

# Natural Hazard Mitigation Plan Update Devens, Massachusetts

December 3, 2025



# Meeting Agenda

- Introduce Planning Team
- Project Overview
- Review Planning Process
- Discuss Community Setting
- Present the Asset Inventory for Devens
- Provide Natural Hazard Characterization
- Review FEMA Risk Assessment Resource
- Discuss Next Steps

# Devens HMP Update Committee

## Committee Members

Project Engineer at MassDevelopment	Joseph Bisceglia
Director of Engineering	John Marc-Aurele
Devens DPW	Shane Melone
Devens Fire Chief / Emergency Management Director for Devens	Tim Kelly
Building Commissioner	Gabe Vellante
MassDevelopment General Counsel	Stephanie Zierten
MassDevelopment Legal Counsel, Devens	Rob Carley
Devens Enterprise Commision (DEC) Director/Conservation Commission for Devens	Neil Angus
Associate Planner (DEC)	Beth Suedmeyer
Fire Chief	Tim Kelly
Environmental Project Engineer	Anne Marie Dowd
Utilities Manager	Jim Moore
State & Regional reps	MEMA (Jeff Zukowski) Hazard Mitigation Planner and MEMA (Beth Dubrawski) Hazard Mitigation Contract Specialist
GZA (Hazard Planning Consultant)	Rosalie Starvish, Project Manager Alex Roper, Hazard Mitigation Engineer



# Devens HMP Update

## MONTACHUSETT REGION NATURAL HAZARD MITIGATION PLAN 2015 UPDATE



*Ashburnham  
Ashby  
Athol  
Ayer  
Clinton  
Devens  
Fitchburg  
Gardner  
Groton  
Harvard  
Hubbardston  
Lancaster  
Leominster  
Lunenburg  
Petersham  
Phillipston  
Royalston  
Shirley  
Sterling  
Templeton  
Townsend  
Westminster  
Winchendon*

Prepared by:

Montachusett Regional Planning Commission (MRPC)  
1427R Water Street, Fitchburg, MA 01420



*The preparation of this plan was funded by a grant from the  
Massachusetts Emergency Management Agency in Cooperation  
with the Federal Emergency Management Agency (FEMA).  
Matching funds were provided by the MRPC.*

# Committee Meetings

- Committee meetings are held on the third Tuesday of every month. Approximately 6 Working Group meetings are expected to take place between Project Initiation and Plan Adoption.

<b>Planning Team Meetings</b>	<b>Date</b>
Project Initiation Meeting	5/20/2025
Committee Meeting	8/19/2025
Committee Meeting	9/16/2025
Committee Meeting	10/15/2025
Committee Meeting	11/18/2025
<i>Committee Meeting</i>	<i>2/2/2026</i>

# HAZARD MITIGATION PLANNING BACKGROUND

**PURPOSE:** Hazard Mitigation planning is a proactive effort to **identify actions** that can **reduce the dangers to life and property** from **natural hazard events** such as flooding, hurricanes, tornadoes, winter storms, and earthquakes.

## REQUIREMENTS:

- **Maintain eligibility for FEMA funding** (Federal Disaster Mitigation Act of 2000).
- **Update this plan in five-year intervals.**

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	Natural Hazard Mitigation Plan Update  Devens, Massachusetts
Local Natural Hazard Mitigation Plan Update	Prepared by: GZA GeoEnvironmental, Inc.  Prepared For: Devens, Massachusetts

# Planning Goals



- Identify Community-specific goals
- Update Community assets
- Document progress made per the 2015 Montachusett Regional Plan Update
- Characterize and assess natural hazard and climate-related hazard risks
- Support public education and outreach throughout the planning process
- Revise and develop strategies and actions to mitigate the hazard risks
- Adopt the Plan Update

# Project Overview

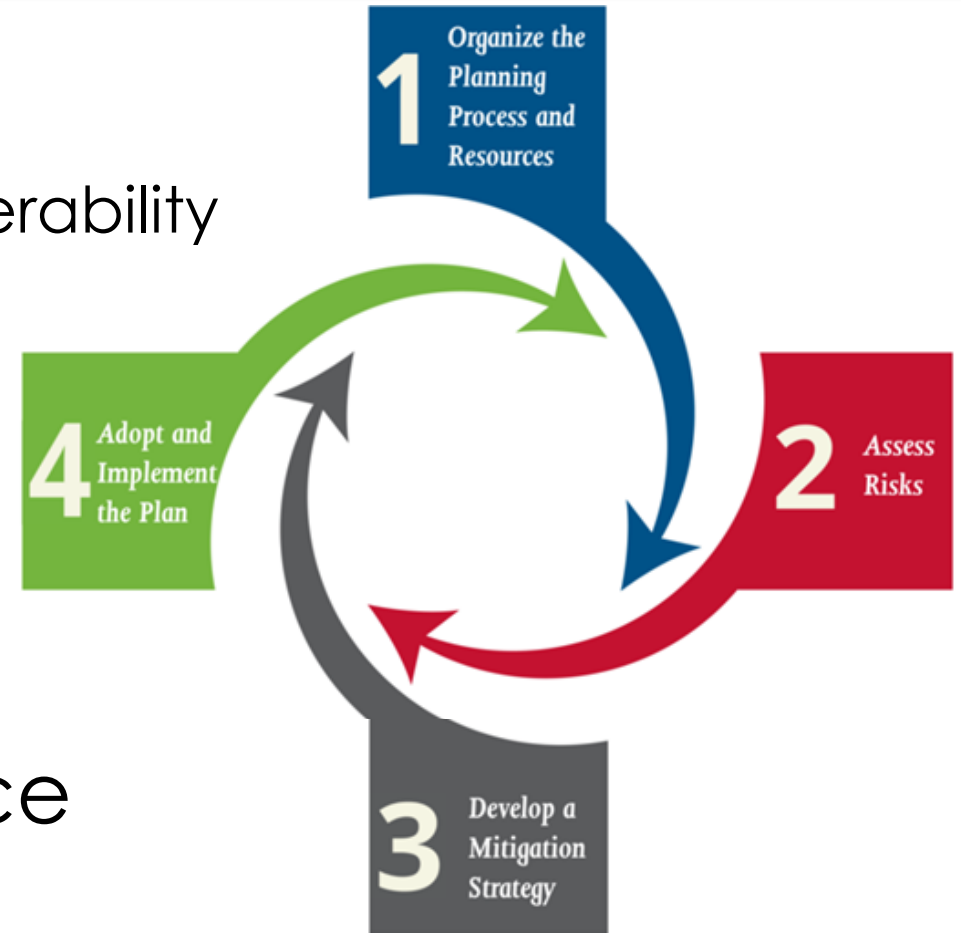
## Planning Tasks

1. Project Initiation
2. Conduct Committee Meetings
3. Planning Process Documentation
4. Multi-Hazard Mitigation Plan Update Development
5. State and Federal Plan Review, Revisions, and Local Adoption



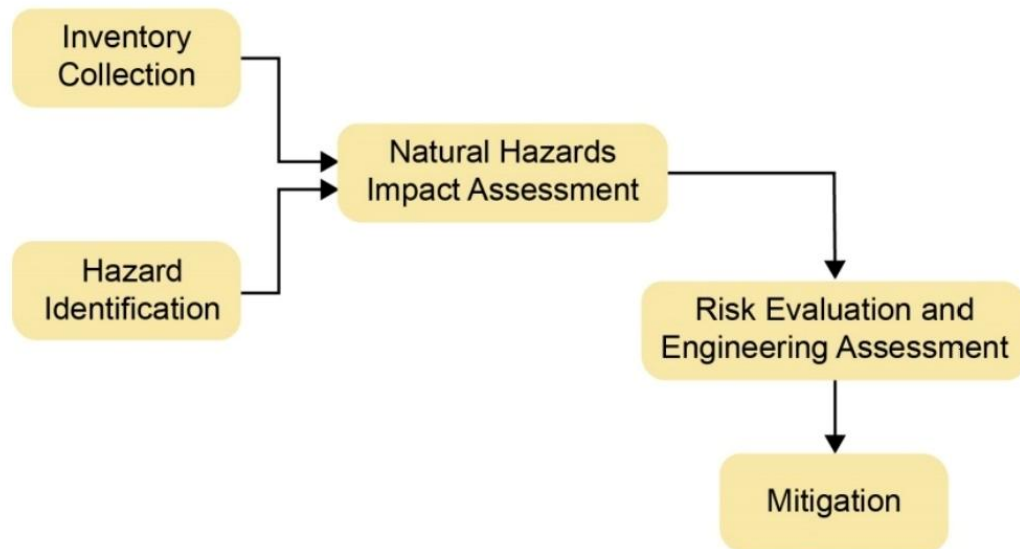
# Planning Process

- Assess Risk:
  - Community Demographics/Social Vulnerability
  - Asset Inventory
  - Natural Hazards Characterization
  - Risk Assessment
- Mitigation Strategy and Actions
- Plan Adoption and Maintenance



# Plan Components

## 2025 HMP Update Table of Contents



Quick Plan Reference Guide

Understanding Natural Hazard Risk

Section 1: Introduction

Section 2: Planning Process

Section 3: Community Profile Overview

Section 4: Natural Hazard Risk Profile

Section 5: Natural Hazard Mitigation Strategies

Section 6: Regional and Intercommunity Considerations

Section 7: Plan Adoption and Implementation

Attachments:

1: Community Profile Details

2: Natural Hazard Characterization Details

3: Natural Hazard Risk Assessment Details

4: FEMA HAZUS-MH Simulation Results

5: State and Federal Funding Sources

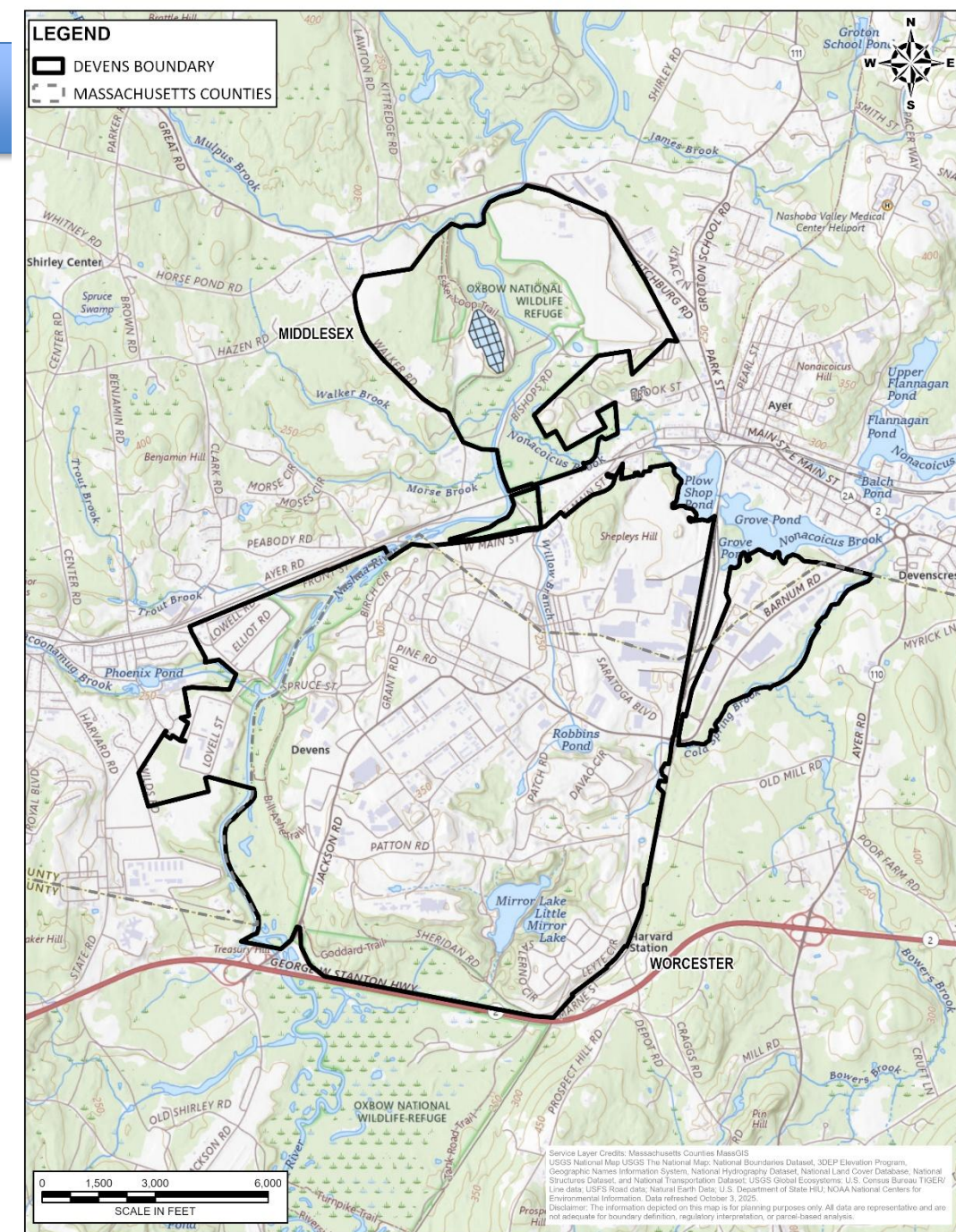
6: Public Meeting Documentation

7: References and Resources

8: Key Contacts

# Devens Community Setting

- 6.87 square miles:
  - 6.78 square miles of land
  - 0.09 square miles of water
  - 2.6 square miles of open space
- 115 acres of wetland and water bodies
- Nashua River and Mirror Lake
- 8 miles of rivers and streams



# Community Profile: People

## Per 2020 Census Data:

### Population

- 1,697 people

### Land Area

- 6.78 square miles

### Population Density

- 250.3 people per square mile

### Median Age

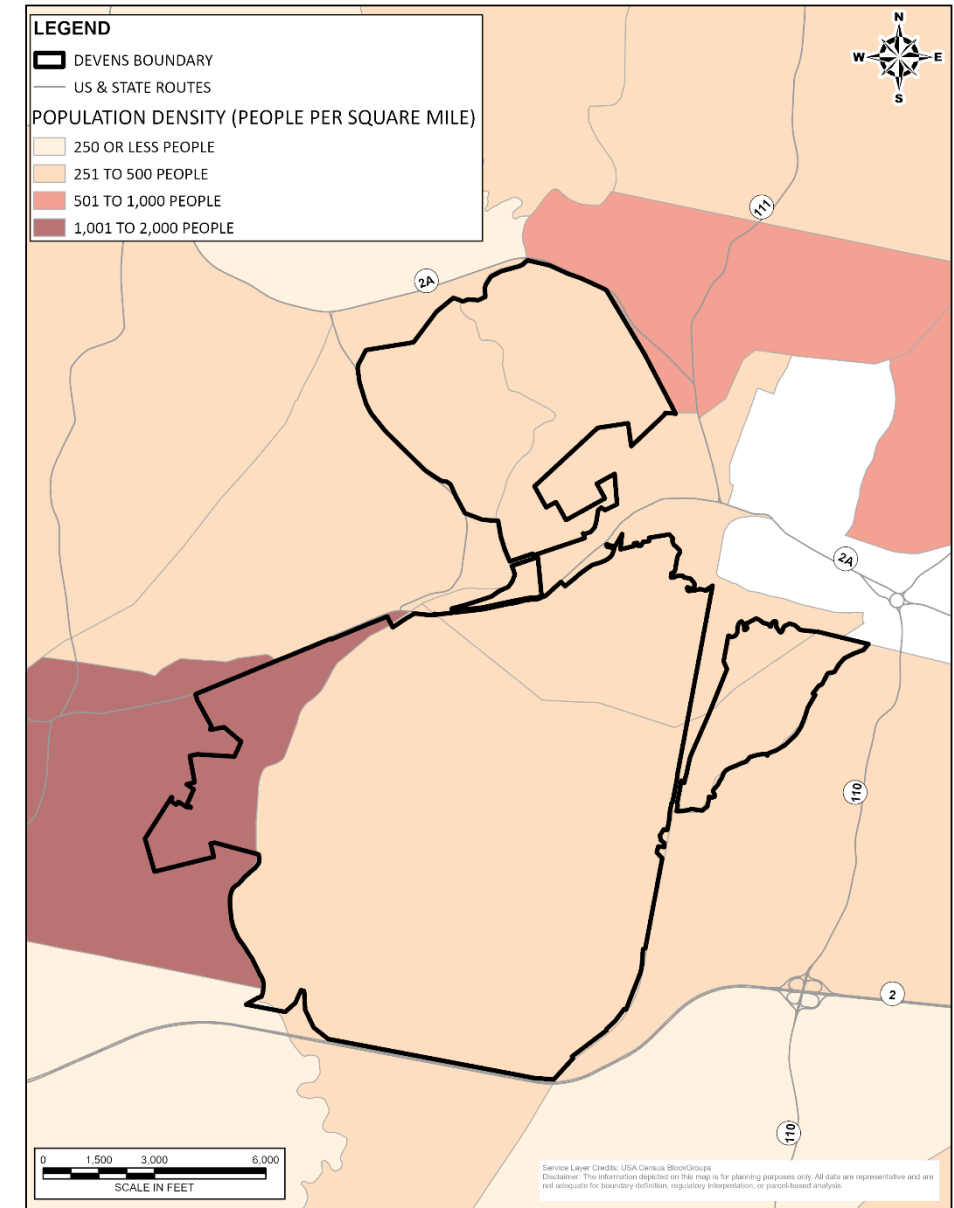
- 46.3 years (median age for the State: 40.0)

### Households

- 305

### Median Household Income

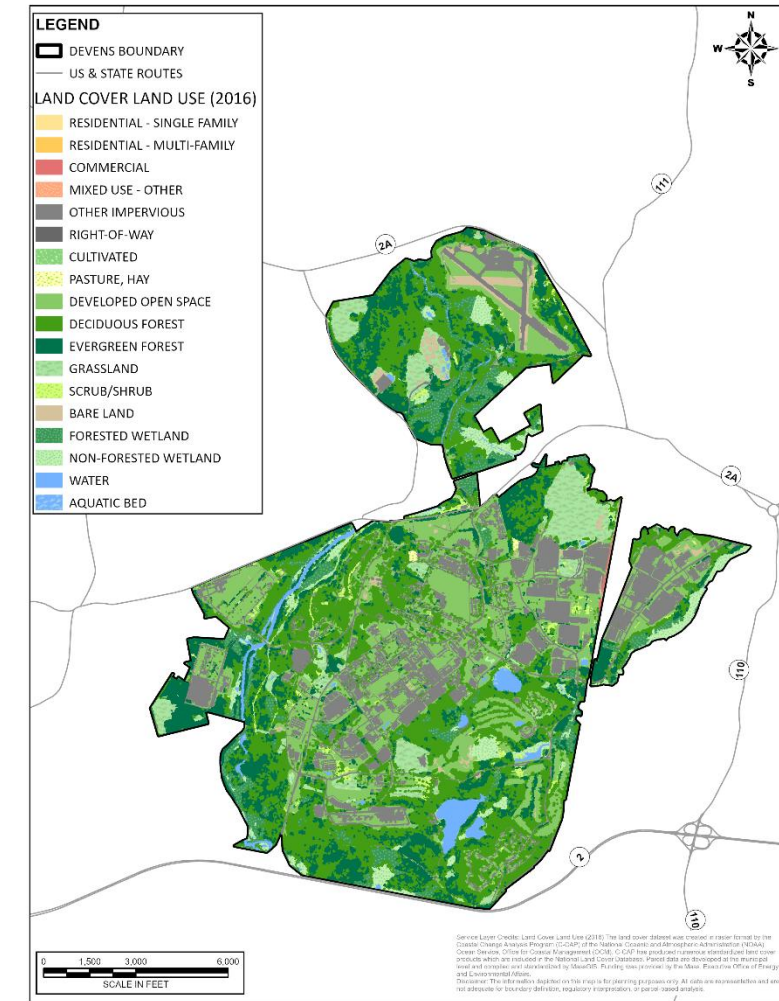
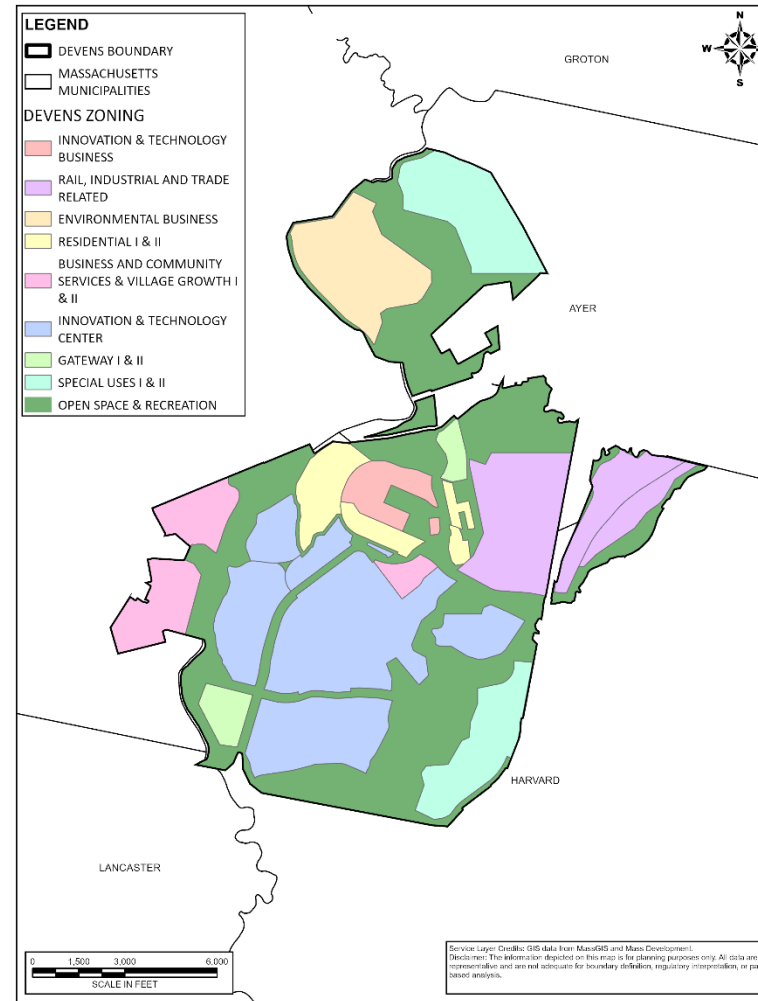
- \$113,125 (state average: \$104,828)





# Community Profile: Land Use and Zoning

- Innovation & Technology Business
- Rail, Industrial & Trade Related
- Environmental Business
- Residential I
- Residential II
- Business Community Services
- Village Growth I
- Village Growth II
- Innovation & Technology Center
- Gateway I Jackson
- Gateway II Verbeck
- Special Use I
- Special Use II



# Inventory of Community Assets

- Support, High Occupancy, and Vulnerable Populations
- High Potential Loss Facilities
- Transportation Systems
- Natural Resources
- Lifeline Systems
- Essential Facilities

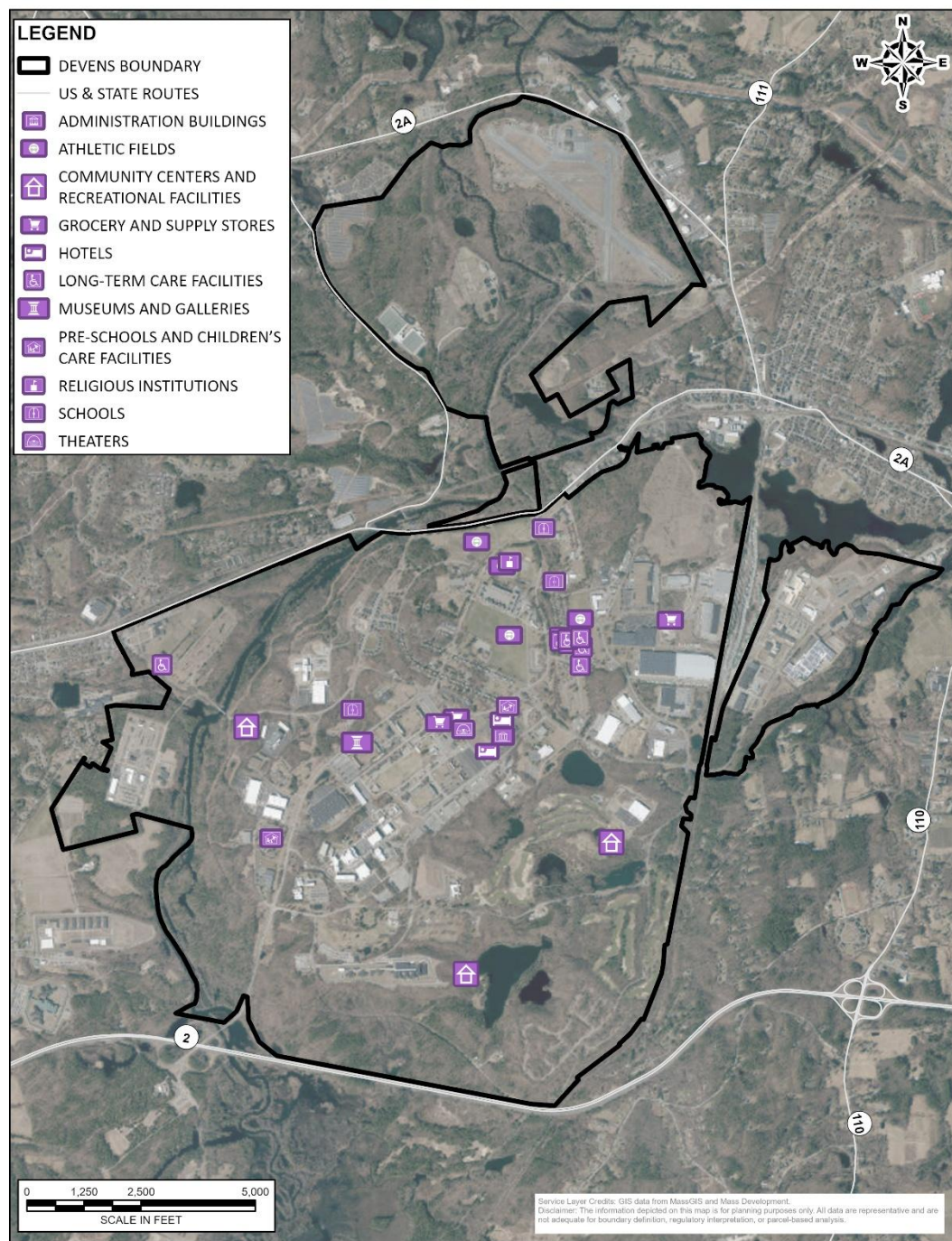


Devens Common Center



# Support, High Occupancy, and Vulnerable Populations

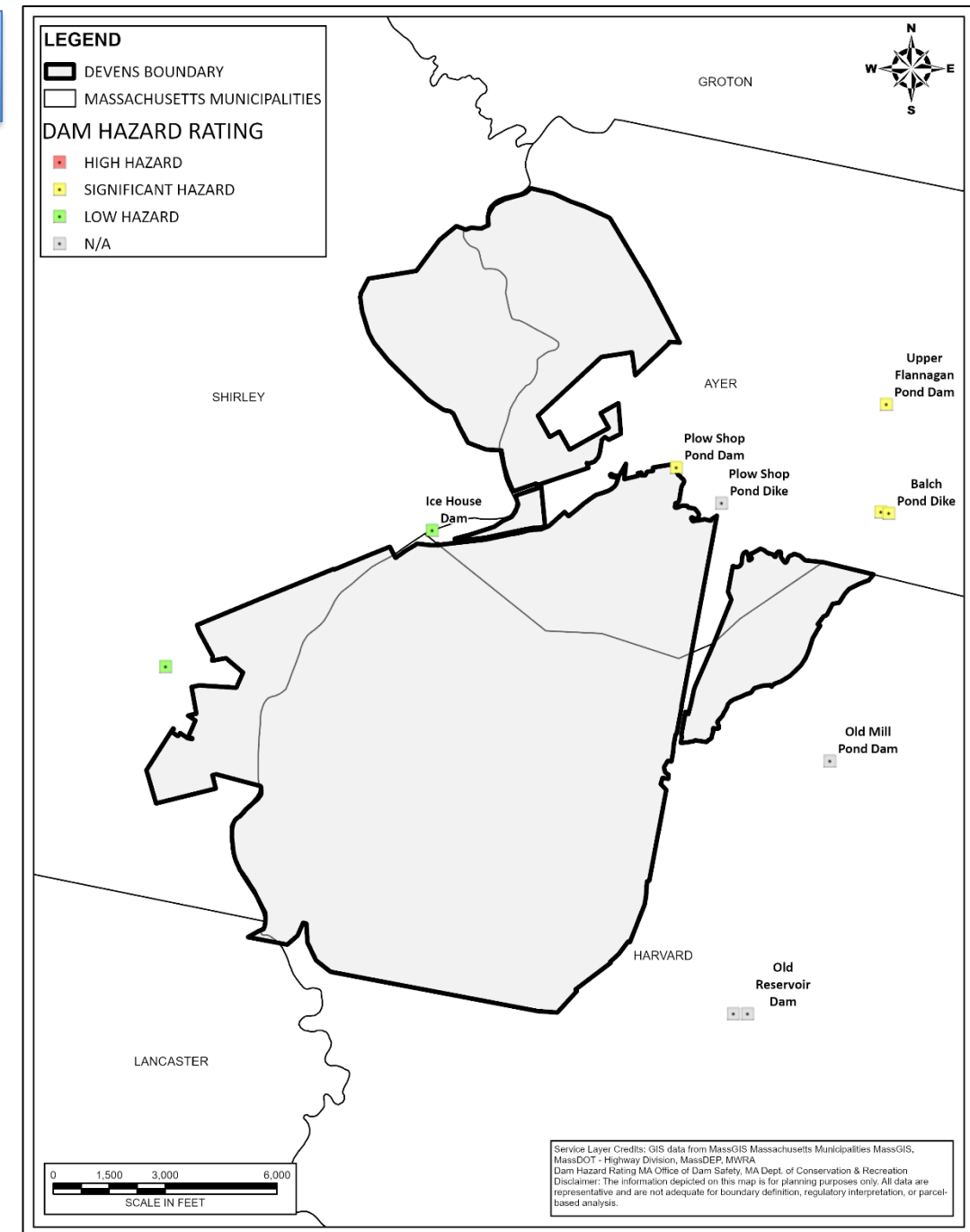
- Long-term Care Facilities
- Schools
- Pre-schools and Children's care facilities
- Town Administration Buildings
- Grocery & Supply Stores
- Theaters
- Religious Institutions
- Museums and Galleries
- Community Centers & Recreational Facilities
- Athletic Fields
- Hotels



# High Potential Loss Facilities

## Dams

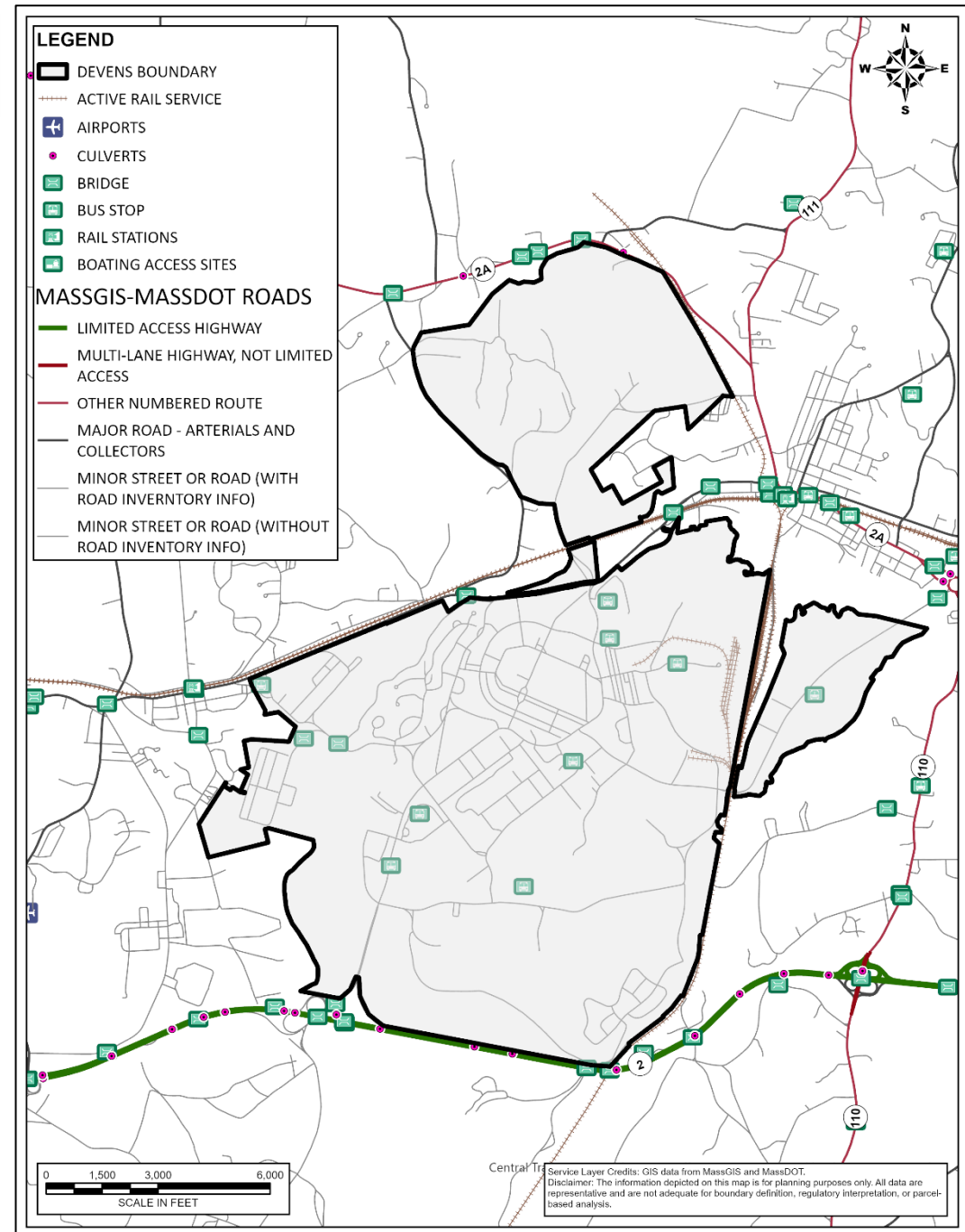
- While there are no high hazard dams located in Devens, dams in neighboring towns may present low to significant hazards which can impact Devens





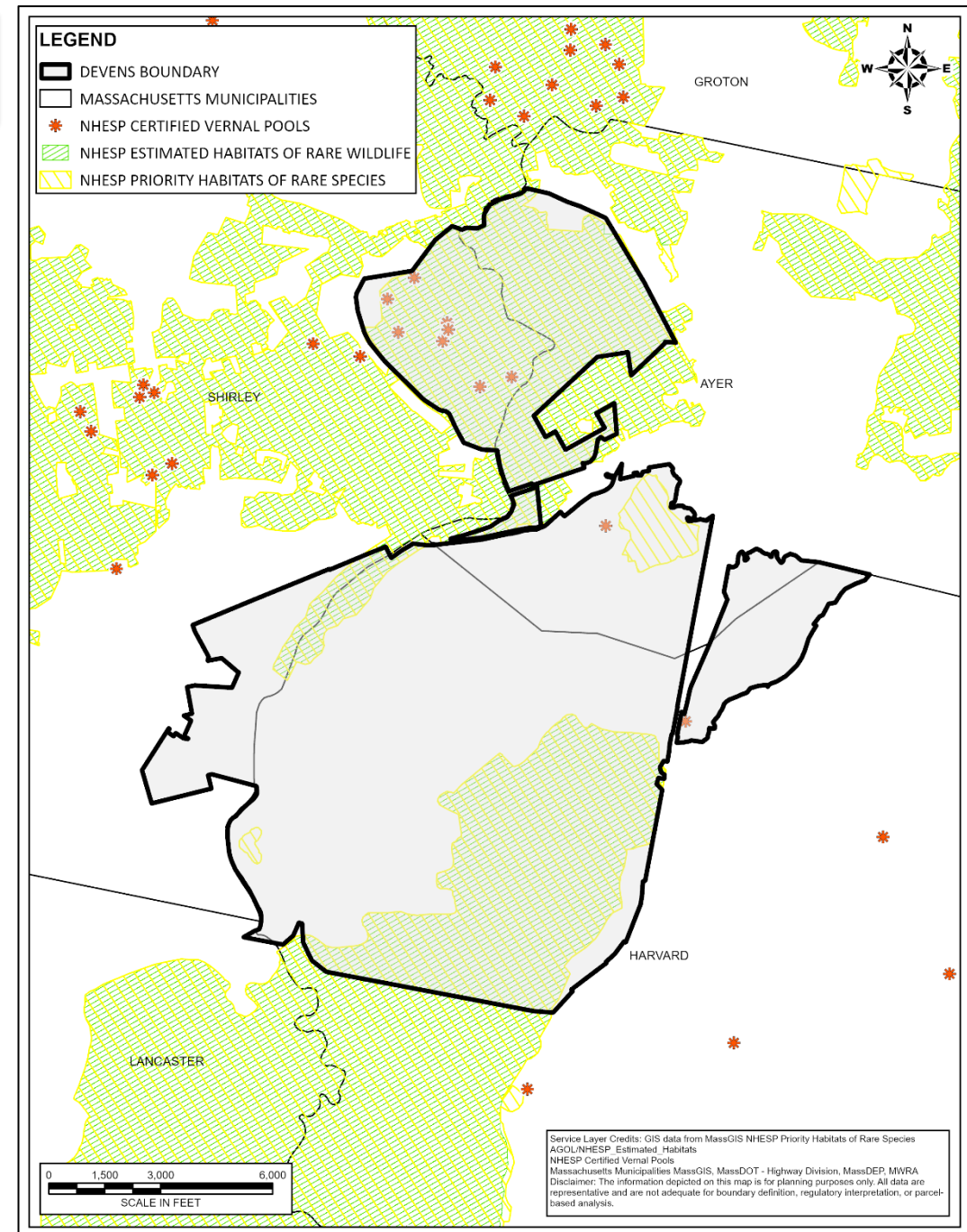
# Transportation Systems

- Key State Highways
  - Route 2A
  - Route 110
  - Route 111
- Key Local Roads
  - Jackson Road
  - West Main Street
  - Barnum Road
- Key Rail Lines
  - Fitchburg Heavy Rail Route



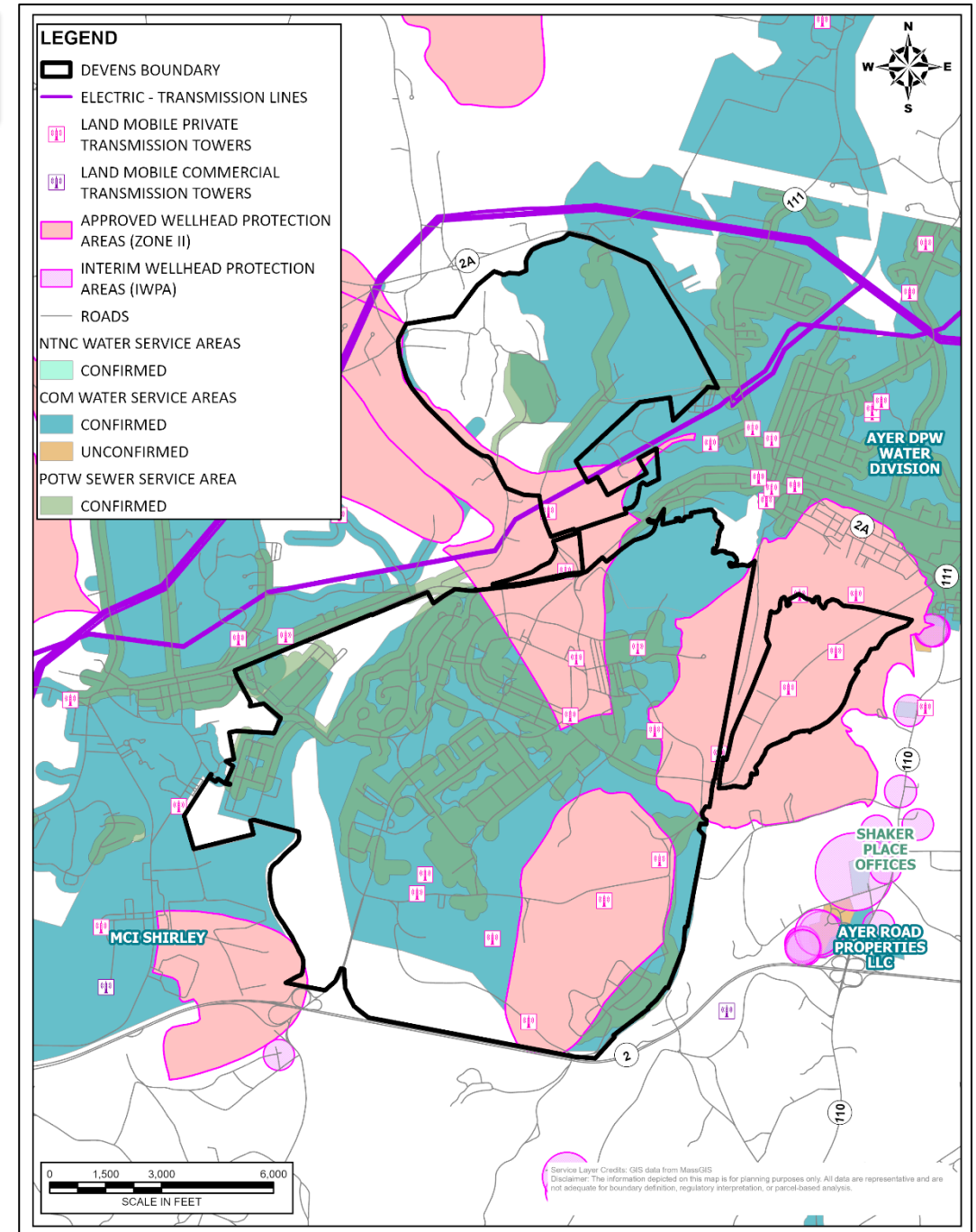
# Natural Resources

- Certified Vernal Pools
- NHESP Priority Habitats of Rare Species
- NHESP Estimated Habitats of Rare Wildlife



# Lifeline Systems

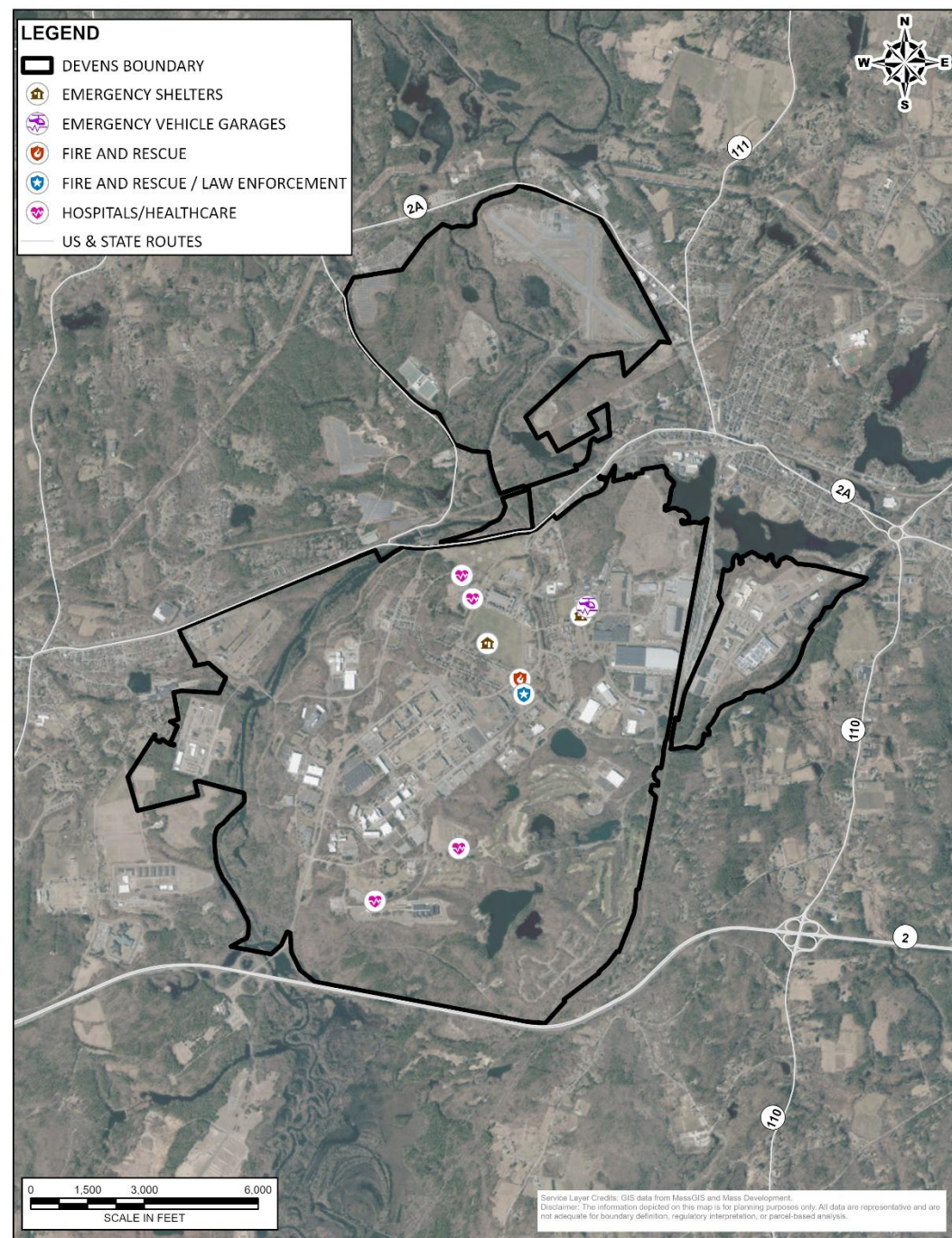
- Electric Power Generation
- Electric Power Transmission
- Natural Gas
- Heating Oil
- Water Supply
- Wastewater Distribution
- Telecommunications





# Essential Facilities

- Hospitals/Healthcare
- Emergency Shelters
- Fire and Rescue
- Law Enforcement Locations
- Emergency Vehicle Garages





# Natural Hazard Categories

## Four hazard categories:

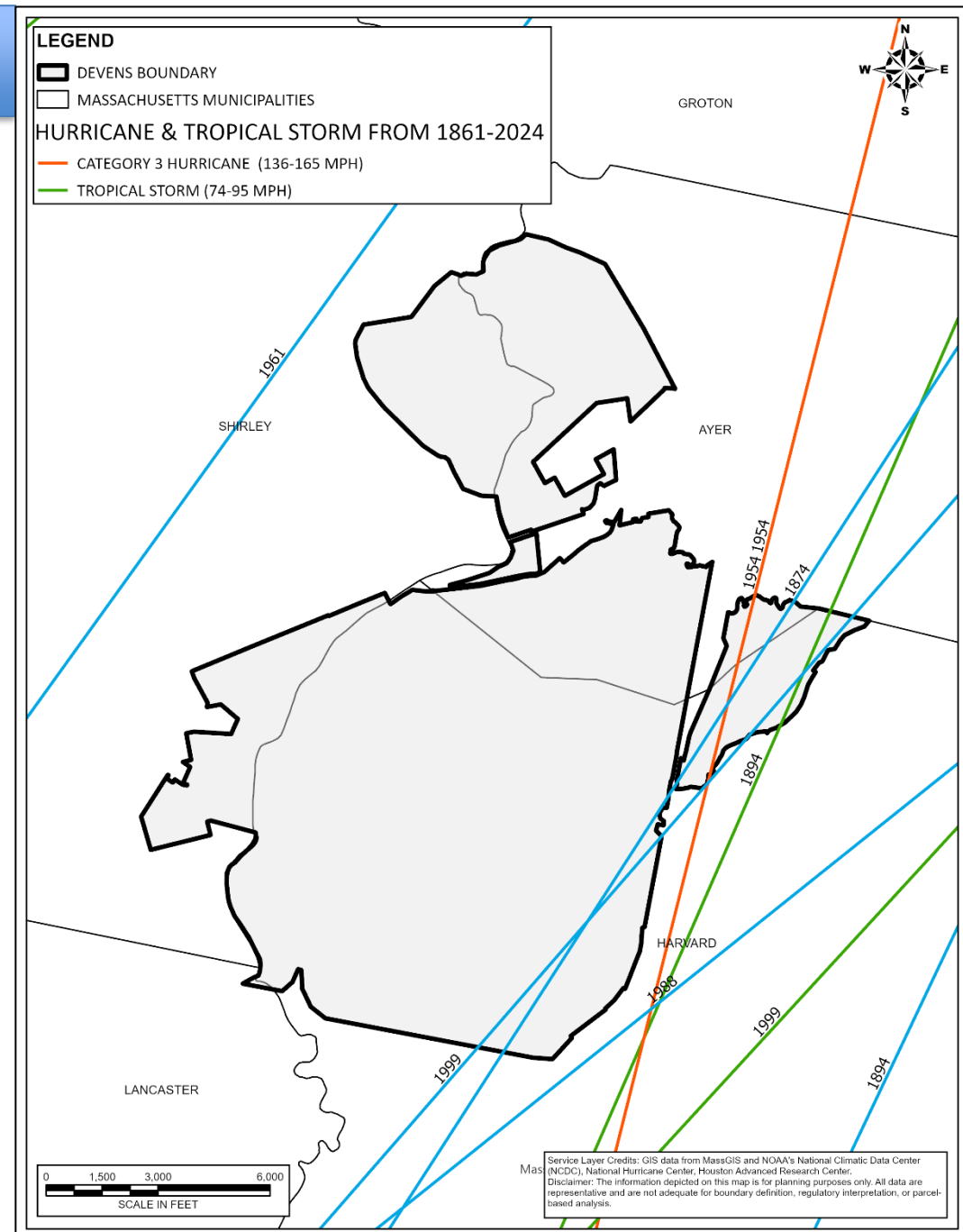
- Severe Weather Hazards
- Climate-Related Hazards
- Geologic Hazards
- Secondary Hazards

Severe Weather Hazards	
Severe Wind:	Hurricanes/Tropical Storms
	Thunderstorms
	Tornadoes
Lightning	
Hail	
Flood:	
	Storm Surge
	Sea Level Rise
	Urban Drainage Flooding
	Riverine Flooding
	Intense Rainfall
Severe Winter Weather:	
	Snowfall
	Ice Storms
Climate-Related Hazards	
Extreme Temperature:	
	Heat
	Cold
Drought	
Wildfire	
Geologic Hazards	
Earthquake	
Landslides	
Tsunami	
Secondary Hazard	
Dam Failure	

# Severe Weather Hazards

## Hurricanes and Tropical Storms

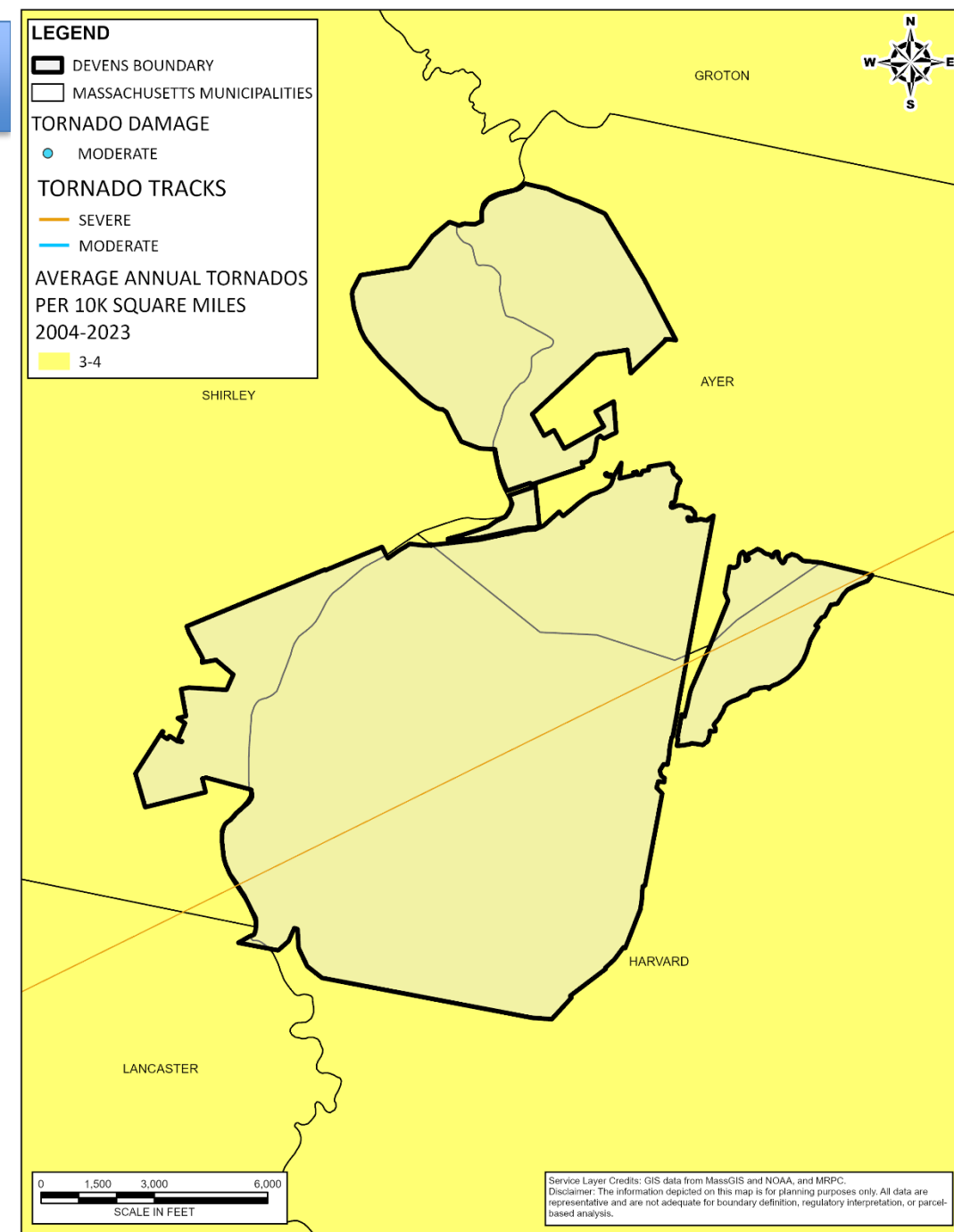
- Notable hurricane tracks through and around Devens



# Severe Weather Hazards

## Tornados

- Severe tornado through Devens



# Severe Weather Hazards

## Extreme Wind Events

### Storm Events Database

[Prev](#) / [Search Results](#) / [Next](#)

#### Event Details:

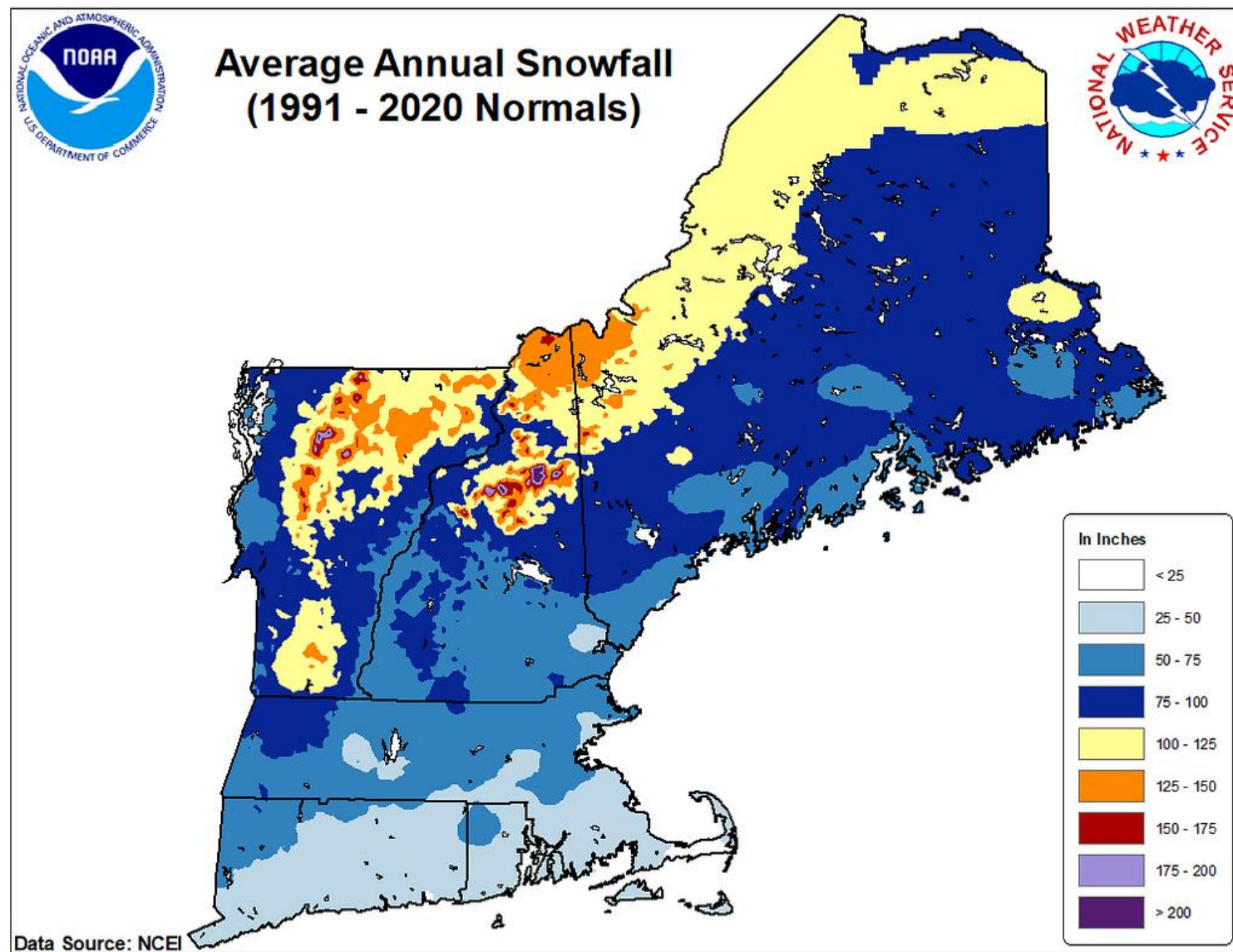
Event	Thunderstorm Wind
Magnitude	0 kts.
State	MASSACHUSETTS
County/Area	WORCESTER
NCEI Data Source	CSV
Begin Date	1994-07-30 12:10 EST
Begin Location	0 Ayer
End Date	1994-07-30 12:25 EST
Deaths Direct/Indirect	0/0 (fatality details below, when available...)
Injuries Direct/Indirect	0/0
Property Damage	0
Crop Damage	0
Event Narrative	On the Fort Devens Military Reservation, a small shed was blown down and this may have induced a fire which burned a warehouse to the ground. Trees were reported blown down along with two power lines. A downpour accompanied this thunderstorm and produced one inch of rain in 15 minutes.



# Severe Weather Hazards

## Winter Weather

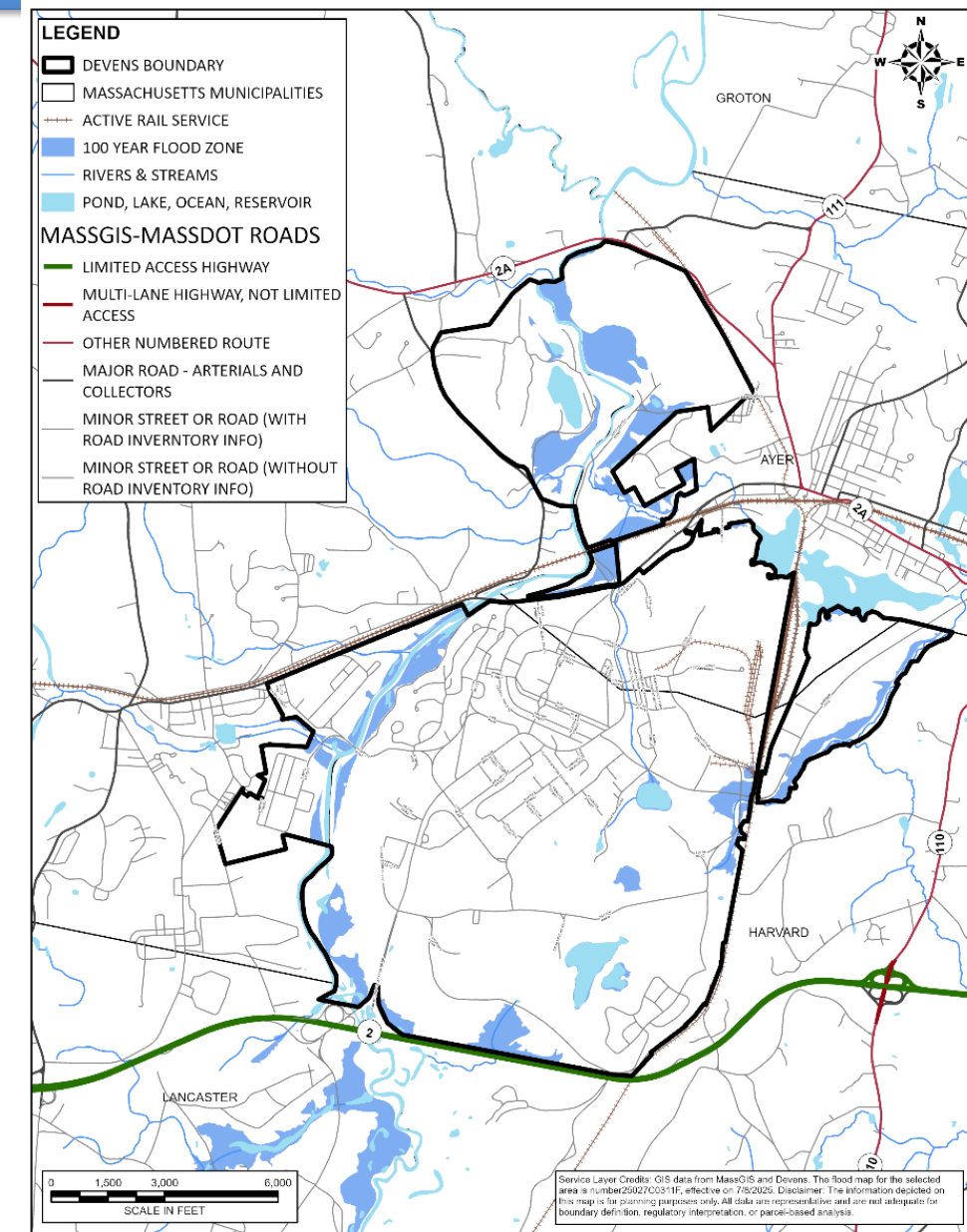
- Average Annual Snowfall
  - 72 Inches
- Ice Storms
  - Average of 2.3 ice storm events per year, with 191 events over 65 years



# Severe Weather Hazards

## Riverine & Intense Precipitation Flooding

- Top ranked hazard due to high economic loss associated with damages to buildings and transportation infrastructure.
- Extent of riverine flooding is limited to the areas along the Nashua River and tributaries
- Intense precipitation may lead to flooding of low-lying areas outside of the floodplain.
- Riverine Flooding:  
4.1 events per year (98 events over 34 years)





MACPHERSON ROAD AT BISHOP ROAD VIEW SOUTH



MACPHERSON ROAD AT RAILROAD BRIDGE VIEW NORTH (3 DAYS AFTER CREST)



MAIN STREET, AYER, VIEW EAST TOWARD PARK STREET



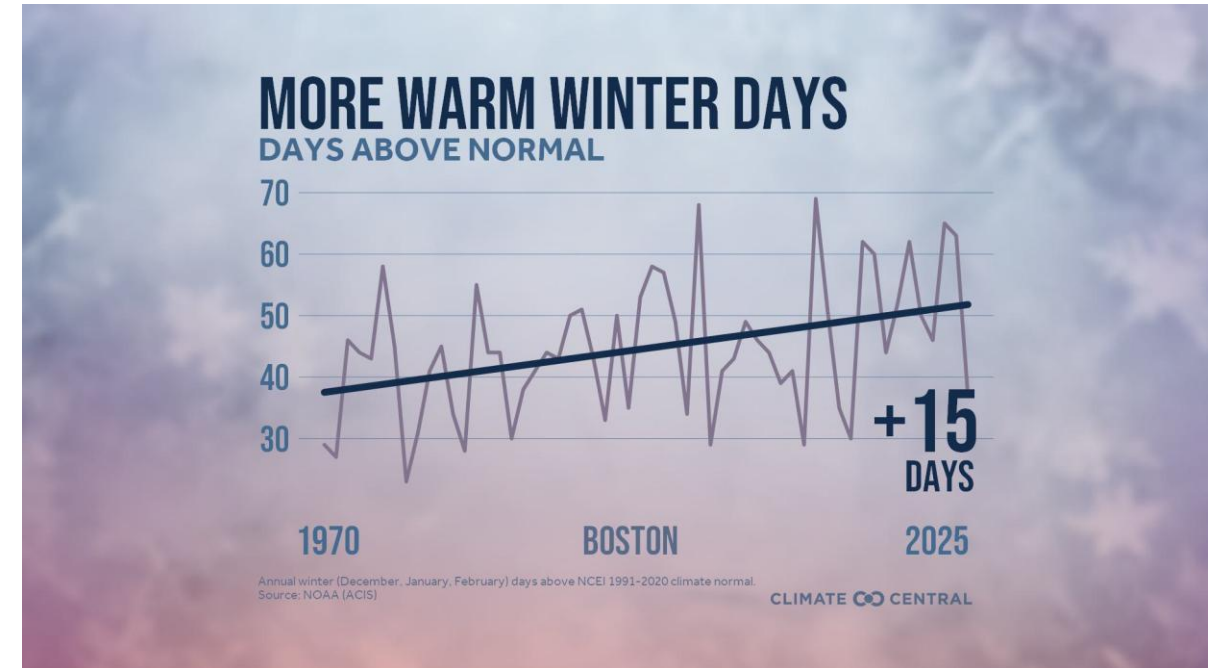
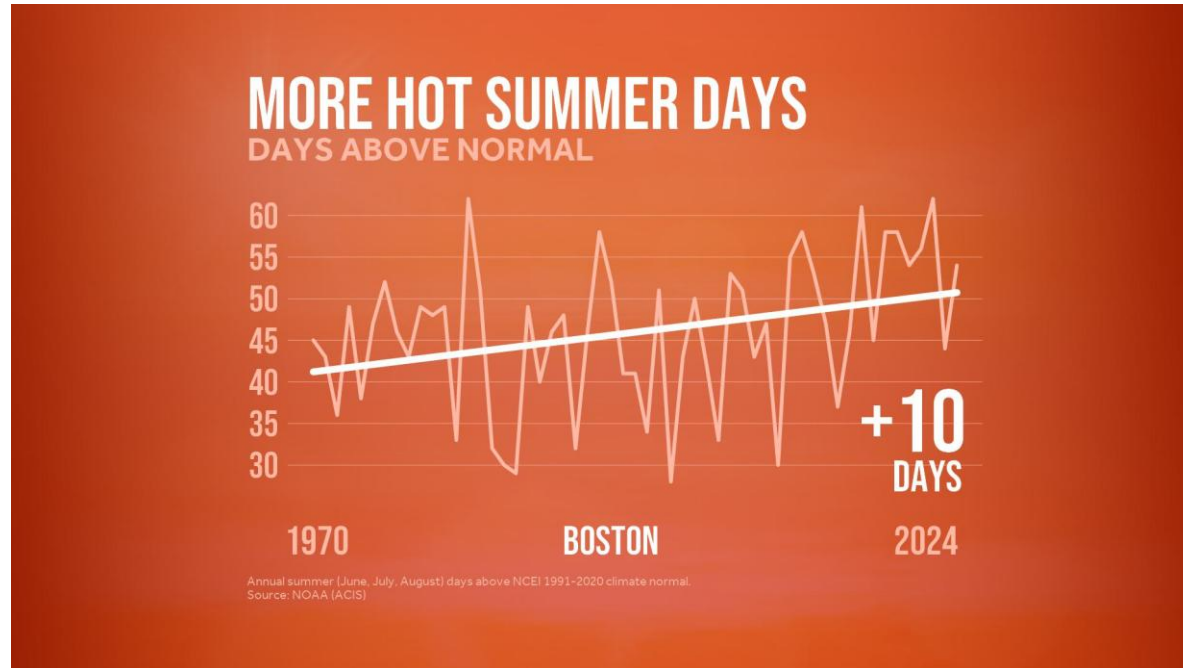
MACPHERSON ROAD AT RAILROAD BRIDGE VIEW NORTH (NORMAL)





# Climate Related Hazards

## Extreme Temperature



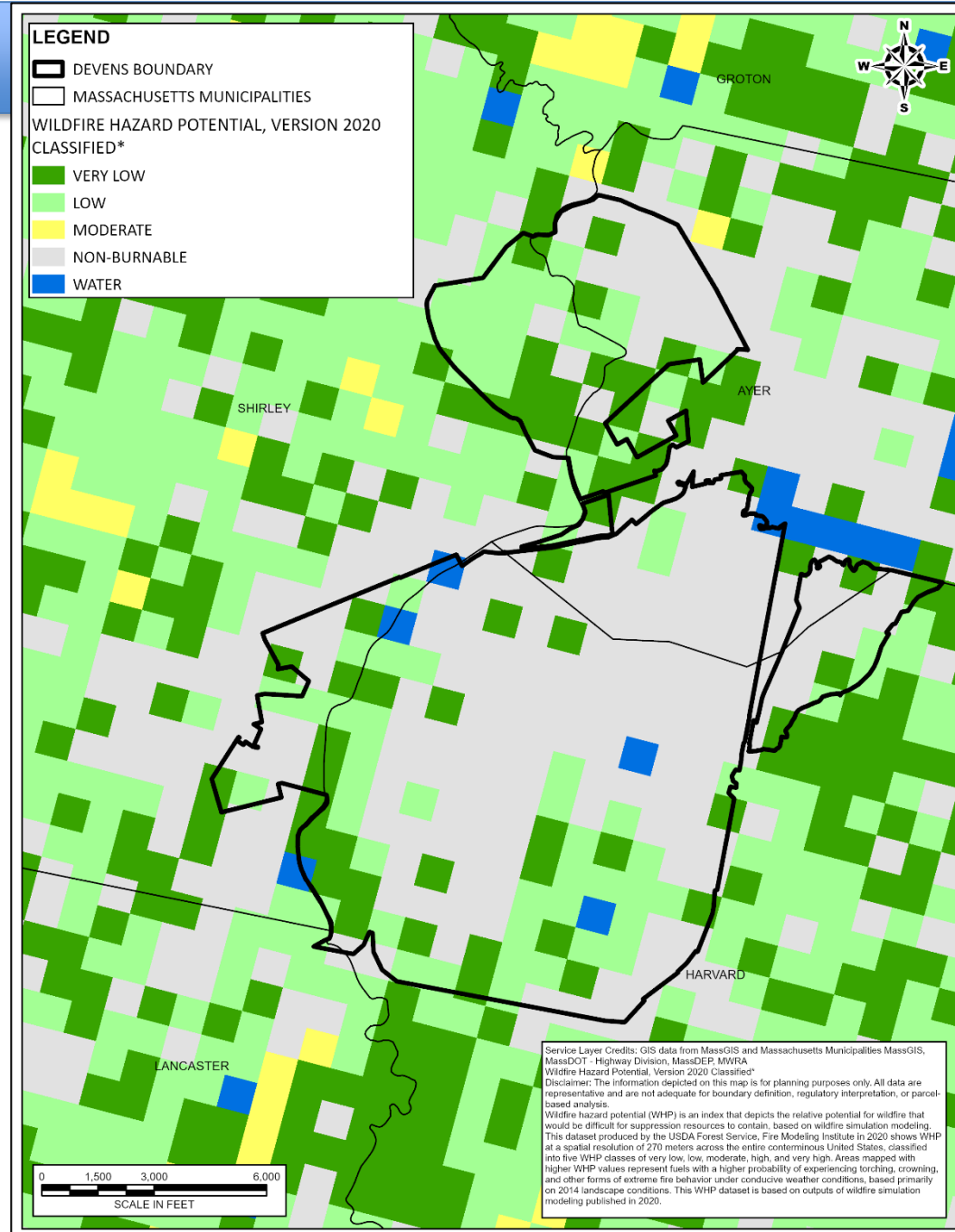
Source: Climate Central

<https://www.climatecentral.org/climate-local/41397>

# Climate Related Hazards

## Wildfire and Drought

- Present Wildfire Hazard Potential
  - Low to Very Low
- Future Wildfire Hazard Potential
  - Increased air temperatures and evapotranspiration, as well as increases in drought, can increase Wildfire potential.



- **Physical Damage**

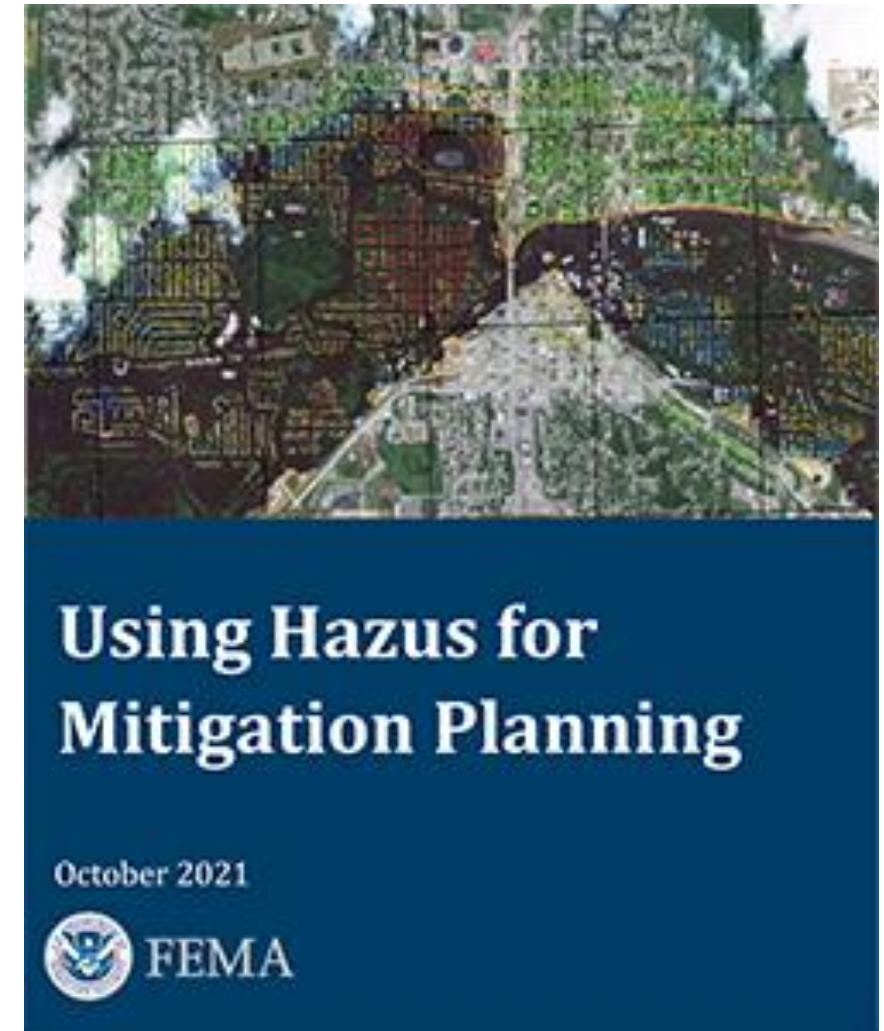
to residential and commercial buildings, schools, and critical facilities and infrastructure.

- **Economic loss**

including lost jobs, business interruptions, and repair or reconstruction costs.

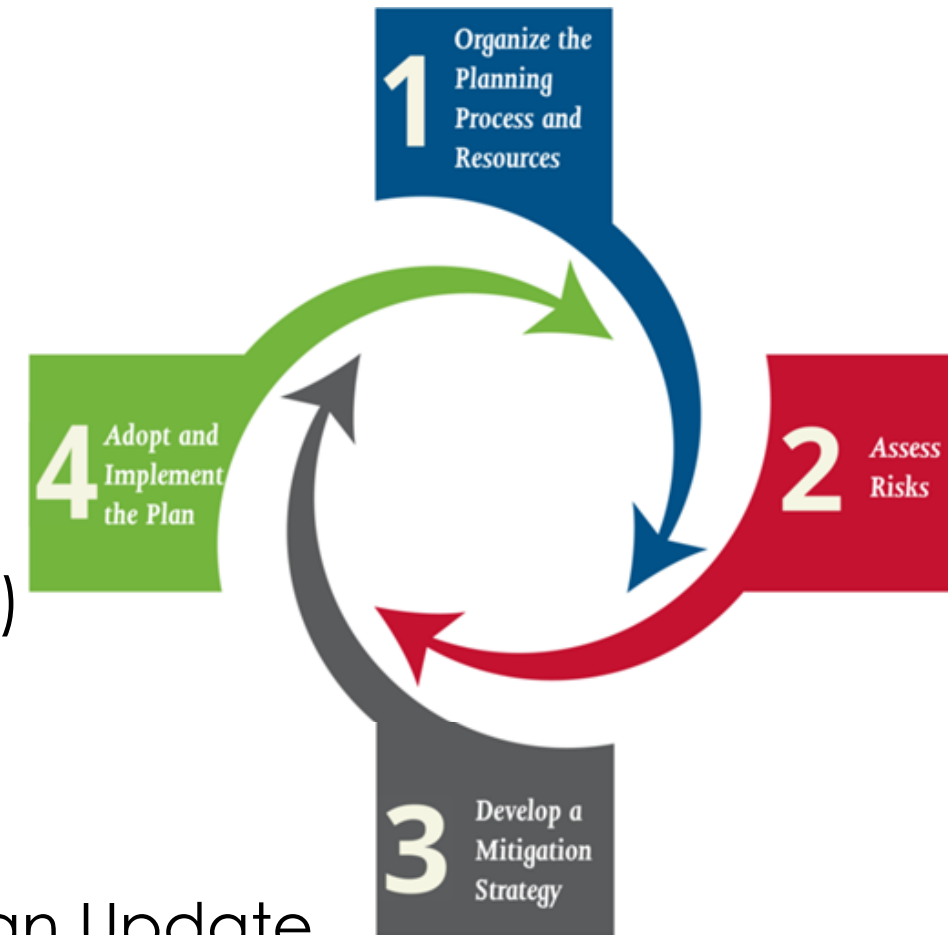
- **Social impacts**

including estimates of displaced households, shelter requirements, and populations exposed to floods, earthquakes, hurricanes, and tsunamis.



# Next Steps

1. Complete Risk Assessment
2. Update Mitigation Goals and Actions
3. Prioritizing Mitigation Actions
4. Continued Committee Meetings
5. Public Meeting #2 (Date to be determined)
  - Risk Assessment Results
  - Updated Mitigation Goals and Actions
6. Provide Draft Natural Hazards Mitigation Plan Update





**Thank you for attending!**  
Questions? Comments?

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Direct: (978) 784-2905

Rosalie Starvish:  
Rosalie.starvish@gza.com  
O: 413.726.2119 or M: 860.550.2777

# Devens Municipal Vulnerability Preparedness

## MVP 2.0

**About the project:** The MVP 2.0 Program is a 2-year grant program run by the State of Massachusetts. It funds communities throughout Massachusetts to identify vulnerabilities to climate change and to implement projects that help build community resilience.

**Contact:** Beth Suedmeyer,  
Environmental Planner, DEC  
[bethsuedmeyer@devensec.com](mailto:bethsuedmeyer@devensec.com)  
978-772-8831, x3314



### Phase 1

#### Developing a Core Team

- (1) Starting to Build Your Team
- (2) Identifying Lived Expertise
- (3) Recruiting the Rest of Your Team

### Phase 2

#### Revisiting Resilience Priorities

- (4) Kicking off Collaboration
- (5) Uncovering Social Resilience
- (6) Revisiting Community Resilience Priorities

### Phase 3

#### Implementing a Seed Project

- (7) Selecting a Seed Project
- (8) Developing an Implementation Plan
- (9) Implementing a Seed Project
- (10) Reflecting, Adjusting, and Next Steps



# The Core Team

The Core Team (staff and Community Liaisons) will focus on how to make Devens more resilient to climate change impacts such as flooding and extreme heat, including ways to support community needs for a stronger and healthier community. In the 2<sup>nd</sup> year, the team will implement a project to building community resilience.

Topics the Core Team may address may include:

- access to healthy food,
- housing,
- transportation,
- parks and open space,
- reducing flood risk, and/or
- ways to stay cool during heat waves.

# Call for Community Liaisons



**What's a Community Liaison?** The role of the Community Liaison will be to connect with community members, understand their needs, concerns, and priorities, and to help make sure that these insights shape decisions about the project. A Community Liaison brings strong connections with Environmental Justice or other priority populations in the community. They will be trained and compensated for their time to facilitate this process.

