Sharon Hazard Mitigation Plan Update

Public Meeting #1

December 19, 2023 Zoom



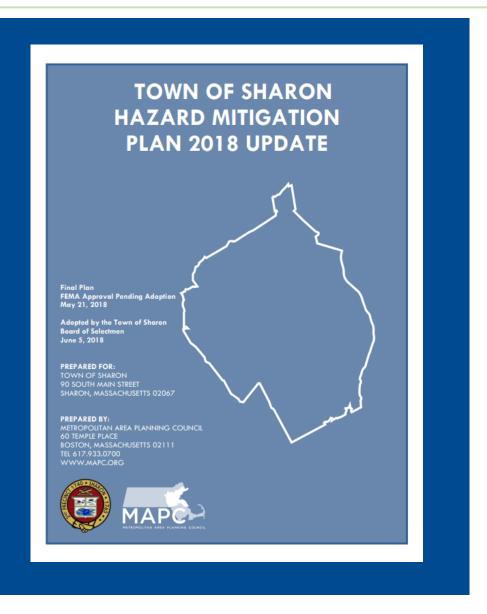
Martin Pillsbury Metropolitan Area Planning Council



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.

- 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)
- ဂျိ
- Wind events (thunderstorms, hurricanes, tornadoes)
- Winter hazards (blizzards, nor'easters)



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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

Natural Hazards:

Harm created by an environmental or geological event, including flooding and earthquakes

Hazard Mitigation: Reducing damage from natural hazards, including short-term, episodic events

<u>Climate Change:</u> Increases the frequency, duration, and intensity of natural hazards; including heat, drought, wind, and precipitation

<u>Climate Adaptation:</u> reducing the risk to, and mitigating impacts from, the increasing frequency of natural hazards

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



The Planning Process





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 Administrator
- Fire Department
- Police Department
- Public Works
- Conservation
- Civil Defense
- Health Dept.
- Building Dept.
- Recreation Dept.



What We've Heard

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

Municipal Facilities

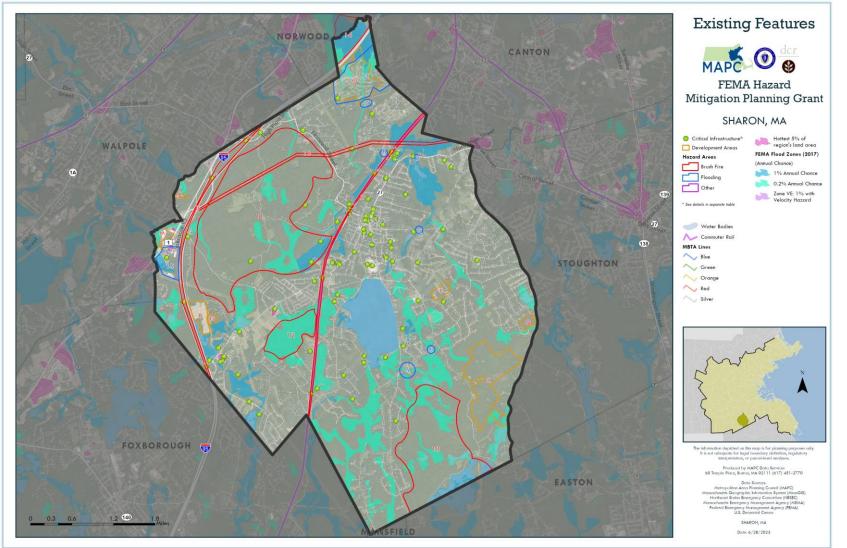
- Town Hall
- Public Safety Facilities
- DPW Facility
- Emergency Ops. Ctr.

Infractructure

- Sewer Pump Stations
- Wells & Water Tanks
- Bridges & Culverts
- Dams

<u>Community Facilities</u>

- Sharon Public Schools
- Nursing Homes
- Places of Worship
- Child Care Facilities



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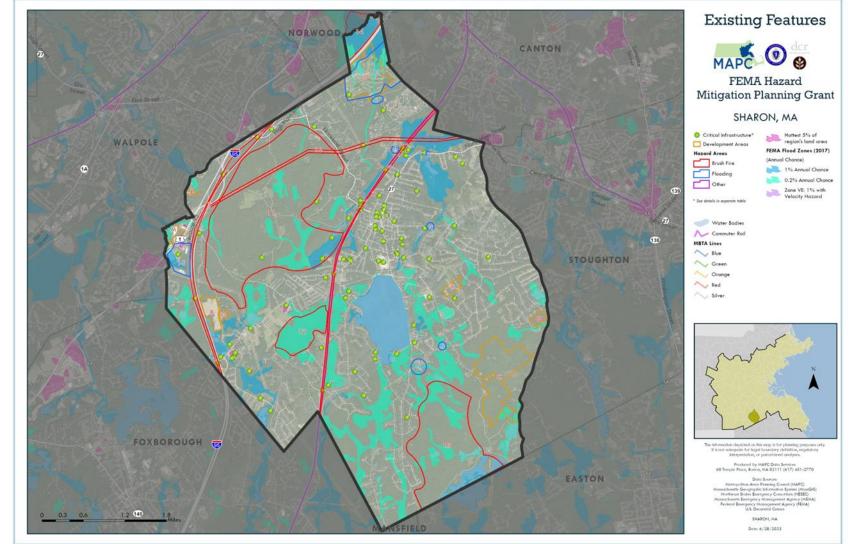
What We've Heard: Examples of Local Hazard Areas

Flooding area examples:

- Billings Street
- Morse Street
- Edgehill at Dedham Street
- Saw Mill Pond Road
- Main Street, near Massapoag Brook
- School Meadow Brook at Commercial Street

Brushfire Hazards:

- Moose Hill
- Borderland State Park
- South of Essex Road



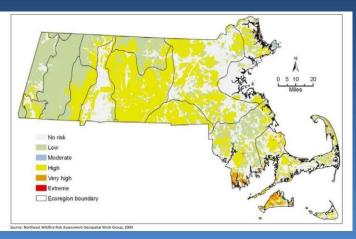
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Other Natural Hazards

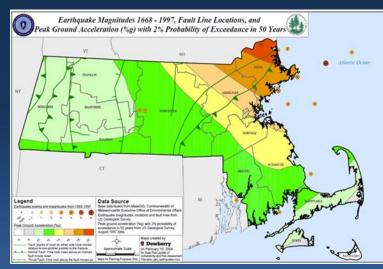
Extreme Heat

								Ten	nperatur	e (°F)								
Relative Humidity (%)		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110	
	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124		136	
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130			
	50	81	83	85	88	91	95	99	103	108	113	118	124					
	55	81	84	86	89	93	97	101	106	112	117	124	130					
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Re	80	84	89	94	100	106	113	121										
	85	85	90	96	102	110	117											
	90	86	91	98	105	113	122											
	95	86	93	100	108	117												
	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			1	105 °F – 129 °F			Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.											
Extreme Caution			g	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.														

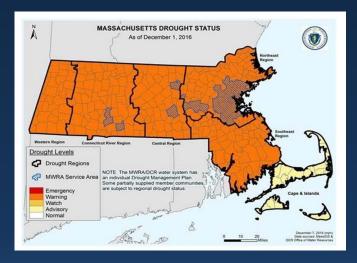
Wildfires



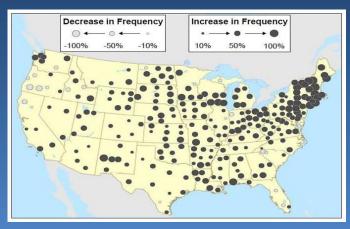
Earthquakes



Drought



Extreme Precipitation



Wind & Winter Hazards: Nor'easters/Blizzards

Storm Event	Date
Severe Winter Storm and Snowstorm	March 2018
	January 2015
Severe Winter Storm,	
Snowstorm, Flooding	
	February 2013
Severe Winter Storm,	
Snowstorm, Flooding	
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:

- Drainage System Maintenance
- Participation in the National Flood Insurance Program (NFIP)
- Stormwater Management (MS4 Permit)
- Wetlands Bylaw/Subdivision/Site Plan
- Open Space Residential Development
- Community Preservation

Brush Fire Mitigation:

- Permits required for outdoor burning
- Fire Tower on Moose Hill
- Public Education During Drought Watches

Winter Hazard Mitigation:

- DPW conducts salting and plowing during winter storms
- Overnight parking ban (November-April)

Wind and Winter Mitigation:

- Trees trimmed for resilience to wind and ice and snow hazards
- Tree Maintenance by Eversource



Next Steps

Next Steps for Developing the Plan

- <u>3rd Local Team Meeting</u> Review the Status of Mitigation from 2018 (January)
- <u>4th Local Team Meeting</u> Prepare Updated Mitigation Strategy (March)
- **<u>2nd Public Meeting</u>** Present Draft Plan, public comments (April)
- **Submit Draft Plan** Review of draft plan by MEMA & FEMA (April)
- 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, Sharon will be eligible for FEMA grants for hazard mitigation projects

Thank You!

Questions and Comments may be sent to:

Martin Pillsbury

MAPC Environmental Director

or

Jiwon Park

MAPC Land Use Planner



SharonResilience@mapc.org

