

Winthrop Hazard Mitigation Plan 2025 Update

Public Presentation on the Draft Plan

October 22, 2025
Winthrop Town Hall



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Metropolitan Area Planning Council



Background: Hazard Mitigation

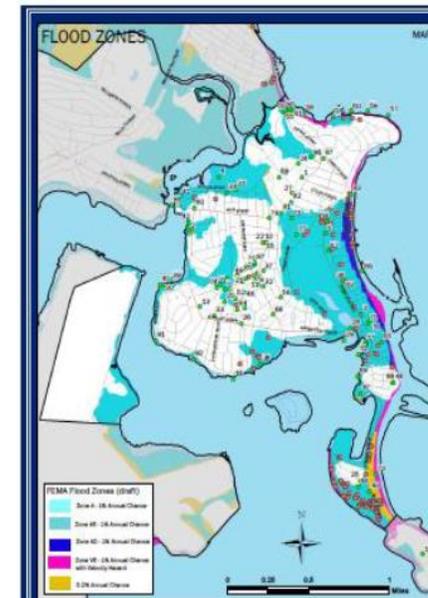


Overview of Hazard Mitigation Planning

Why is Winthrop doing this plan?

- **Disaster Mitigation Act of 2000:** *FEMA National Hazard Mitigation Guidelines*
- **Periodic Plan Updates:** *Updated data and priorities*
- **FEMA grant eligibility:** *Approved Plan required for FEMA Mitigation Grants*

TOWN OF WINTHROP HAZARD MITIGATION PLAN 2014 UPDATE



FINAL PLAN Adopted by the Town
July 22, 2015

Overview of Hazard Mitigation Planning

Reducing impacts of natural hazards through strategies including projects, programs, and policies.

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

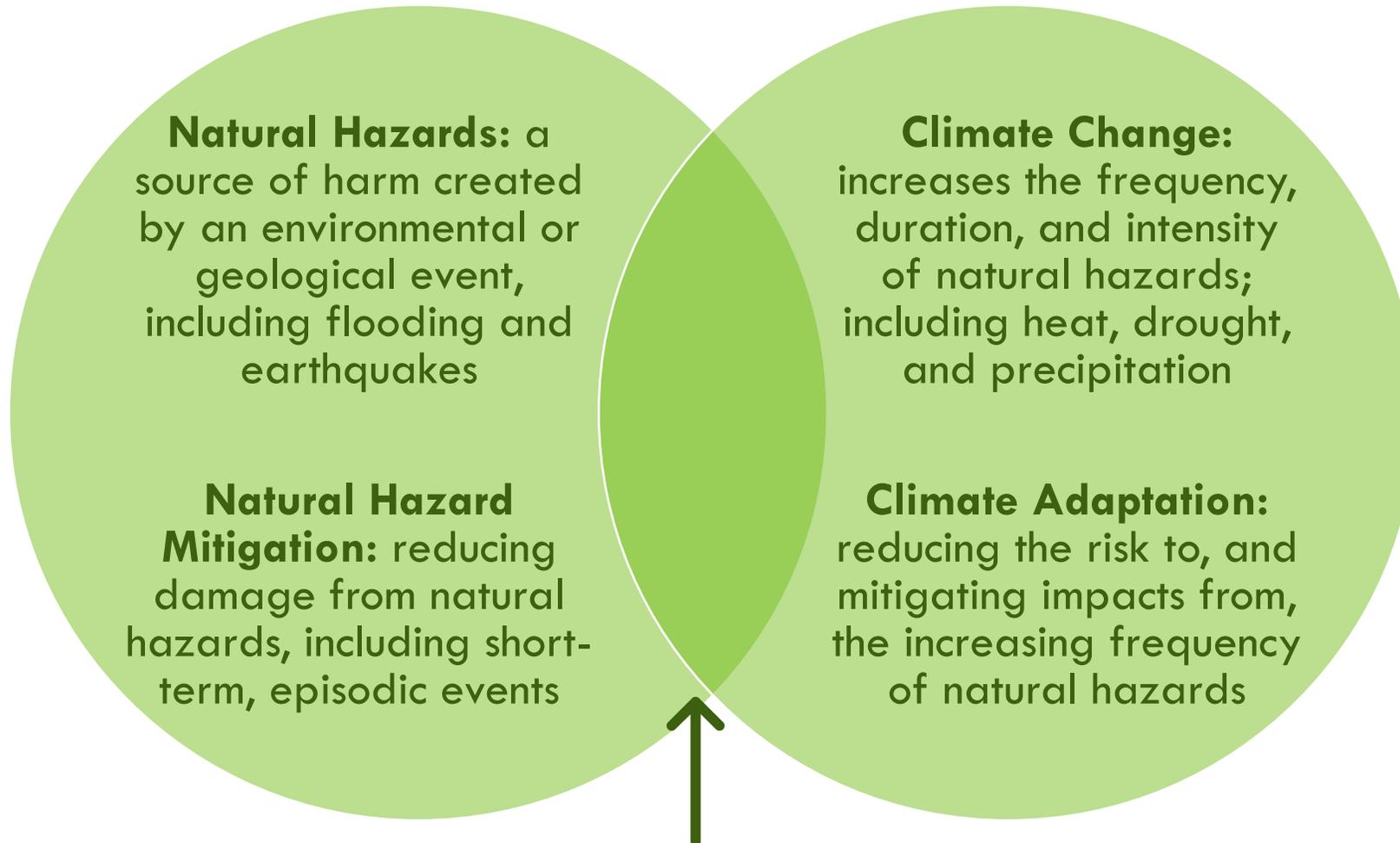


Techniques for Hazard Mitigation



- Prevention
- Property Protection
- Public Education and Outreach
- Protect Natural Resources
- Structural Projects (*culverts, pumps, dams*)
- Emergency Services Protection

Hazards Mitigation and Climate Change



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

The Planning Process



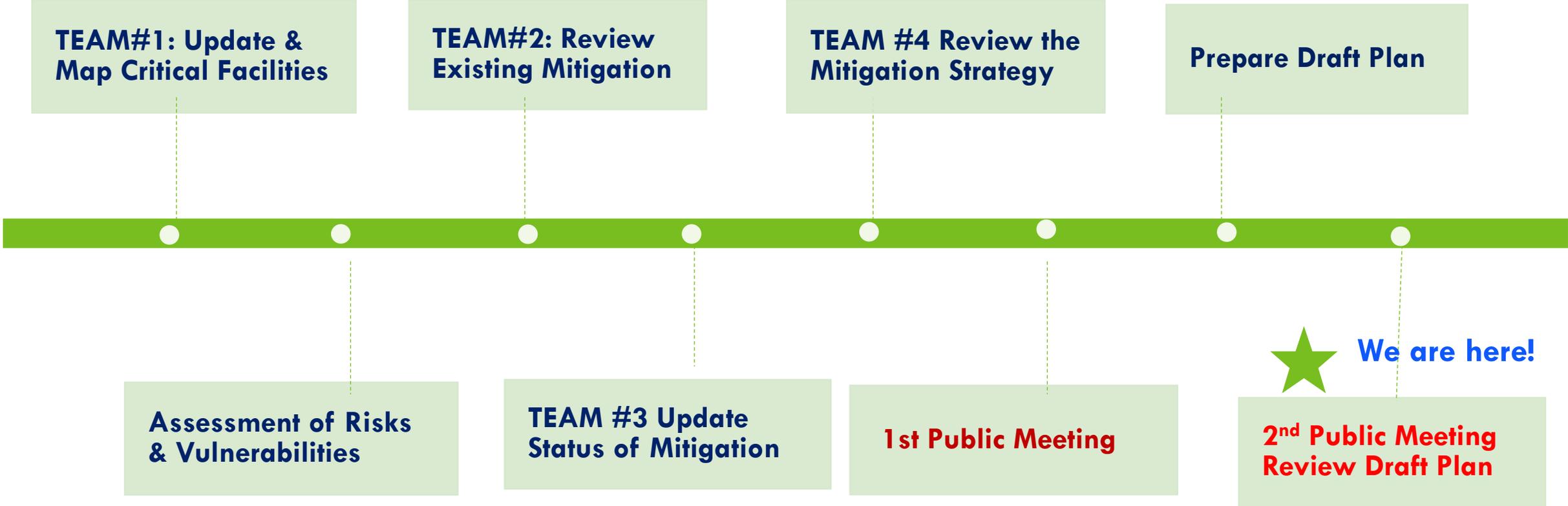
Process Guided by the Local Hazard Mitigation Team

- Town Manager/Asst. TM
- Fire Department
- Police Department
- Department of Public Works
- Planning Board
- Conservation Commission
- Board of Appeals
- Building Commissioner
- Public Health
- Resilience Manager
- Sustainability Manager

Local Team Role:

- **Update critical facilities and local hazard areas**
- **Review mitigation goals**
- **Provide local knowledge on existing mitigation measures**
- **Review mitigation actions for the updated plan**

Plan Development Process



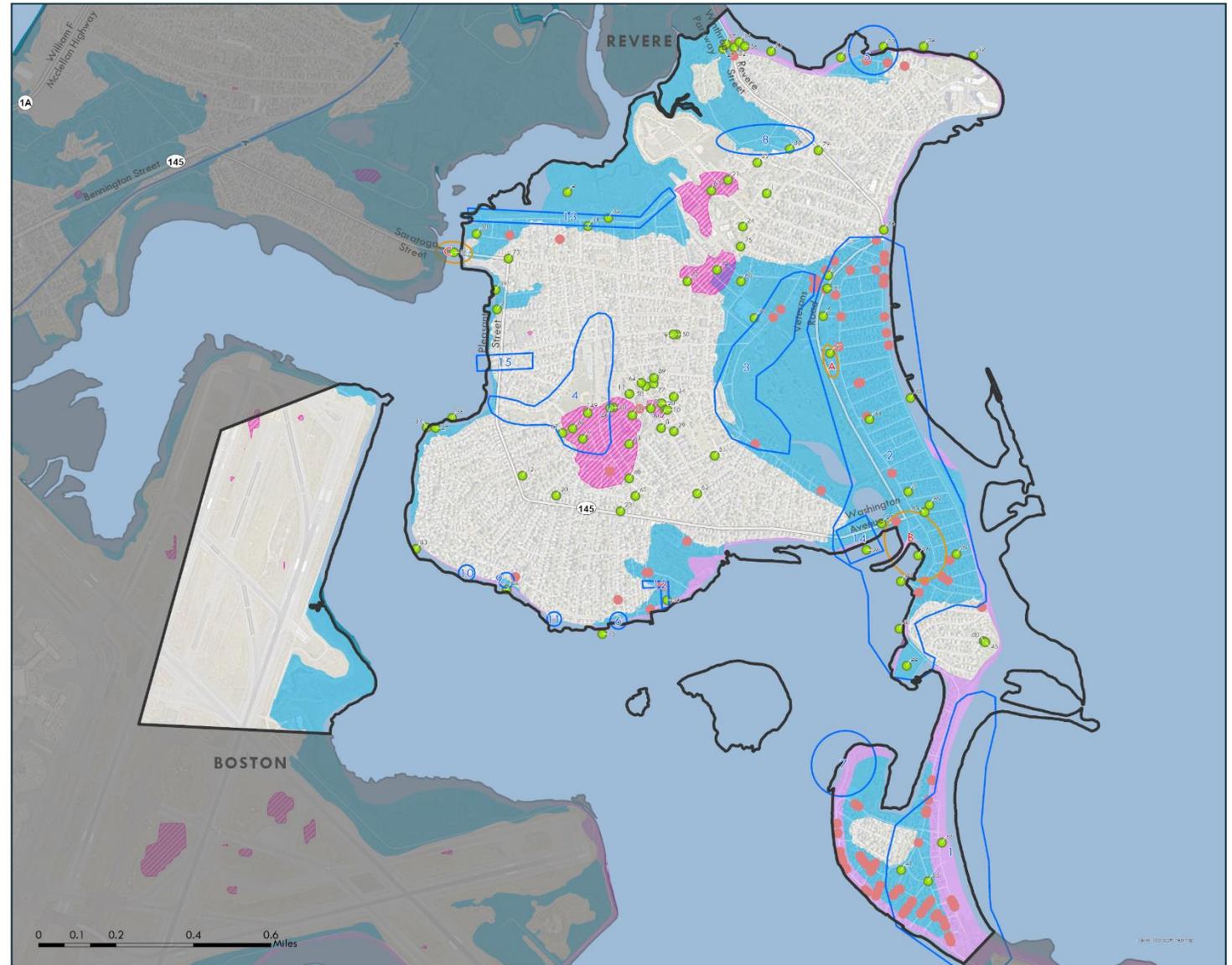
Hazards and Vulnerability



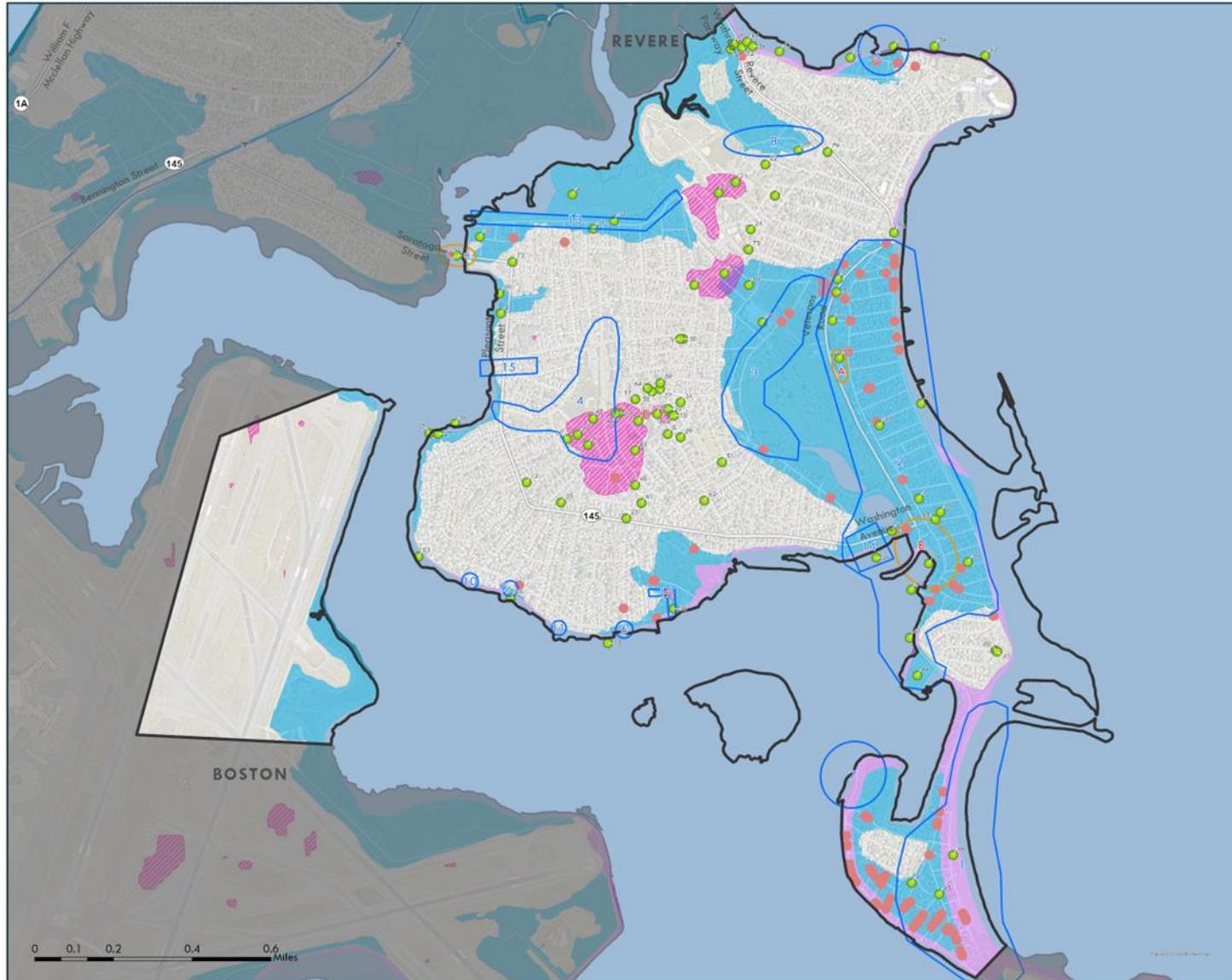
Local Flood Hazard Areas

Identified by the Local Team:

Yrillel Beach
Shirley Street Neighborhood
Lewis Lake
Somerset seawall & headwall
Cottage Park seawall & headwall
Sargent Street seawall & headwall
Woodside seawall & headwall
Coughlin Park
Bayou Street Neighborhood
Ingleside Park
Lower Nahant Avenue
Pico Avenue
Morton Street
Washington Avenue & River Road
Pleasant Street @ Girdlestone Rd.



Examples of Critical Facility Sites



Identified by the Local Team:

Winthrop Police Dept

Winthrop Fire HQ

Winthrop DPW Building

Winthrop EOC

Town Hall

Public Safety Communication Tower

Belle Isle Bridge

Lewis Lake Tidal Gate

Stone Revetment, Seawall

Pico Sewer Pump Station

Winthrop Water Storage Tank

Deer Island Wastewater Facility

Pleasant Times Day Care

Arthur Cummings School

Children's Corner Preschool

Winthrop Senior Center

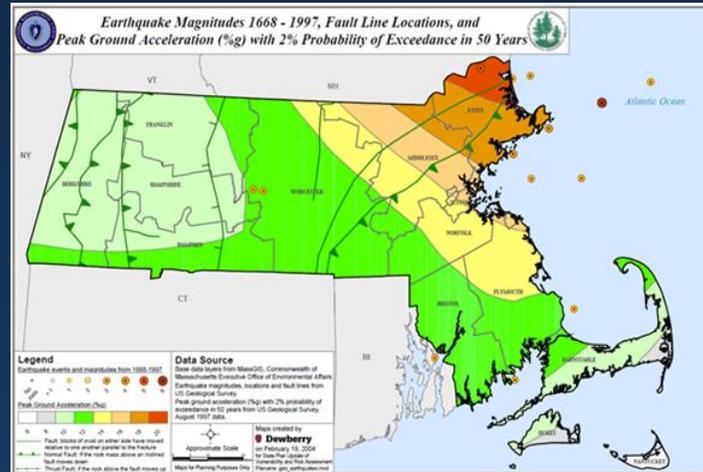
Other Natural Hazards

Extreme Heat

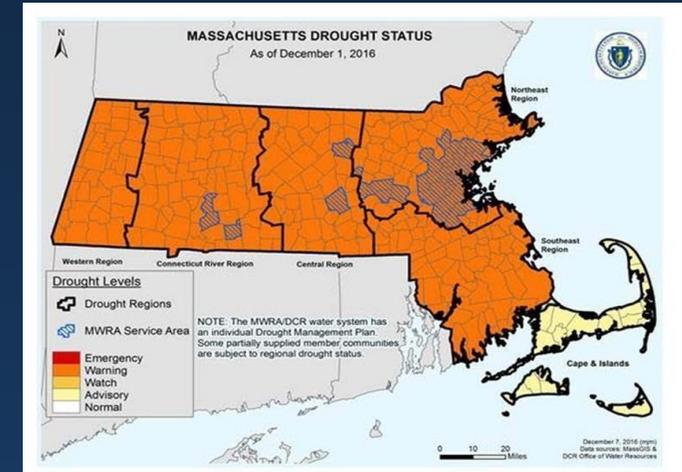
		Temperature (°F)															
		80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
Relative Humidity (%)	40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
	45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
	50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
	55	81	84	86	89	93	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.

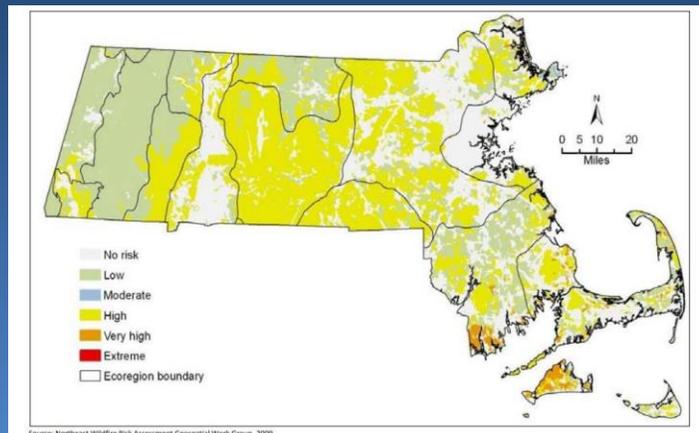
Earthquakes



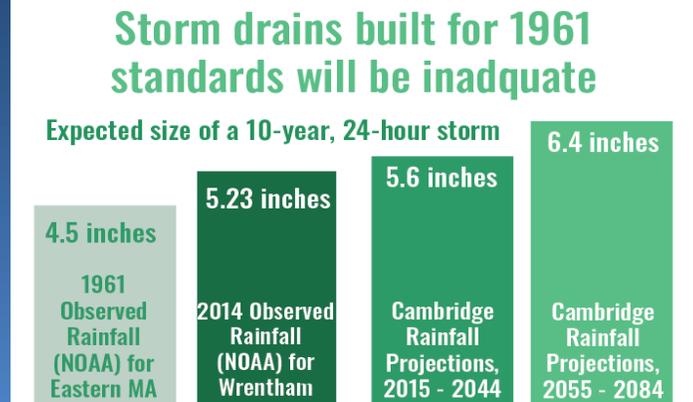
Drought



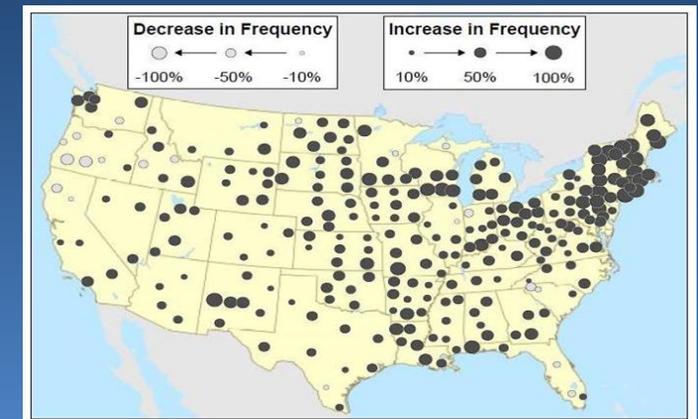
Wildfires



More Large Storm Events

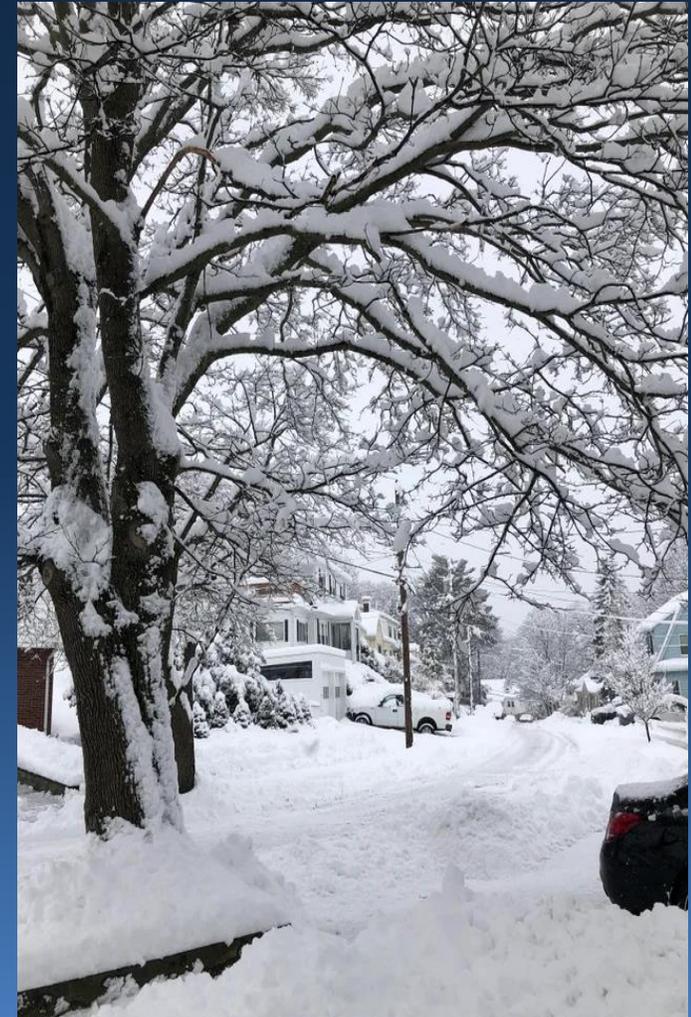


Extreme Precipitation



Wind & Winter Hazards: Nor'easters/Blizzards

Storm Event	Date
Superstorm Sandy	October/November 2012
Severe Winter Storm, Snowstorm, Flooding	February 2013
Severe Winter Storm, Snowstorm, Flooding	January 2015
Severe Winter Storm	March 2018
Severe Winter Storm, Blizzard	December 2020
Severe Winter Storm, Snowstorm, Flooding	February, April, October 2021



Mitigation Recommendations



Mitigation Recommendations for the 2025 Plan

COASTAL FLOODING

A. Yirrell Beach project

B. Lewis Lake drainage improvements

C. Boston Harbor Drainage Outfall upgrade headwalls and seawalls

D. Community Rating System: Consider submitting a CRS application

E. Land acquisition: Acquire vacant flood prone lands if they become available

FLOODING FROM PRECIPITATION

F. Ingleside Park drainage assessment and improvements

G. Lower Nahant Avenue drainage improvements

H. Upgrade Bayou Street drain line; consider closed pipe system

I. Morton Street, and outfall chambers.

J. Girdlestone Road/ Tileston Road: Implement drainage improvements,

K. Pico Ave: Implement drainage improvements

L. Utility Elevations: Complete utility elevation project in flood hazard areas

Mitigation Recommendations for the 2025 Plan

EXTREME WEATHER / WINTER HAZARDS

M. Work to ensure electrical utilities are properly maintained

WILDFIRE HAZARDS

N. Develop and maintain a wildfire database

DROUGHT HAZARDS

O. Incorporate drought tolerant species into land use regulations

P. Require permeable surfaces to promote infiltration and reduce runoff

EXTREME TEMPERATURES

Q. Public education on cooling centers and warming centers.

GEOLOGIC HAZARDS

R. Building Code: Local enforcement of the requirements of the MA Building Code

Mitigation Recommendations for the 2025 Plan

MULTI-HAZARDS

S. Upgrade emergency generators: Town Hall/EOC

T. Micro Grid: Investigate the benefits and feasibility of a micro grid to ensure resilient energy supply to critical facilities

U. Coordinated Access and Evacuation: Collaborate with DCR, MassDOT and Boston to ensure coordinated access connecting Winthrop to the mainland for emergency access and evacuation.

V. Integrate Hazard Mitigation into local plans and land use review processes:

W. Incentivize Hazard Mitigation by adopting a local Stormwater Fee

X. Increase Hazard Education and Risk Awareness

Final Steps for Developing the Plan

1. Review & Finalize the Plan—The Town welcomes questions and comments
2. FEMA & MEMA Review of the Plan – Revisions if required
3. Town Adoption of Final Plan – After FEMA approval of the Plan

The updated plan will be approved by FEMA for the next 5 years

The Town will be eligible for FEMA grants for mitigation projects

The Town wants to hear from you...

The Draft Plan is available at:

www.mapc.org/resource-library/winthrop-hmp

Questions and Comments may be sent to:

WinthropResilience@mapc.org

Please send by November 10