

# Littleton Hazard Mitigation Plan 2024 Update

## Public Meeting #2

May 28, 2024  
Littleton Select Board

Martin Pillsbury and Jenifer Wallitsch  
Metropolitan Area Planning Council



# Background: Hazard Mitigation

---

# Overview of Hazard Mitigation Planning

- **Disaster Mitigation Act of 2000**  
*FEMA national guidelines for local Hazard Mitigation Plans*
- **5-year plan update cycle:**  
*Update plan data and community priorities for mitigation actions*
- **FEMA grant eligibility:**  
*Approved plan required for eligibility for FEMA mitigation project grants (BRIC)*

## TOWN OF LITTLETON HAZARD MITIGATION PLAN 2024 UPDATE



DRAFT FOR TOWN REVIEW  
May 14, 2024

Town of Littleton  
Metropolitan Area Planning Council



# Overview of Hazard Mitigation Planning

*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, dams*)

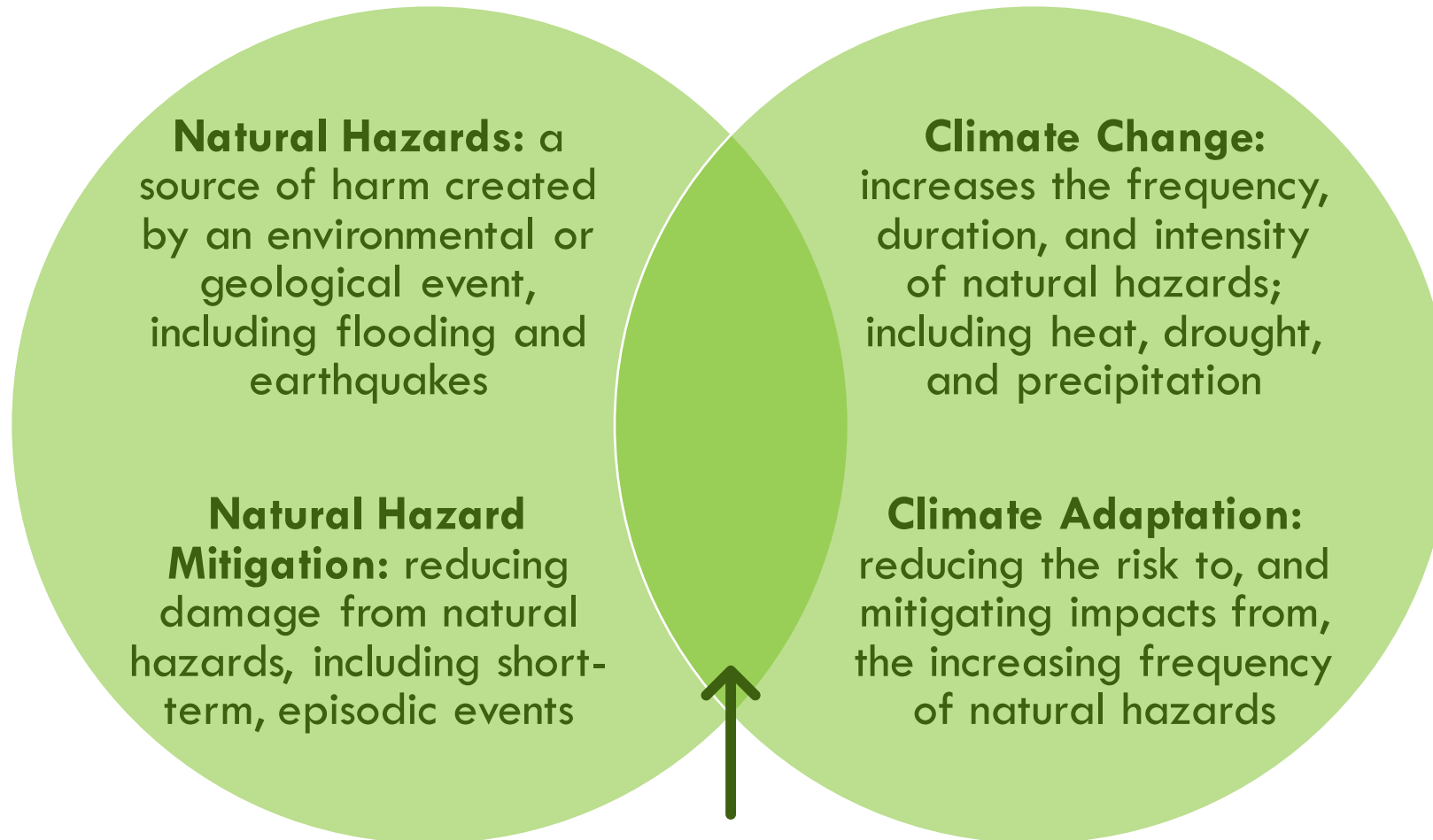
Emergency Services Protection  
(*protection of emergency facilities & infrastructure*)





# Natural Hazards and Climate Change

---



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

# The Planning Process

---



# Process Guided by the Local Hazard Mitigation Team

---

## Local Team Role:

- Participate in four meetings
- Establish and endorse project goals
- Provide updated data and local expertise
- Finalize mitigation actions for the final plan

## Representatives from:

- Town Administrator
- Planning Administrator
- Fire Department
- Elder and Human Services
- Police Department
- Conservation Department
- Public Works Department
- Littleton Electric Light and Water Departments

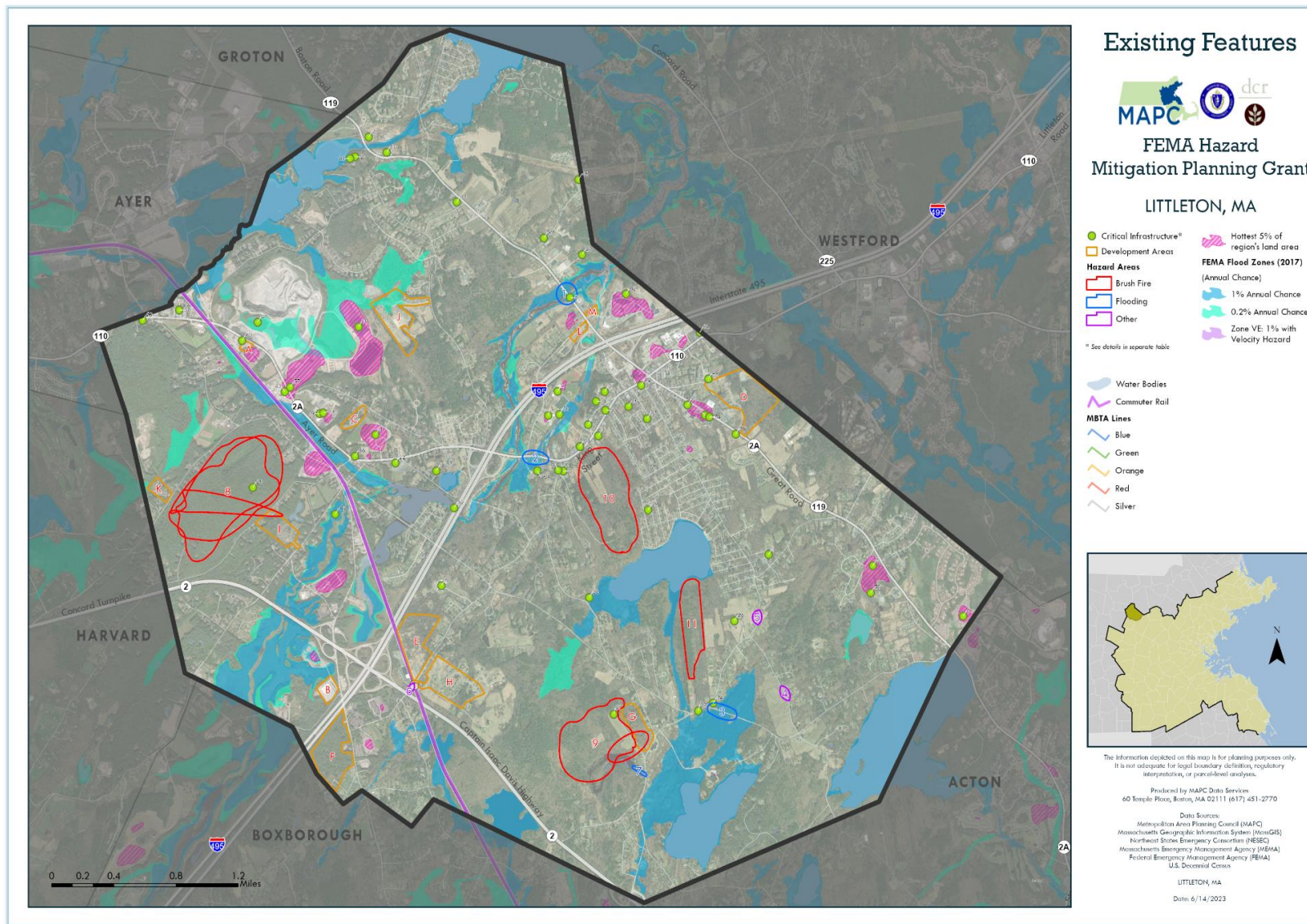
# Plan Development Process



# Highlight of the Plan

---

# Examples of Critical Facilities & Infrastructure



## Municipal Facilities

- Town Hall
- Fire Station
- Police Station

## Infrastructure

- Pump Stations
- Town Wells
- Water Towers
- Mill Pond Dam

## Community Facilities

- Littleton Schools
- Shattuck St Housing
- Life Care Center
- Acton Medical Associates



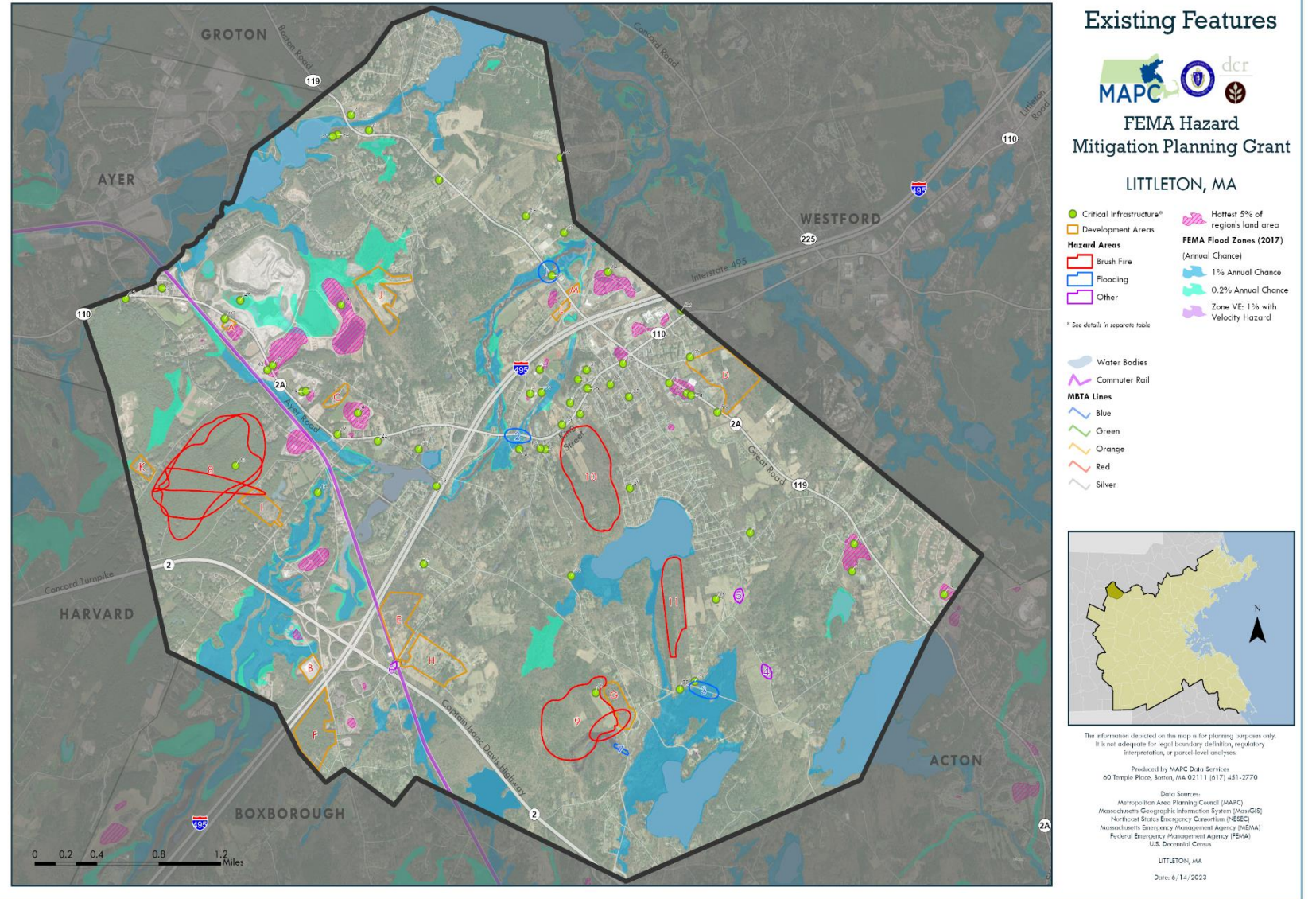
# Examples of Local Hazard Areas

## Flooding areas:

- King Street
- Nashoba Road
- Beaver Brook/Great Road
- Gilson Road

## Other Hazards:

- **Snow** hazards at Nagog Hill Road and Newtown Road
- **Brushfire** hazard at Oak Hill, Morgan Property/Forest Foundation, Frost and Whitcomb Conservation Area, Smith Conversation Land and Cobb/Yapp Conversation Land



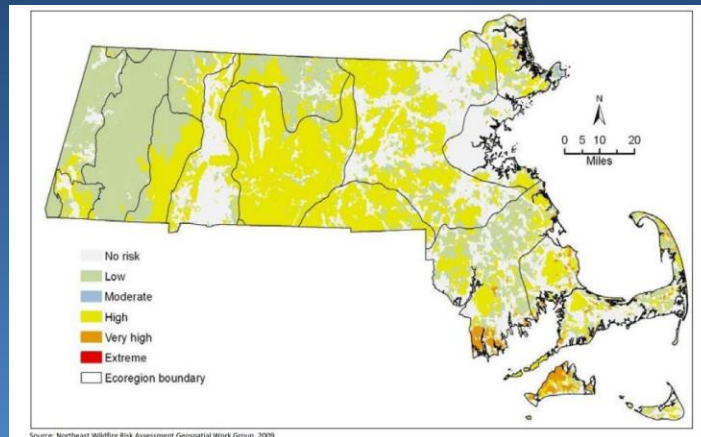


# Other Natural Hazards

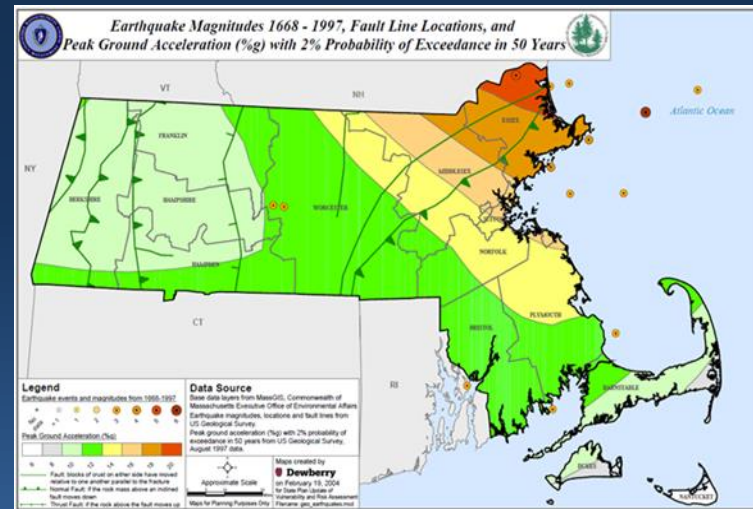
## Extreme Heat

		Temperature (°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	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	126	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.											

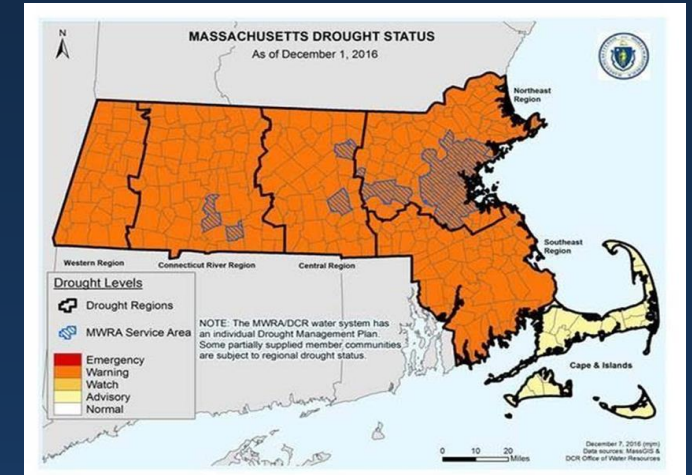
## Wildfires



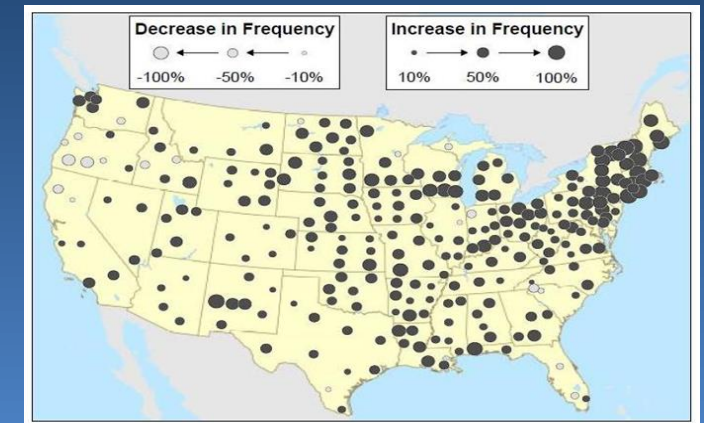
## Earthquakes



## Drought



## Extreme Precipitation



# Examples of Littleton's Existing Mitigation Measures

## Multiple Hazard Mitigation:

Local Emergency Management Comm. (LEPC)  
Comp. Emergency Management Plan (CEMP)

## Flood Mitigation:

- Annual Catch Basin Cleaning
- Drainage Maintenance
- Participation in the National Flood Insurance Program (NFIP)
- Water Resources Protection
- Wetlands Protection
- Open Space Residential Design (OSRD)
- Community Preservation
- Site Plan Review

## Brush Fire Mitigation:

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

## Winter Hazard Mitigation:

- DPW conducts standard snow operations.

## Wind and Winter Mitigation:

- Trees trimmed for resilience to wind and ice and snow hazards (Town contractor and National Grid)
- MA State Building Code



# Mitigation Strategy for 2024-29

---

Mitigation Measure	Priority
<b>FLOOD HAZARDS</b>	
• Create criteria for future open space parcels such as flood mitigation for purchase of parcels and interconnected and diverse open space land	High
• Review Open Space Residential Development bylaw, adopt cluster-by-right	High
• Concentrate development in existing areas of development	High
• Beaver control measures--Create a beaver mitigation plan	High
• Review options for extending wetlands buffer zones	Medium
• Conduct hydraulic analysis of flooding issues in the Mill Pond Area	Medium
• Identify more rain gardens and water retention basins on steep slopes	Medium
• Make public aware of watershed sub-basins with signage at water divides	Medium

## **WIND/EXTREME WEATHER**

- |  |        |
|--|--------|
| • Install wind resistant windows in public buildings | Medium |
|--|--------|

## **WILDFIRE HAZARDS**

- |  |      |
|--|------|
| • Maintain fire access roads at Oak Hill, Long Lake, Yapp Conservation Land, and NE Forestry Foundation Property | High |
| • Public Education on Brush Fire Prevention  | High |

## **WINTER HAZARDS**

- |  |        |
|--|--------|
| • Assessing snow loads on flat building roofs. | Medium |
|--|--------|

## **GEOLOGIC HAZARDS**

- |   |        |
|---|--------|
| • Conduct feasibility study on how to make town facilities earthquake resistant | Medium |
|---|--------|

## **EXTREME TEMPERATURE HAZARDS**

- |  |        |
|--|--------|
| • The town will continue to add green roofs and solar canopies to future municipal properties.   | Medium |
| • Update site plan requirements to eliminate heat islands in parking lots and to increase shade. | High   |

## **DROUGHT HAZARDS**

- |  |        |
|--|--------|
| • Include drought tolerant landscaping in site plan review, including a look at drought resistant grass seed | High   |
| • Continue and enhance the Boxboro and Littleton water conservation project region wide                      | High   |
| • Include rain barrels and drought resistant grass seeds in future projects                                  | Medium |
| • Public Education on reducing water consumption specifically regarding large area water consuming lawns     | Medium |

## **CLIMATE RESILIENCE/ADAPTATION**

- |   |      |
|---|------|
| • Continue to make climate considerations and sustainability a priority in the budgeting and capital investment plans | High |
| • Explore producing a climate action plan/municipal sustainable action plan using the sustainability committee        | High |

## **INVASIVE SPECIES**

- |  |      |
|--|------|
| • Strategically reduce invasive plants (e.g. garlic mustard pull) and combine with town-wide week-long clean-up effort as is done successfully in abutting towns | High |
|--|------|

# Public Review of the Draft Plan

Available for public review & comment:

[www.mapc.org/resource-library/hull-hmp/](http://www.mapc.org/resource-library/hull-hmp/)

Please send comments & questions to:

[LittletonResilience@mapc.org](mailto:LittletonResilience@mapc.org)

By June 18, 2024

TOWN OF LITTLETON  
HAZARD MITIGATION PLAN  
2024 UPDATE



DRAFT FOR TOWN REVIEW  
May 14, 2024

Town of Littleton  
Metropolitan Area Planning Council



# Thank You!

---

**Maren Toohill, Town Planner**

[Mtoohill@littletonma.org](mailto:Mtoohill@littletonma.org)

**Martin Pillsbury and Jenifer Wallitsch**

**MAPC**

[LittletonResilience@mapc.org](mailto:LittletonResilience@mapc.org)

---

**Download Plan: [www.mapc.org/resource-library/hull-hmp/](http://www.mapc.org/resource-library/hull-hmp/)**

**Send comments: [LittletonResilience@mapc.org](mailto:LittletonResilience@mapc.org)**