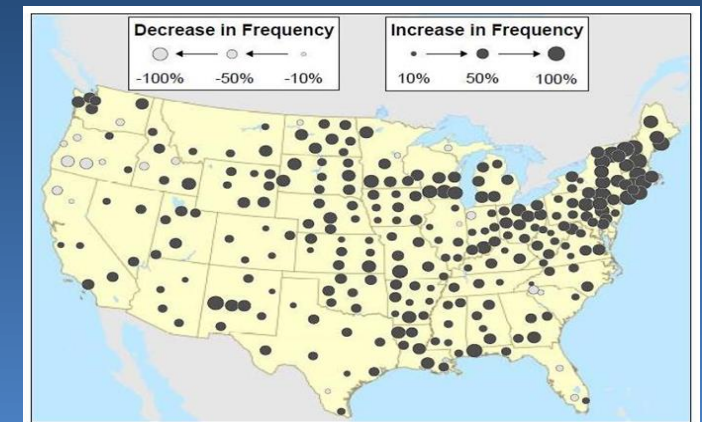
Earthquakes



Wildfires



Extreme Precipitation



Wind & Winter Hazards: Nor'easters/Blizzards

Storm Event	Date
Severe Winter Storm and Snowstorm	March 2018
Severe Winter Storm, Snowstorm, Flooding	January 2015
Severe Winter Storm, Snowstorm, Flooding	February 2013
Hurricane Sandy	October/November 2012



What We've Heard: Examples of Existing Mitigation Measures

Multiple Hazard Mitigation:

Municipal Vulnerability Preparedness (MVP)
Local Emergency Management Comm. (LEPC)
Comp. Emergency Management Plan (CEMP)

Flood Mitigation:

- Participation in the National Flood Insurance Program (NFIP)
- Community Rating System participation
- Freeboard Incentive
- Elevating Repetitive Loss Properties
- Tide Gates, Seawalls, Jetties, Dikes
- Zoning – Floodplain Overlay District

Brush Fire Mitigation:

- Permits required for outdoor burning
- Fire department review of subdivision plans for fire safety

Winter Hazard Mitigation:

- Snow Disposal Site

Wind and Winter Mitigation:

- Trees trimmed for resilience to wind and ice and snow hazards
- Communications Tower Zoning Regulations
- MA State Building Code

We want to hear from you!

We want to hear from you! Please let us know:

1. What natural hazards are you most concerned about?

Please select your top three (3) priorities:

- A. Extreme Wind – Hurricanes, Thunderstorms
- B. Flooding – Stormwater
- C. Flooding – Coastal
- D. Extreme Heat
- E. Winter hazards/blizzards/ice storms
- F. Brushfire/wildfires
- G. Drought

We want to hear from you! Please let us know:

2. Have any of those hazards impacted you?

Examples might include flooding in your neighborhood, wind events that caused power outages, business closures, etc.

3. Which hazard mitigation strategies are most important to you?

Please select your top three (3) priorities.

- A. Updating Town Bylaws and Regulations to increase resilience
- B. Designing resilient infrastructure such as roads, bridges, coastal structures
- C. Promoting community social resilience; supporting vulnerable residents
- D. Resilient Green Infrastructure, Nature-based Solutions, and Open Space
- E. Data Analysis and modeling to project future conditions and hazards
- F. Public outreach, education, and engagement related to natural hazards

Next Steps

Next Steps for Developing the Plan

- 4th Local Team Meeting – Prepare Updated Mitigation Strategy (December)
- 2nd Public Meeting – Present Draft Plan, public comments (February)
- Submit Draft Plan – review of draft plan by MEMA & FEMA (February)
- Town Adoption of Final Plan – Select Board vote to adopt the final plan
- FEMA Approval – the Town will receive a letter approving the plan for 5 years

After FEMA approval of the plan, Hull will be eligible for FEMA grants for hazard mitigation projects

Thank You!

Questions and Comments may be sent to:

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or

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