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Natural Hazard Mitigation Plan Update

Devens, Massachusetts

Local Natural Hazard Mitigation Plan Update

Prepared in accordance with the requirements presented in the 44 Code of Federal Regulations (CFR) Part 201.6, FEMA Local Mitigation Plan Review Guide and the Local Mitigation Handbook

Prepared by:
GZA GeoEnvironmental, Inc.

Prepared For:
Devens, Massachusetts

April 15, 2026

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Certificate of Adoption

Add FEMA formal approval letter here

EXECUTIVE SUMMARY

Natural Hazard Mitigation Planning is intended to provide the Community of Devens with a risk-based approach to making planning decisions, while considering the community's climate change resiliency planning and implementation of priority projects. This plan satisfies the regulatory requirements for hazard mitigation planning through the Federal Emergency Management Agency (FEMA).

Planning Process

This updated Natural Hazard Mitigation Plan (NHMP) Update was developed through the following steps:

1. Create a Working Group made up of community members and stakeholders.
2. Define hazard mitigation goals.
3. Develop inventory of Community assets and critical facilities.
4. Identify main natural hazards that pose risk to the community and incorporate feedback from the Community.
5. Conduct a vulnerability and risk assessment of top natural hazards.
6. Review and update existing mitigation strategies.
7. Define and prioritize mitigation actions.
8. Develop an action and implementation strategy.

Hazard Mitigation Goals

The Community of Devens endorsed the following set of common hazard mitigation goals to protect community assets and critical facilities.

1. Promote reduction or elimination of injury to or loss of life and property, loss of natural environments, loss of infrastructure, and the associated economic impacts from natural hazards.
2. Identify responsibilities, plan for, and implement hazard preparedness and response actions on a state, regional, and local level.
3. Maintain and enhance the jurisdiction's natural and man-made systems that protect against natural hazards. Continue to promote and incorporate Green Infrastructure, Low-Impact Development, and Nature-Based Solutions into redevelopment projects to facilitate resilience.
4. Implement effective hazard mitigation projects on a local and regional level.
5. Increase cooperation and coordination among private entities, local agencies, state agencies, and federal agencies.
6. Develop and implement resilience strategies for community resources including business, residential, natural, historic and cultural, social, and transportation and infrastructure, on a state, regional, and local level.
7. Increase public awareness of natural hazard risks and mitigation activities.
8. Improve existing local policies, plans, regulations, and practices to reduce or eliminate the impacts of natural hazards and enhance resiliency.

EXECUTIVE SUMMARY Cont.

Vulnerability and Risk

The Community of Devens NHMP Plan assesses the potential impacts to the community from a variety of natural hazards, including but not limited to:

Additional natural hazards noted to be of concern in Devens include intense precipitation (resulting in flash flooding) and wildfires. The NHMP documents the exposure of community assets and critical facilities to these natural hazards, the frequency of events, and the risk associated with each hazard.

Hazard Mitigation Strategy

During the NHMP process, the Working Group identified a total of 48 hazard mitigation actions. The number of actions for each mitigation action category is summarized below.

Mitigation Action Category	# of Actions	# of High Priority Actions	Location in Plan
Local Planning and Regulations	25	13	Page 5-4
Structure and Infrastructure Projects	10	3	Page 5-6
Natural Systems Protection	7	1	Page 5-7
Education and Awareness Programs	6	1	Page 5-8
TOTAL	48	18	

Mitigation Action Categories:

Local Planning and Regulations

- These actions involve government authorities and community policies or codes that influence the way land and buildings are developed and built.

Structure and Infrastructure Projects

- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure.

Natural Systems Protection

- These actions include green infrastructure and low impact development, nature-based solutions, and engineering with nature to incorporate natural features or processes into the built environment.

Education and Awareness Programs

- These actions focus on ways to keep residents informed about potential risk and mitigation measures for natural disasters.

EXECUTIVE SUMMARY Cont.

Other Relevant Plans and Studies

Prior and ongoing related plans and studies which were reviewed during the planning process include (but are not limited to) the following:

- Devens Reuse Plan
- Devens Stormwater Management Plan
- Devens Forward: 2020 Climate Action & Resilience Plan
- Devens Open Space and Recreation Plan
- Town of Harvard, MA Hazard Mitigation Plan Update
- Montachusett Region Natural Hazard Mitigation Plan 2015 Update

QUICK PLAN REFERENCE GUIDE

The following provides a Quick Reference Guide to the Devens Natural Hazard Mitigation Plan Update:

STEP 1: UNDERSTAND THE PLANNING PROCESS

Section 1 - Introduction describes the purpose of having a NHMP and the Plan update, as well as lists the Hazard Mitigation Goals.

Section 2 - Planning Process describes the planning process and identifies the members of the Local Planning Team (LPT) or Working Group that participated in the Plan development. **Attachment 6** presents public meeting documentation for the two public meetings.

STEP 2: INVENTORY COMMUNITY ASSETS (COMMUNITY PROFILE)

Section 3 - Community Profile presents a brief overview of the Community assets. **Attachment 1** provides a detailed description of these assets, including the Community population, and an inventory of Essential and Lifeline Systems, High Potential Loss Facilities, Transportation Infrastructure, Community Facilities, Zoning Districts, and General Building Stock.

STEP 3: IDENTIFY NATURAL HAZARDS

Section 4 - Natural Hazard Risk identifies and summarizes the natural hazards applicable to the Community. **Attachment 2** provides a detailed description of relevant natural hazards. The hazards are characterized by past hazard events and expected probability of occurrence. Future climate-related changes to severe weather and climate-related hazards are also presented based on the current available science.

STEP 4: ASSESS NATURAL HAZARD IMPACTS AND RISK

Section 4 - Natural Hazard Risk also presents the results of an assessment of the vulnerability of the Community to natural hazards. **Attachment 3** provides a detailed hazard vulnerability assessment. FEMA HAZUS-MH simulations were performed for Hurricane (probabilistic), flood (1% and 0.2% Annual Exceedance Probability [AEP] floods), and earthquake (2% in 50 years). The simulation results are presented in **Attachment 4**.

STEP 5: MITIGATION PLAN AND IMPLEMENTATION

Sections 5, 6, and 7 present mitigation strategies and actions, regional and intercommunity considerations, and plan implementation details. **Attachment 3** provides the basis for ranking natural hazard priorities. **Attachment 5** presents state and federal hazard mitigation and response grant funding sources. References and resources, and key contacts are presented in **Attachments 7** and **8.**

UNDERSTANDING NATURAL HAZARD RISK

This Natural Hazard Mitigation Plan Update is intended to provide Devens with a risk-based approach to making planning decisions.

Risk can be assessed qualitatively or quantitatively. The evaluation of the risks associated with the Devens natural hazards required:

1) identifying the type of natural hazard(s) applicable to Devens;
2) evaluating their probability of occurrence; and
3) evaluating their consequences.

By characterizing the hazard and evaluating its probability and consequences, the likelihood that these consequences will be experienced is determined. Once the consequences are understood in this way, value and risk-based planning decisions can be made.

Quantitative Risk Assessment

Quantitative assessment of natural hazard risk typically defines hazard probability in terms of Annual Exceedance Probabilities (AEP). The AEP refers to the probability that an event (e.g., a specific flood water level) will be experienced or exceeded in any given year. For example, the 1% AEP event has a 1 in 100 chance of being met or exceeded in any given year. This probability is often described in terms of a recurrence interval. The recurrence interval is also a statistical indication of the probability of an event and can be considered as the "expected" frequency of an event, on average and over a long period of time. The 100-year recurrence interval is consistent with a 1% AEP. Estimates of AEP are typically presented as "mean" values and have uncertainty represented by lower and upper bounds.

Quantitative estimates of natural hazard probabilities, to be statistically meaningful, require long periods of record of actual historical hazard data or use of other statistical methods. Certain natural hazards such as coastal flooding and earthquakes have been defined quantitatively by the federal government (FEMA, USGS and/or the US Army Corps of Engineers), and these values have been used for this Plan. For other natural hazards (e.g., hail), this Plan has used limited historical data to extrapolate probabilities. While not statistically valid, the extrapolated estimates are useful in categorizing likelihood of occurrence (e.g., high to very low). Even though these "quantitative" values are presented in the Plan, the reader should be aware that they are not statistically meaningful due to the limited period of record of historical data.

Evaluating Consequences

This Plan Update evaluates the consequences associated with natural hazards in several different ways. The FEMA HAZUS-MH software is used to calculate losses (e.g., building damage) associated with Hurricanes (high winds), Flooding and Earthquakes. For the other natural hazards, the consequences were extrapolated from available historical data. Similar to the estimated probabilities for these hazards, this approach is not statistically valid; however, it is useful for categorizing the consequences (minor to catastrophic).

Risk Over Time

While AEPs and recurrence intervals define the annual risk (i.e., risk in any given year), the risk of experiencing that same hazard event at least once will increase when longer periods of time are considered. For example, while the 1% AEP flood has a 1 in 100 chance (1%) of occurring in any given year, it has a 1 in 4 chance (25%) of occurring at least once over a 30-year period.

Climate Change

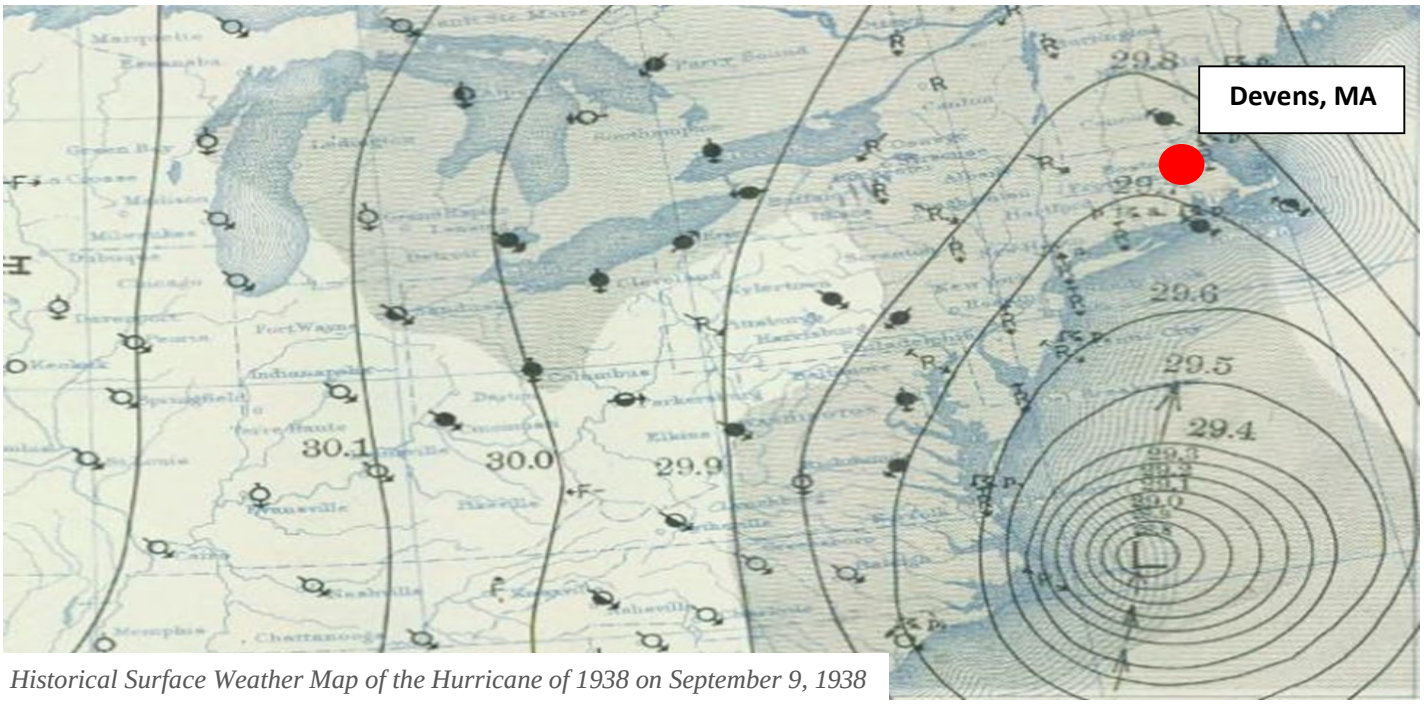
Climate change can affect the risk of severe weather and climate-related hazards. For example, a flood level that has a 1% AEP today may have a much higher probability of occurrence in the future due to climate change effects on rainfall patterns and intensities.

Low Probability is not the Same as Impossible

Even though a hazard is predicted to have a low probability of occurrence, that does not mean it cannot happen. For example, a major tornado is unlikely to occur in Devens based on the available historical data but it is possible - it is just predicted to be a low probability for planning purposes.

Section 1: Plan Introduction

SECTION 1- INTRODUCTION



Historical Surface Weather Map of the Hurricane of 1938 on September 9, 1938

PURPOSE OF PLAN UPDATE

The following presents the Natural Hazard Mitigation Plan (NHMP, Plan) 2025 Update for the Community of Devens, Massachusetts. The Community is a Regional Enterprise Zone community located within the towns of Ayer and Shirley (in Middlesex County) and Harvard (in Worcester County) in northcentral Massachusetts.

As a New England community, Devens is vulnerable to storms, intense rainfall, and extreme wind, as well as other severe weather hazards, climate-related hazards (e.g., extreme heat and cold), and geologic hazards (e.g., earthquakes). Devens has developed this NHMP Update to address the risks and vulnerabilities associated with natural disasters and to develop near- and long-term strategies for protecting people and property from future hazard events. Ultimately, the goal of the Plan Update is to enable action to reduce loss of life and property.

The development of the Plan Update enables Devens to:

- Increase education and awareness about the Community's vulnerability to natural hazards;
- Build partnerships for risk reduction involving government, organizations, businesses, and the public;
- Identify long-term, broadly-supported strategies for risk reduction;
- Align risk reduction with other state, regional, tribal, or community objectives;
- Identify implementation approaches that focus resources on the greatest risks and vulnerabilities; and
- Communicate priorities to potential sources of funding.

PLAN REQUIREMENT

In addition, FEMA requires state, tribal, and local governments to develop and adopt hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance, including funding for mitigation projects. Jurisdictions must update their hazard mitigation plans and re-submit them for FEMA approval every five years to maintain eligibility.

The Commonwealth of Massachusetts encourages local municipalities to take ownership of the multi-hazard mitigation planning process by pursuing and developing local multi-hazard mitigation plans (HMPs).

SECTION 1 - INTRODUCTION cont.

Hazard Mitigation Goals

The Community of Devens has endorsed the following goals for this NHMP Update:

1. Promote reduction or elimination of injury to or loss of life and property, loss of natural environments, loss of infrastructure, and the associated economic impacts from natural hazards.
2. Identify responsibilities, plan for, and implement hazard preparedness and response actions on a state, regional, and local level.
3. Maintain and enhance the jurisdiction's natural and man-made systems that protect against natural hazards. Continue to promote and incorporate Green Infrastructure, Low-Impact Development, and Nature-Based Solutions into redevelopment projects to facilitate resilience.
4. Implement effective hazard mitigation projects on a local and regional level.
5. Increase cooperation and coordination among private entities, local agencies, state agencies, and federal agencies.
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7. Increase public awareness of natural hazard risks and mitigation activities.
8. Improve existing local policies, plans, regulations, and practices to reduce or eliminate the impacts of natural hazards and enhance resiliency.

Section 2: Planning Process

SECTION 2 - PLANNING PROCESS

The FEMA planning process includes the following steps:

1. **Organize the Planning Process and Resources**

   At the start, focus on assembling the resources needed for a successful mitigation planning process. This includes securing technical expertise, defining the planning area, and identifying key individuals, agencies, neighboring jurisdictions, businesses, and/or other stakeholders to participate in the process. The planning process for local and tribal governments must include opportunities for the public to comment on the plan.

2. **Assess Natural Hazard Risks**

   Identify the characteristics and potential consequences of hazards. It is important to understand what geographic areas each hazard might impact and what people, property, or other assets might be vulnerable.

3. **Develop Mitigation Strategies**

   Develop long-term strategies for avoiding or minimizing the undesired effects of disasters. The mitigation strategy addresses how the mitigation actions will be implemented and administered.

4. **Adopt and Implement the Plan**

   Once FEMA has approved the plan and received the adoption from the governing body, the state, tribe, or local government can bring the mitigation plan to life in a variety of ways, ranging from implementing specific mitigation projects to changing aspects of day-to-day organizational operations. To be successful, the plan must remain a relevant, living document through routine maintenance. The state, tribe, or local government needs to conduct periodic evaluations to assess changing risks and priorities and make revisions as needed.

The Devens community followed this process, including:

- Organizing a diverse Working Group.
- Retaining GZA to provide technical and planning expertise.
- Providing opportunities for the public to comment on drafts of the plan prior to final plan approval.
- Providing opportunities for neighboring communities and local and regional agencies involved in natural hazard mitigation activities that have the authority to regulate development, as well as businesses, academia, and other private and non-profit interests to be involved in the planning process.
- Reviewing and incorporating applicable existing plans, studies, reports, and technical information into the plan.

A Working Group was assembled with critical community leadership responsibilities. The Working Group was tasked with providing oversight and guidance in developing the Plan.

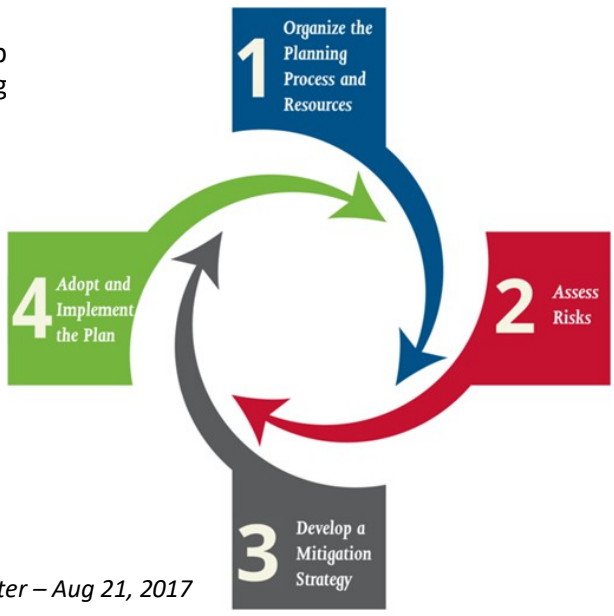


Figure credit FEMA/Jenny Burmester – Aug 21, 2017

WORKING GROUP 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 Commission (DEC) Director / Conservation Commission for Devens	Neil Angus
Associate Planner (DEC)	Beth Suedmeyer
Environmental Project Engineer	Anne Marie Dowd
Utilities Manager	Jim Moore
State & Regional Representatives	MEMA (Jeff Zukowski) Hazard Mitigation Planner and MEMA (Beth Dubrawski)

SECTION 2 - PLANNING PROCESS cont.

The Working Group conducted monthly meetings from May 2025 through February 2026 to provide input and guidance in developing the plan throughout the planning process. The purpose of each meeting is summarized below:

- Working Group Meeting No. 1: Discussed a general Project overview and discussed the Community's capabilities. Reviewed the inventory of Community assets.
- Working Group Meeting No. 2: Reviewed and discussed natural and climate change related hazard characterizations with respect to Devens. Discussed other Devens Plans relevant to the drafting of the Natural Hazard Mitigation Plan Update.
- Working Group Meeting No. 3: Reviewed the 2015 Montachusett Region Natural Hazard Mitigation Plan's mitigation goals for Devens and discussed the implementation status of each of those goals since 2015. Working Group members provided details of previous natural hazard events that have impacted Devens.
- Working Group Meeting No. 4: Presented a draft list of new goals and mitigation actions to be included in the Plan Update, including listing the priorities, costs, and responsible agencies for each action. Working Group provided feedback during the meeting and after the meeting via email.
- Working Group Meeting No. 5: Reviewed the revised mitigation actions for the Plan Update. Discussed preparation measures for the first Public Meeting as well as tentative dates for a second Public Meeting.
- Working Group Meeting No. 6: Discussed the Working Group's comments on the draft Plan Update. Revisions were made to the draft per this discussion and a final draft of the Plan Update with attachments was completed. Discussed preparation measures for the second Public Meeting.

Devens conducted two public meetings that provided residents, community stakeholders, businesses, non-profit organizations, community groups, and community officials (including the Working Group members) with the opportunity to participate during the planning process. Stakeholders in Devens include but are not limited to governmental bodies, residents, local businesses and non-profits, and the surrounding towns. The purpose of these meetings was to solicit input during the planning process for consideration and integration into the development of the Plan. The meetings were held at the Vicksburg Conference Room during the Devens Committee meetings and were publicized on the Devens Committee website and through social media.

At the first public meeting on December 3, 2025, a presentation was given to provide background on Hazard Mitigation Planning and to describe the assets inventory of Devens, hazards characterization, and preliminary risk assessment. At the second public meeting on May 6, 2026, a presentation was given to provide the final risk assessment results and the Community's revised Mitigation Strategy that included updated goals and actions. The Draft Plan was publicized prior to the second public meeting to give the public the opportunity to review the plan during the drafting stage. The presentation materials for both public meetings are included in **Attachment 6**.

SECTION 2 - PLANNING PROCESS cont.

EXISTING PLAN REVIEW

Several existing plans, reports, and regulatory programs were reviewed by GZA, and relevant details were incorporated as part of this Natural Hazard Mitigation Plan Update, including:

- 2023 ResilientMass Plan (Massachusetts State Hazard Mitigation and Climate Adaptation Plan)
- Devens Bylaws
- Devens Enterprise Commission Rules and Regulations
- Devens Forward: 2020 Climate Action & Resilience Plan
- Devens Open Space and Recreation Plan (2008 – 2013)
- Devens Reuse Plan (1994)
- Devens Stormwater Management Plan (Updated June 2022)
- Devens Water Resource Protection Map
- Devens Zoning Map
- Federal Emergency Management Agency (FEMA), Local Mitigation Plan Review Guide, October 2011
- FEMA, Flood Insurance Rate Map (Panel 0311, Map Number 25027C0311F), effective July 8, 2025
- FEMA, Hazard Mitigation Assistance Guidance, February 2015
- FEMA, Hazus Earthquake Model Technical Manual, October 2020
- FEMA, Hazus Flood Technical Manual, July 2022
- FEMA, Hazus Hurricane Model Technical Manual, July 2022
- FEMA, Local Mitigation Planning Handbook, June 2025
- FEMA, Local Mitigation Planning Policy Guide, April 11, 2025
- FEMA, National Flood Insurance Program Flood Insurance Manual, April 2024
- FEMA, The National Risk Index, accessed 8/5/2025
- Massachusetts 10th Edition October 11, 2024 State Building Code
- Montachusett Region Natural Hazard Mitigation Plan 2015 Update
- National Oceanic and Atmospheric Administration (NOAA), NOAA Storm Events Database
- Sustainable Devens Webpage
- Town of Harvard, MA Hazard Mitigation Plan Update (July 2022)
- U.S. Census. 2020

Section 3: Community Profile

SECTION 3 - COMMUNITY PROFILE OVERVIEW

Location: Devens is a Regional Enterprise Zone community located within the towns of Ayer and Shirley (in Middlesex County) and Harvard (in Worcester County) in northcentral Massachusetts as shown in **Figure 1-1**. The Community is bordered by Shirley to the north, Ayer to the east, Lancaster to the west, and Harvard to the south.

Characteristics: Devens is a master-planned community that was previously Fort Devens, which served as the U.S. Army's New England Headquarters for 79 years before closing in 1996. After the closing of the Fort, the property was conveyed to Mass Development, an economic development and real estate agency tasked with stimulating economic investment across Massachusetts. Devens has become a model for military base reuse, and now hosts residential areas, commercial and industrial facilities, recreational land, and over 2.6 square miles of open space. The total area of Devens is about 6.87 square miles, with approximately 6.78 square miles of land and 0.09 square miles of water.

The Devens Enterprise Commission is the unified permitting agency for Devens and fulfills the role of planning, zoning, historic preservation, health department, and conservation commission. MassDevelopment also shares multiple roles, and both entities interact to oversee the operations and management of Devens, in collaboration with the U.S. Army, the Federal Medical Center (federal prison), and U.S. Fish and Wildlife Service (USFWS).

Devens Reuse Plan: The Devens Reuse Plan is a 1994 document that outlines the goals and proposed future uses for transitioning from a former military base to civilian uses, with focuses on economic development and environmental protection. The overall goal established for the plan is as follows: “The Devens reuse challenge demands a visionary planning effort grounded in environmental, social, and economic reality. It must be realistic, pragmatic, market-driven, flexible and future-oriented.” The Reuse Plan focuses on sustainable development, creating a diversity of land uses, and maintaining a balance of meeting local, regional, and state interests. As a master-planned community, development and re-development was planned to avoid impacts to areas of important natural resources and floodplains, and such areas were designated as protected open space. This approach reduces the impacts to infrastructure that may result when development encroaches on waterways, wetlands, and floodplains.

Open Space: More than 2.6 square miles of Devens is Open Space, accounting for approximately one-third of the Community area. This includes wetlands, floodplains, and other protected land part of the regional Nashua River Valley. Natural resources in these open space areas include Mirror Lake, Little Mirror Lake, Robbins Pond, Black Spruce Bog, The Eskers ridge land formations, the Nashua River, Grove Pond, Cold Spring brook, Willow Brook, and the Oxbow National Wildlife Refuge.

The Community is governed by the Devens Enterprise Commission (DEC). Devens is also part of the Montachusett Regional Planning Commission (MRPC). The MRPC was created in 1968 under MGL Chapter 40B, Sections 1-8. Per the statute, the MRPC is a Regional ‘planning district’ and a ‘public body corporate’.

Attachment 1 provides a detailed description of the Community’s profile including population, land use, essential facilities, lifeline systems, support, high occupancy and vulnerable populations, historic properties, and natural resources. This data is sourced from the US Census, and an alternate compilation of demographic and economic data updated to 2025 is available from the Devens Business Profile and Economic Contribution Analysis Report (https://www.devensec.com/meetings/Devens_Economic_Profile_and_Analysis_Report_FINAL_2025.pdf).

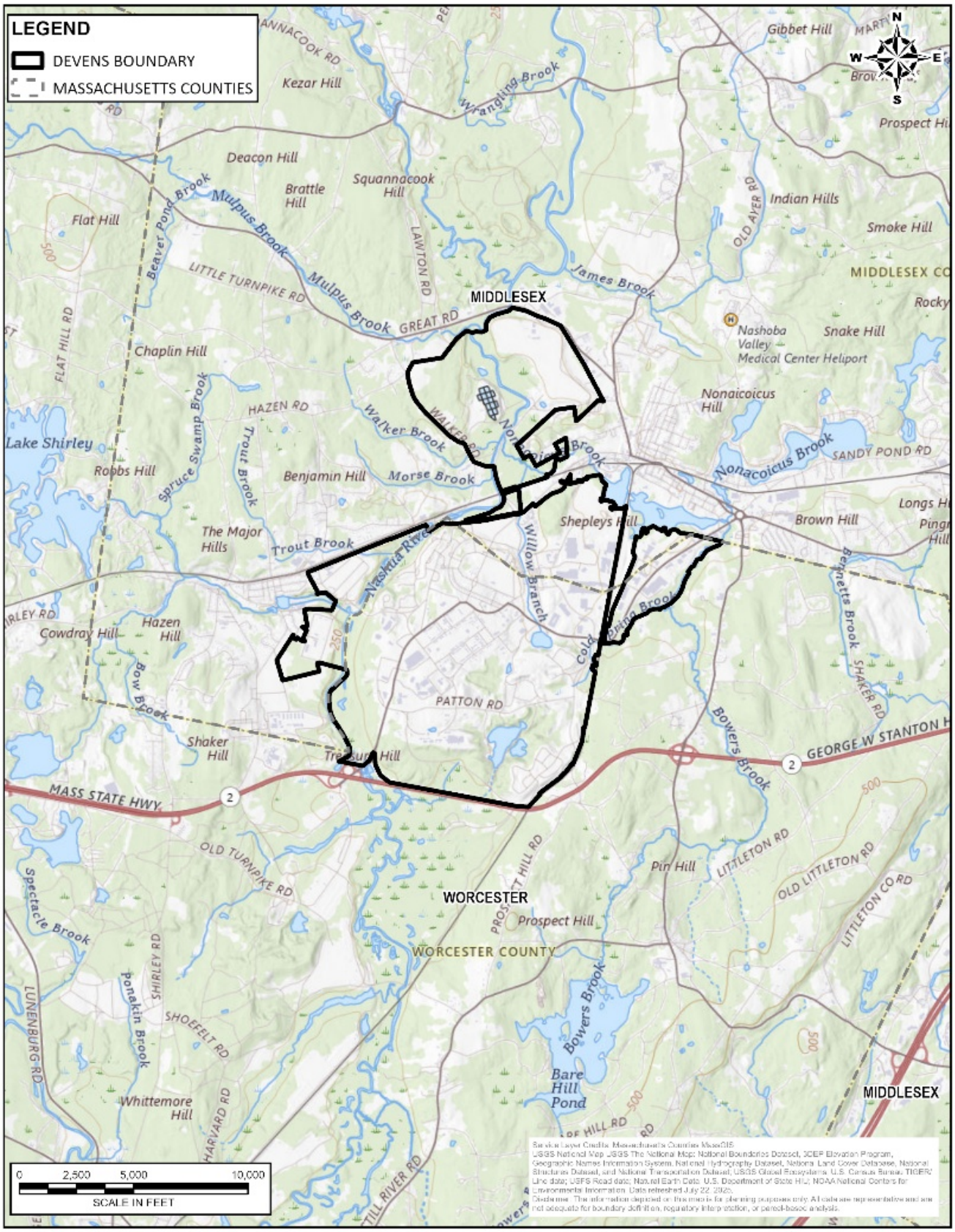


Figure 1-1: Devens Site Locus & Community Limits

Section 4: Natural Hazard Risk

SECTION 4 - NATURAL HAZARD RISK OVERVIEW

A Natural Hazard Risk Assessment was conducted by GZA to evaluate the potential consequences of natural hazards to the people, economy, and built and natural environments of the community of Devens. The FEMA Multi-Hazard HAZUS-MH program was used to evaluate economic losses due to seismic, flood and hurricane hazards. This software utilizes data on occupied buildings. The HAZUS-MH simulation results are presented in **Attachment 4**. The FEMA National Risk Index[1] was used to score the relevant natural hazards based on the expected annual losses for each hazard, as well as the community resilience and social vulnerability for each community (see **Table 1**). The details of the risk assessment and how the hazards were ranked are presented in **Attachment 2** and **Attachment 3**. The top ranked hazards include:

- Riverine/ Inland Flooding

  Riverine and other inland flooding is a top ranked hazard due to high economic loss associated with damages to buildings within the floodplain and impacts to transportation infrastructure. Although the 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. The Community has noted that local intense precipitation events have been occurring more frequently.

- Winter Weather

  Severe winter weather most frequently occurs during nor'easters, coincident with high winds, cold temperatures, and/or blizzard conditions. Winter weather presents risks due to transportation impacts (limited use of roadways), cold temperatures, and the potential for structural damage (roof failures). Snowfall and ice accumulation can lead to downed trees or tree branches that can cause power outages or property damage. Although the risk index score for winter weather is relatively low, it is included as a top hazard due to NHMP Working Group feedback and experience.

- Hurricane

  Hurricane is ranked highly due to its severe wind coincidence with riverine flooding and its potential for widespread damage. A hurricane strike at or near Devens with a 1% probability of occurrence (100-year recurrence interval) would be catastrophic (similar to the 1938 and 1954 hurricanes). In addition to high winds, hurricanes will also create heavy rainfall.

- Drought/Wildfire

  Drought and wildfire are ranked highly due to potential severity associated with an occurrence. Drought and Wildfire both have high risk index scores according to the FEMA National Risk Index. Although there is a relatively low probability of wildfire near Devens, there is an added risk due to firefighting access associated with potential Unexploded Ordnances (UXOs) in certain locations.

[1] https://hazards.fema.gov/nri/

SECTION 4 - NATURAL HAZARD RISK OVERVIEW CONT.

Table 1: Devens Natural Hazard Ranking (based on the hazard frequency of occurrence, severity, and extent of impact area)

Natural Hazards	Risk Index Score	Risk Index Rating(FEMA National Risk Index)
Cold Wave	57.9	Relatively Low
Drought	96.6	Relatively Moderate
Earthquake	72.0	Relatively Low
Hail	24.3	Very Low
Heat Wave	38.5	Relatively Low
Hurricane	81.7	Relatively Moderate
Ice Storms	63.8	Relatively Low
Landslides	65.1	Relatively Low
Lightning	68.3	Relatively Moderate
Riverine Flooding	80.3	Relatively Moderate
Strong Wind	19.3	Very Low
Tornado	42.1	Relatively Low
Wildfire	87.3	Relatively Moderate
Winter Weather	34.7	Relatively Low

Table 2 presents a summary of the predicted likelihood of occurrence/frequency (probability), severity/magnitude and impact area for each natural hazard that is relevant to Devens. The hazard probability of occurrence (frequency)[2] is characterized as:

Frequency:

- **Very Low:** Events that occur less frequently than once in 1,000 years (less than 0.1% per year).
- **Low:** Events that occur from once in 100 years to once in 1,000 years (0.1% to 1% per year).
- **Medium:** Events that occur from once in 10 years to once in 100 years (1% to 10% per year).
- **High:** Events that occur more frequently than once in 10 years (greater than 10% per year).

The hazard impact in part is characterized as follows:

Severity:

- **Minor:** Limited and scattered property damage; no damage to public infrastructure (roads, bridges, trains, airports, public parks, etc.); contained geographic area (i.e., 1 or 2 communities); essential services (utilities, hospitals, schools, etc.) not interrupted; no injuries or fatalities.
- **Serious:** Scattered major property damage (more than 50% destroyed); some minor infrastructure damage; wider geographic area (several communities); essential services are briefly interrupted; some injuries and/or fatalities.
- **Extensive:** Consistent major property damage; major damage to public infrastructure (up to several days for repairs); essential services are interrupted from several hours to several days; many injuries and fatalities.
- **Catastrophic:** Property and public infrastructure destroyed; essential services stopped; thousands of injuries and fatalities.

[2] The probability of a specific natural hazard occurring is typically defined in terms of its annual exceedance probability (AEP). This refers to the probability that a hazard condition will be met or exceeded in any given year. In lieu of the AEP, the term recurrence interval (in years) is often used.

SECTION 4 - NATURAL HAZARD RISK OVERVIEW CONT.

Table 2: Community of Devens Natural Hazard Overview

Natural Hazard	Likelihood/ Frequency	Severity/Magnitude	Impact Area
Severe Weather Hazards			
Strong Wind	Strong Wind within Middlesex County: 0.9 events per year (31 events over 34 years)	Minor to Extensive	Community-wide
Hurricane	Hurricanes within Middlesex County: 0.2 events per year (13 events over 73 years)	Serious to Catastrophic	Community-wide
Tornado	Tornadoes within Middlesex County: 0.01 events per year (1 events over 72 years)	Serious to Catastrophic	Community-wide
Lightning	Lightning within Middlesex County: 12.1 events per year (268 events over 30 years)	Minor (fatality risk is very low)	Community-wide
Hail (≥ 3/4 inch)	Hail within Middlesex County: 2.5 events per year (86 events over 35 years)	Minor to Serious	Community-wide
Riverine Flooding	Riverine Flooding within Middlesex County: 4.1 events per year (98 events over 34 years)	Serious to Extensive	Portions of Devens

Community impacts due to riverine flooding:

- Based on the results of the HAZUS simulation, one building is predicted to be impacted during to the 1% AEP flood.
- Based on the results of the HAZUS simulation, two buildings are predicted to be impacted during to the 0.2% AEP flood.
- No Lifeline Systems are predicted to be impacted during the 1% or 0.2% AEP floods.
- Twelve (12) Roads impacted. Large sections of MacPherson Road during 1% AEP (>100-year recurrence interval) flood.

SECTION 4 - NATURAL HAZARD RISK OVERVIEW CONT.

Table 2: Community of Devens Natural Hazard Overview (Cont.)

Natural Hazard	Likelihood/ Frequency	Severity/Magnitude	Impact Area
Severe Winter Weather			
Winter Weather	Winter Weather within Middlesex County: 6.8 events per year (112 events over 16 years)	Serious	Community-wide
Ice Storm	Ice Storms within Middlesex County: 2.8 events per year (191 events over 65 years)	Serious	Community-wide

Community snowfall estimates (upper bound monthly snowfall estimates)*:

- 8 to 10 snow days per year
- Average annual snowfall of 72 inches
- 16 years with 1 or more events over 16-year record
- Reasonable estimate of average monthly snowfall: 13 to 19 inches
- Reasonably conservative monthly snowfall upper bound: 51 inches (maximum monthly upper bound of 60 inches)

* Used data from the Ashburnham, MA National Weather Service (NWS) local forecast office which is the nearest office to Devens with relevant historical data.

SECTION 4 - NATURAL HAZARD RISK OVERVIEW CONT.

Table 2: Community of Devens Natural Hazard Overview (Cont.)

Natural Hazard	Likelihood/ Frequency	Severity/Magnitude	Impact Area
Climate Related Hazards			
Heat Wave	Heat Wave within Middlesex County: 0.4 events per year (7 events over 16 years)	Minor to Serious (vulnerable populations)	Community-wide
Cold Wave	Cold Wave within Middlesex County: 0.6 events per year (9 events over 16 years)	Minor to Serious (vulnerable populations)	Community-wide
Drought	Drought within Middlesex County: 5.7 events per year (126 events over 22 years)	Minor	Community-wide
Wildfire	The estimated probability of wildfire near Devens is 0.023% per year	Minor	26% of area is forest

Devens climate considerations:

Periods of colder temperatures occur at Devens and can cause wind chill conditions. Wind chill conditions example:

- 0˚F and 25 mph sustained wind speeds, 30-minute exposure
- 5˚F and 55 mph sustained wind speeds, 30-minute exposure

The severity and magnitude of extreme heat events at Devens is, in part, dependent upon: 1) demographics; and 2) the capability of residents to get cool (e.g. air conditioners in homes). Devens' demographic data indicates that up to 13% of the population may be at a greater than average vulnerability as outlined below.

- 12.9% of Devens' population is older than 65 years
- 9.6% of Devens' population is at the poverty level

SECTION 4 - NATURAL HAZARD RISK OVERVIEW CONT.

Table 2: Community of Devens Natural Hazard Overview (Cont.)

Natural Hazard	Likelihood/ Frequency	Severity/Magnitude	Impact Area
Geologic Hazards			
Earthquake	2% in 50 years PGA[1] (2,500-year recurrence interval; Maximum Considered Earthquake) in the vicinity of Devens is 0.14g[2]	Serious	Community-wide
	10% in 50 years PGA (500-year recurrence interval) in the vicinity of Devens is 0.04g	Minor	Community-wide
Landslide	No historical landslide conditions exist within Middlesex County: 0 events per year (0 events over 12 years)	Minor	Portions of Devens

[1] Peak Ground Acceleration

[2] Acceleration due to gravity

About earthquakes in Devens:

- The direct earthquake risk to Devens is due to the ground motion that results during the earthquake. The Seismic Design Category for the majority of Devens is A or B, indicating a low seismic hazard. The 10% in 50 years (500-year recurrence interval) ground motion would be experienced as light to moderate perceived shaking and none to very light damage. The 2% in 50 years (2,500-year recurrence interval) ground motion would be experienced as very strong perceived shaking and moderate damage. The estimated probability of an earthquake near Devens is 0.083% per year.

Section 5: Natural Hazard Mitigation Strategies

SECTION 5 - NATURAL HAZARD MITIGATION STRATEGIES

The Devens NHMP Working Group prepared an updated mitigation strategy to reduce the potential losses identified in the risk assessment (see **Section 4** and **Attachment 3**) based on the Community's existing mitigation capabilities and ability to improve these capabilities in the future. This updated strategy serves as a roadmap for the next 5 years that builds upon the natural hazard mitigation related work carried out since the 2015 Montachusett Regional Natural Hazard Mitigation Plan Update. This strategy includes the following four elements as per 44 Code of Federal Regulations (CFR) part 201.6: Hazard Risk Mitigation Goals, Hazard Mitigation Implementation and Progress, Existing Hazard Mitigation Capabilities, and Hazard Risk Mitigation Measures/Actions.

It is important to note that most of the new measures and actions outlined in this NHMP Update focus on the highest ranked hazards due to the potential impact these hazards may have on the Community.

Participation in the National Flood Insurance Program

The U.S. Congress established the National Flood Insurance Program (NFIP) in 1968, with the passage of the National Flood Insurance Act of 1968. The State of Massachusetts, through its local communities, complies with the NFIP in part by enforcing the Wetlands Protection Act (WPA), which helps restrict development in flood-prone areas, and by enforcing the State Building Code, which regulates building specifications and additional related zoning bylaws, such as a floodplain overlay district. Devens complies with the NFIP by enforcing these regulations on a local level. According to the Massachusetts Emergency Management Agency (MEMA), the Community of Devens does not have a Community Identification Number (CID) with FEMA therefore FEMA's data is not listed as being within Devens limits explicitly, as Devens is a Regional Enterprise Zone community located within the towns of Ayer, Shirley, and Harvard. More information about Devens in relation to NFIP policies is provided in **Attachment 3**.

1. HAZARD RISK MITIGATION GOALS

The Devens NHMP Working Group met on May 20, 2025, to review proposed hazard mitigation goals. In consideration of the 2015 Montachusett Regional Natural Hazard Mitigation Plan Update, FEMA HMP goal recommendations, and feedback provided by the Working Group members, the Working Group endorsed the following goals for this Plan Update:

Mitigation Goals

1. Promote reduction or elimination of injury to or loss of life and property, loss of natural environments, loss of infrastructure, and the associated economic impacts from natural hazards.
2. Identify responsibilities, plan for, and implement hazard preparedness and response actions on a state, regional, and local level.
3. Maintain and enhance the jurisdiction's natural and man-made systems that protect against natural hazards. Continue to promote and incorporate Green Infrastructure, Low-Impact Development, and Nature-Based Solutions into redevelopment projects to facilitate resilience.
4. Implement effective hazard mitigation projects on a local and regional level.
5. Increase cooperation and coordination among private entities, local agencies, state agencies, and federal agencies.
6. Develop and implement resilience strategies for community resources including business, residential, natural, historic and cultural, social, and transportation and infrastructure, on a state, regional, and local level.
7. Increase public awareness of natural hazard risks and mitigation activities.
8. Improve existing local policies, plans, regulations, and practices to reduce or eliminate the impacts of natural hazards and enhance resiliency.

SECTION 5 - NATURAL HAZARD MITIGATION STRATEGIES CONT.

2. HAZARD MITIGATION IMPLEMENTATION AND PROGRESS

The Devens NHMP Working Group met on September 16, 2025, to document the progress made based on the actions outlined in the 2015 Regional NHMP Update.

Table 4 below shows the implementation of and progress on mitigation action items since the 2015 Regional NHMP Update. It is important to note that many of the following mitigation action items continue to be ongoing activities which are included as existing capabilities and as mitigation actions in **Table 5** of this NHMP Update.

Mitigation Capabilities

The Community of Devens, Massachusetts is different from the other jurisdictions in the Montachusett Region in that it is an unincorporated village and census-designated place within the towns of Ayer, Shirley and Harvard. Therefore, the Hazard Mitigation Plans for each of these three communities may have elements that are applicable to Devens, including their existing protections matrices. In addition, separate from the 2015 Hazard Mitigation Plans developed for the 22 Montachusett Region municipalities, Devens has prepared its own Comprehensive Emergency Management Plan (CEMP). The CEMP provides a framework wherein the Community can plan and perform their respective emergency functions during a disaster or emergency situation on the local, state or national level. The CEMP addresses Mitigation, Preparedness, Response, and Recovery aspects of emergency management organizations, programs, protective actions, and specific hazards:

1. Mitigation: Those activities which eliminate or reduce the probability of disaster;
2. Preparedness: Those activities which governments, organizations, and individuals develop to save lives and minimize damage;
3. Response: Those activities which prevent loss of lives and property and provide emergency assistance; and
4. Recovery: Short and long term activities which return all systems to normal or improved standards.

The Devens CEMP is written in accordance with existing federal, state, and local statutes. The CEMP outlines an emergency management program for planning and response to potential emergency or disaster situations. It assigns responsibilities and functions, which will provide for the safety and welfare of citizens against the threat of natural, technological, and national security emergencies and disasters.

3. PRIORITIZATION

Based on an evaluation of the results of the benefit/cost review, the Working Group prioritized each mitigation action and strategy using the following qualitative rating system of high, medium and low.

High Priority: An action that has benefits that exceed cost, has funding secured or is an ongoing project. High priority actions can be completed in the short-term or mid-term (1 to 5 years) or are projects that are long-term projects that can be initiated in the short-term and will have large positive impacts once completed.

Medium Priority: An action that has benefits that exceed costs, and for which funding has not yet been secured, but is eligible for funding. Actions can be completed in the short- or mid-term, once funding is secured, or are projects that are long-term projects that can be initiated in the short-term and will have large positive impacts once completed.

Low Priority: An action that will mitigate the risk of a hazard that has benefits that do not exceed the costs or are difficult to quantify, for which funding has not been secured, that is not eligible for grant funding, and for which the timeline for completion is long-term or uncertain. Low priority actions may be eligible for grant funding from other programs that have not yet been identified. Financing is unknown, and they can be completed over the long term.

The Working Group prioritized the mitigation actions based on the results of the benefit/cost review of the proposed actions presented in **Table 5**. In addition, **Table 5** provides details on the agencies responsible for leading/coordinating the implementation of each action and potential funding sources. **Table 5-1** on the following page lists the acronyms used in **Table 5**.

SECTION 5 - NATURAL HAZARD MITIGATION STRATEGIES CONT.

CODES FOR TABLE 5

BUILD	Better Utilizing Investments to Leverage Development
CEMP	Comprehensive Emergency Management Plan
CSCI	Climate Smart Communities Initiative
DEC	Devens Enterprise Commission
DOT	Department of Transportation
DU	Ducks Unlimited
DPW	Department of Public Works
ECO	Environmental and Climate One Stop
EEA	Executive Office of Energy and Environmental Affairs
EMPG	Emergency Management Performance Grant
FEMA	Federal Emergency Management Agency
HMGP	Hazard Mitigation Grant Program
MD	MassDevelopment
MEMA	Massachusetts Emergency Management Agency (MEMA)
MET	Massachusetts Environmental Trust
NFWF	National Fish & Wildlife Foundation
RDCF	Rural Development Community Facilities
TU	Trout Unlimited
UCF	US Forest Service Urban and Community Forestry
USDA	US Department of Agriculture
VFAP	Volunteer Fire Assistance Program

Table 5-1

Description of Action	Completed or Ongoing?	Include in 2026 Plan?
ALL NATURAL HAZARDS		
Work with Neighboring Communities to Establish a Community Emergency Response Team (CERT) to more effectively respond to all natural hazards thus mitigating any damage.	Completed	No
Inventory Supplies at Existing Shelters and Develop a Needs List and Storage Requirements to ensure the availability of adequate supplies during a natural hazard. Supplies must be adequate to eliminate or reduce risk to human life.	Ongoing	Yes
Identify shelters and publicize locations to the public to reduce or eliminate long term risk to human life.	Completed	Yes
Utilize interactive mapping application prepared by MRPC/CMRPC to update critical infrastructure and simulate real time evacuation scenarios to mitigate hazards to the public.	Completed	No
Increase hazard education and risk awareness to public by purchasing and distributing educational materials at public facilities.	Ongoing	Yes
Implement recommendations regarding natural hazard mitigation in existing planning documents including the emergency evacuation plan.	Ongoing	Yes
FLOOD RELATED AND GEOLOGIC HAZARDS		
Identify Existing Shelters that are Earthquake Resistant as well as Outside of Floodplain (and Dam Inundation) Areas to ensure that shelters are available to the public during these types of hazards. Shelters must be identified and adequate to eliminate or reduce risk to human life.	Completed	No
Update flood mapping to identify structures in flood plain.	Completed	No
Prepare a Priority List and possibly seek funding through the Hazard Mitigation Program for the Replacement of Undersized Culverts throughout the town to reduce or eliminate flooding risk.	Ongoing	Yes
Continue participation in the National Flood Insurance Program.	Ongoing	Yes
Evaluate and relocate furnaces, water heaters, and electrical equipment in municipal owned buildings that are located in areas prone to flooding to reduce flood damage.	Completed	No
Install "beaver diverters" and water control devices to mitigate flooding caused by beaver dams.	Completed	Yes
Hire trapper for removal of beavers to mitigate flooding caused by beaver dams.	Completed	No
OTHER NATURAL HAZARDS (WILDLAND FIRE / ATMOSPHERIC AND WINTER RELATED HAZARDS)		
Increase awareness by educating property owners regarding actions that they can take to reduce risk to property by hosting an Open House at the Fire Department, developing and distributing an Educational Pamphlet on Fire Safety and Prevention (SAFE PROGRAM) (SENIOR SAFE) and wildfire prevention.	Ongoing	Yes
Develop a Mitigation Plan to provide access to Water, Information, Shelter and Food Stores to People in Remote Locations of the community in the Event of a Severe natural hazard. Integrate this information into community comprehensive plans.	Ongoing	Yes
Enforce state building codes related to design loads to include wind effects generated from atmospheric related hazards.	Completed	No
Identify areas with potential for brush fires to track community vulnerability by developing and maintaining a database. Clear brush to provide access for emergency services. Regularly inspect and cut branches threatening power lines and overhead utilities.	Ongoing	Yes

Table 4: Implementation and Progress

MITIGATION ACTIONS	Benefits	Costs	Priority	Timeline	Responsible Agencies	Potential Funding Sources	Hazard Type
LOCAL PLANNING AND REGULATIONS							
1) Adopt and Implement the Hazard Mitigation Plan following approval by FEMA, with formal adoption by the Devens Enterprise Commission (DEC) and the MassDevelopment Board of Directors.	High	Low	High	1 year	DEC and MD	DEC and MD	General Multiple Hazards
2) Establish a Hazard Mitigation Implementation Committee (comprised of DEC, municipal staff, Mass Development, regional/state partners, and the public) to oversee ongoing mitigation efforts and track progress.	High	Low	High	1 year	DEC and MD	DEC and MD	General Multiple Hazards
3) Integrate Hazard Mitigation Goals into local policies and programs, including zoning, development review, and infrastructure planning.	Medium	Low	Medium	1 – 5 years	DEC and MD	DEC and MD	General Multiple Hazards
4) Increase the capacity of local Emergency Managers, DPWs, and Fire, Police and Health Departments to plan for and mitigate natural hazards.	High	Low	High	1 – 5 years	DEC as local Health Dept. partnering with Nashoba Associated Boards of Health	FEMA Emergency Management Performance Grant (EMPG), ECO One Stop	General Multiple Hazards
5) Improve the quality of data for the community as it pertains to natural hazards.	High	Low to Medium	High	Ongoing	MD	Climate Smart Communities Initiative (CSCI), ECO One Stop	General Multiple Hazards
6) Develop strategies for tree planting for climate resilience, providing wind breaks and reducing heat island impacts.	Medium	Low to Medium	Medium	1 – 5 years	DEC and MD	ECO One Stop, UCF, MassWildlife, DCR, NRCS, USFW, EEA Urban and Community Forestry Challenge Grants (UCF)	General Multiple Hazards
7) Enhance severe storm resilience by maintaining protocols for tree trimming, promoting utility maintenance, and public alert systems.	Medium	Low	Medium	Ongoing	MD	EMPG, MD	General Multiple Hazards
8) Coordinate regional emergency responses with Ayer, Shirley, Harvard, and other surrounding communities to test readiness for severe storms, flooding, and other natural hazards.	High	Low	High	1 – 5 years	MD	EMPG, ECO One Stop, CSCI	General Multiple Hazards

Table 5: Mitigation Actions

MITIGATION ACTIONS	Benefits	Costs	Priority	Timeline	Responsible Agencies	Potential Funding Sources	Hazard Type
9) Coordinate with local businesses to provide shelter/short-term refuge in the event of serious emergency or power outage.	High	Low	Medium	1 – 5 years	MD	EMPG, CSCI	General Multiple Hazards
10) Continue to implement standards in the Subdivision Rules and Regulations under 974 CMR 2.00 to require temporary and permanent erosion control measures for streams and surface water bodies.	Medium	Low	Medium	Ongoing	DEC	DEC, ECO One Stop	General Multiple Hazards
11) Review and update the Devens Comprehensive Emergency Management Plan (CEMP) to meet the most recent MEMA format and address evolving hazards, vulnerabilities, and community growth.	High	Low to Medium	High	1 – 5 years	MD	ECO One Stop	General Multiple Hazards
12) Review and update, as needed, the Devens Climate Action & Resilience Plan.	High	Medium	High	1 – 5 years	DEC	ECO One Stop, CSCI	General Multiple Hazards
13) Review and update, as needed, the Devens Climate Change and Natural Hazard Municipal Vulnerability Preparedness Plan.	High	Medium	High	1 – 5 years	DEC, MD	ECO One Stop, CSCI	General Multiple Hazards
14) Review and update, as needed, the Devens Stormwater Management Plan.	Medium	Medium	Medium	1 – 5 years	DEC, MD	ECO One Stop, CSCI	General Multiple Hazards
15) Review and update, as needed, the Devens Open Space and Recreation Plan.	Low	Medium	Low	1 – 5 years	MD, DEC, Surrounding Towns	ECO One Stop, CSCI	General Multiple Hazards
16) Review and update, as needed, the Devens Stormwater Pollution Prevention Plan.	Medium	Medium	Medium	1 – 5 years	MD, DEC	ECO One Stop, CSCI	General Multiple Hazards
17) Review and update, as needed, the Devens Water Resources Protection Report.	Medium	Medium	Medium	1 – 5 years	MD, DEC	CSCI	General Multiple Hazards
18) Review and update, as needed, the Devens Green Infrastructure Guidelines for Devens Projects.	Medium	Low to Medium	Medium	1 – 5 years	DEC	ECO One Stop, CSCI	General Multiple Hazards
19) Enhance and promote sustainability and resiliency planning efforts.	Medium	Low	Medium	Ongoing	DEC and MD	ECO One Stop, CSCI	General Multiple Hazards
20) Continue enforcement of the floodplain development standards under 974 CMR 4.08 to regulate and control development within mapped floodplains.	High	Low	High	Ongoing	DEC	DEC	Flood Hazards
21) As Devens geographically consists of the towns of Ayer, Shirley and Harvard, continue to support the continued participation of those towns in the NFIP through compliance with floodplain management requirements,	High	Low	High	1 – 5 years	DEC and MD	DEC and MD	Flood Hazards

Table 5 Cont.: Mitigation Actions

MITIGATION ACTIONS	Benefits	Costs	Priority	Timeline	Responsible Agencies	Potential Funding Sources	Hazard Type
including map updates, enforcement, and recordkeeping.							
22) Continue to implement Wetlands Protection and Stormwater Management Regulations under 974 CMR Sections 3.04, 4.06, and 4.08 to minimize flood risk and manage runoff.	High	Low	High	Ongoing	DEC	Section 319, NFWF Five Star Program, MassWildlife Habitat Management Grant Program, Ducks Unlimited (DU)	Flood Hazards
23) Continue to promote enforcement of design and performance standards under 974 CMR 3.00 and 4.00 and adherence to the *Green Infrastructure Guidelines for Devens Projects* to preserve open space and allow for natural infiltration and stormwater absorption.	High	Low	High	Ongoing	DEC	ECO One Stop	Flood Hazards
24) Continue to implement heavy rain and snow melt flood preparedness measures, including monitoring of drainage systems and high-risk flood areas, per DEC and MassDevelopment requirements.	High	Low	High	Ongoing	DEC and MD	CSCI, ECO One Stop	Flood Hazards
25) Develop a plan for providing access to water, information, shelter, and food stores to people in remote locations in the Devens Community in the event of a severe winter storm.	Medium	Low to Medium	Medium	1 – 5 years	MD	CSCI, ECO One Stop, MD	Climate Related Hazards: Severe Weather
STRUCTURE AND INFRASTRUCTURE PROJECTS							
26) Maintain cutting edge sustainable design standards for structure and infrastructure projects with a focus on nature-based solutions where feasible.	Medium	Low to Medium	Low	Ongoing	DEC and MD	ECO One Stop, DEC, MD	General Multiple Hazards
27) Maintain and upgrade stormwater infrastructure through regular catch basin cleaning, storm drain/culvert maintenance, and targeted system improvements.	High	Medium	High	Ongoing	DEC and MD	ECO One Stop, DEC, MD	General Multiple Hazards
28) Conduct culvert cleaning and treatment through the Massachusetts Mosquito Program.	High	Medium	High	Ongoing	DEC and MD	DEC and MD	General Multiple Hazards
29) Assess and replace undersized culverts, including the two on Patten Road. Culvert assessments should include wildlife and stream connectivity.	High	Medium to High	Medium	1 – 5 years	MD	MD, ECO One Stop	General Multiple Hazards
30) Proactively identify strategies for management of beavers, including regular beaver management practices to prevent	Medium	Medium	Medium	1 – 5 years	DEC and MD	ECO One Stop, CSCI, MD	General Multiple Hazards

Table 5 Cont.: Mitigation Actions

MITIGATION ACTIONS	Benefits	Costs	Priority	Timeline	Responsible Agencies	Potential Funding Sources	Hazard Type
flooding of roadways, culverts, and water bodies.							
31) Identify and evaluate structures that can be Public Shelters in the case of natural disasters and/or emergencies.	High	Medium	High	1 – 5 years	MD	CSCI, USDA Rural Development Community Facilities Direct Loan & Grant Program (RDCF)	General Multiple Hazards
32) Ensure that all identified shelters have sufficient facilities and back-up utility service in the event of primary power failure.	High	Medium to High	Medium	1 – 5 years	MD	CSCI, HMGP	General Multiple Hazards
33) Install permanent generators for emergency power when required for schools and emergency shelters, or to enable hook-ups with currently available generators. Consider generator power sources such as renewables and storage where feasible as opposed to natural gas or diesel.	High	High to Very High	Medium	1 – 10 years	MD	HMGP	General Multiple Hazards
34) Investigate, design and implement structural projects that will reduce and minimize the risk of flooding.	High	High to Very High	Medium	1 – 10 years	MD	ECO One Stop, CSCI, HMGP, DOT Better Utilizing Investments to Leverage Development (BUILD)	Flood Hazards
35) Prioritize Green Infrastructure projects in redevelopment areas to manage stormwater and reduce flood risks.	Medium	Medium	Medium	Ongoing	DEC and MD	ECO One Stop, Section 319, Five Star	Flood Hazards
NATURAL SYSTEMS PROTECTION							
36) Expand environmental protection measures to preserve natural wetlands and open space as part of development and redevelopment planning.	High	Low to Medium	High	1 – 5 years	DEC and MD	ECO One Stop, CSCI, MassWildlife, DU	General Multiple Hazards
37) Improve connectivity between natural systems through green infrastructure / nature-based solutions.	Medium	Medium	Medium	1 – 5 years	DEC and MD	ECO One Stop, Five Star, Trout Unlimited (TU)	General Multiple Hazards
38) Increase protections for preserving, restoring, and enhancing the community's tree canopy through more effective provisions for planting and replanting requirements (new/replacement shade trees) in local regulations.	Medium	Low to Medium	Medium	1 – 5 years	DEC and MD	ECO One Stop, CSCI, UCF	General Multiple Hazards
39) Create a community-wide tree inventory, assessment, and plan, with a focus on canopy analysis and connectivity.	Medium	Medium	Medium	1 – 5 years	DEC and MD	ECO One Stop, CSCI, UCF	General Multiple Hazards
40) Develop an Invasive Species Response and Management Plan.	Low	Low	Low	1 – 5 years	DEC and MD	ECO One Stop, CSCI, MassWildlife, Massachusetts	General Multiple Hazards

Table 5 Cont.: Mitigation Actions

MITIGATION ACTIONS	Benefits	Costs	Priority	Timeline	Responsible Agencies	Potential Funding Sources	Hazard Type
						Environmental Trust Grants (MET)	
41) Maintain and/or restore public water bodies to reduce flooding and erosion impacts.	Low	Medium to High	Low	1 – 10 years	DEC/MD	ECO One Stop, Five Star, Section 319	Flood Hazards
42) Identify areas with potential for brush fires to track community vulnerability by developing and maintaining a database.	Medium	Low	Medium	1 – 5 years	MD	MD	Climate Related Hazards: Wildfire
EDUCATION AND AWARENESS PROGRAMS							
43) Develop public education and outreach campaigns to inform residents and businesses about hazard risks and mitigation actions.	Medium	Low	Medium	1 – 5 years	DEC and MD	ECO One Stop, CSCI	General Multiple Hazards
44) Develop and distribute an educational pamphlet on fire safety and prevention.	Medium	Low	Medium	1 – 5 years	DEC and MD	CSCI, Volunteer Fire Assistance Program (VFAP)	General Multiple Hazards
45) Continue to encourage community members to sign up for the OnSolve (Code Red) notification system managed by MassDevelopment.	High	Low	High	Ongoing	MD	CSCI, ECO One Stop	General Multiple Hazards
46) As residential population increases, explore the potential for volunteer participation.	Medium	Low	Low	1 – 5 years	DEC and MD	ECO One Stop, CSCI, EMPG, VFAP	General Multiple Hazards
47) Educate residents and volunteers regarding the safe methods and actions necessary to deal with hurricanes and tornados.	High	Low	High	1 – 5 years	DEC and MD	CSCI, ECO One Stop, EMPG	Climate Related Hazards: Severe Weather
48) Develop and distribute educational information regarding the threats from extreme heat and cold.	Medium	Low	Medium	1 – 5 years	DEC and MD	CSCI, ECO One Stop	Climate Related Hazards: Severe Weather

Table 5 Cont.: Mitigation Actions

Section 6: Regional and Intercommunity Relationships

SECTION 6 - REGIONAL AND INTERCOMMUNITY CONSIDERATIONS

Some hazard mitigation issues are strictly local, where an identified hazard mitigation issue originates primarily within the municipality/community and can be solved at the municipal/community level. There are also intercommunity issues that involve cooperation between two or more municipalities. There is a third level of mitigation which is regional; involving a state, regional or federal agency or an issue that involves three or more municipalities.

The Devens Enterprise Commission (DEC) is the primary Community agency responsible for regulating development in the Community, managed by the state's finance and development agency (MassDevelopment, MD). Feedback to the DEC was ensured through the participation of the DEC Director and DEC Environmental Planner in the NHMP Work Group. In addition, the public meetings were held during official Devens Working Group meetings that included the participation of the NHMP Working Group members. Neighboring communities and other regional and state entities were provided with an opportunity to participate and provide input at the two public meetings held on December 3, 2025, and May 6, 2026. The Community will continue to collaborate with local, regional, and state agencies as a part of the implementation of actions outlined in this Plan. Below is a more detailed overview of the regional and intercommunity considerations for this plan.

REGIONAL PARTNERS

In many communities, mitigating natural hazards is more than a local issue. For example, the drainage systems that serve these communities are a complex system of storm drains, outfalls, roadway drainage structures, and other facilities owned and operated by a wide array of agencies including but not limited to the Community of Devens, MassDevelopment, private property owners, the Town of Shirley, the Town of Harvard, the Town of Ayer, and the Massachusetts Department of Transportation (MassDOT). The planning, construction, operations, and maintenance of these structures are integral to many of the hazard mitigation efforts. Therefore, these agencies must be considered as regional partners in hazard mitigation. These agencies also operate under the same constraints as communities do, including budgetary and staffing constraints and numerous competing priorities. Additional regional partners to Devens include the Army National Guard, US Fish and Wildlife Service, the Bill Ashe Visitors Center, the Nashua River Watershed Association, and regional railways including Berkshire Eastern, operated by Genesee Wyoming. **Section 5** of the Plan includes mitigation actions where several of these agencies will collaborate with the Community in moving hazard mitigation efforts forward. Implementation of these actions will require that all parties work together to develop solutions.

REGIONAL FACILITIES IN DEVENS

Major facilities owned, operated, and maintained by federal, state, regional, local, or private entities in Devens, Massachusetts include: Massachusetts Route 2; nearby Interstate 495; local roadways such as Jackson Road, Barnum Road, and Hospital Road; the Federal Medical Center (FMC Devens); the Devens Reserve Forces Training Area (U.S. Army Reserve); Massachusetts State Police services; the Devens Fire Department; the Nashoba Valley Regional Dispatch District; MassDevelopment administrative and public works facilities; the Shriver Job Corps Center; local utility infrastructure; and recreational and cultural facilities including the Fort Devens Museum and Mirror Lake recreational areas. Other regional facilities invited to participate in public comment of the Plan Update include the Devens Recycling Center, Regional Household Hazardous Waste Facility, Loaves and Fishes Food Pantry, Transitions Women's Shelter, and Clear Path for Veterans.

INTERCOMMUNITY CONSIDERATIONS

Devens and the surrounding Towns of Ayer, Harvard, and Shirley share a close planning and development relationship because Devens continues to undergo phased redevelopment under MassDevelopment's oversight. Potential for increased development in the future will require continued coordination and approval among Devens, the Devens Enterprise Commission, MassDevelopment, and the surrounding Towns to minimize impacts and ensure regional planning goals are aligned. Natural resource protection along the Nashua River and surrounding wetlands is also an intercommunity consideration as it protects upstream and downstream flooding which can impact communities outside of Devens.

Section 7: Plan Adoption and Implementation

SECTION 7 - PLAN ADOPTION AND IMPLEMENTATION

Adopting, implementing, monitoring, evaluating, and updating the Community's Local Natural Hazard Mitigation Plan Update are necessary steps to sustaining a viable Plan that will assist the Community in becoming more resilient to natural hazards into the future. An overview of how the Community, through MassDevelopment and the Devens Enterprise Commission (DEC), will carry out these tasks is outlined as follows.

PLAN ADOPTION

The Draft Plan was provided to the Community on April x, 2026, for review and distribution to the public and local, regional, and state stakeholders. The Draft Plan was posted on the Community website on April x, 2026, for public review and input. Public meetings were held on December 3, 2025, and May 6, 2026, during the Devens Committee meetings at the Vicksburg Conference Room to: 1) present the Draft Plan and 2) solicit input and feedback on the Draft Plan from the public. Based on feedback provided at the public meetings and received from the public online, the Draft Plan was revised on May x, 2026. The Community then submitted the Draft Plan Update to the Massachusetts Emergency Management Agency (MEMA) and the Federal Emergency Management Agency (FEMA) for review. Upon receiving conditional approval of the plan by FEMA, the Plan was presented and approved by MassDevelopment and the DEC on xxxxxxxxx, 2026**.**

PLAN IMPLEMENTATION

The implementation of the Plan commences upon its formal adoption by the DEC and MassDevelopment, and official approval by MEMA and FEMA. **Section 5** details the mitigation strategy that prioritizes the various actions identified to reduce the impacts from future natural hazards. MassDevelopment and the DEC will be responsible for overseeing the implementation of the plan.

In addition, Community officials will identify existing planning documents and regulations where relevant policies and actions outlined in this Plan Update may be incorporated to improve the potential for the implementation of mitigation actions across related programs and agencies. Relevant programs, policies, and/or regulations may include updates to existing policies and regulations.

PLAN MONITORING AND EVALUATION

On an annual basis, the Community will coordinate a meeting to review the Plan progress over the last year. This Plan review will include an evaluation of hazard mitigation activities such as ongoing projects, changes in developing new mitigation actions resulting from a natural disaster event, changes in local, State, and federal regulations that may impact the implementation of future projects, and modification of existing actions. As a part of this process, the Community will evaluate and assess the effectiveness of the action items outlined in the plan in achieving the plan goals and objectives.

A review and evaluation of the Community's Plan will be conducted on a 5-year basis in compliance with the 2000 Disaster Mitigation Act and Part 201.6 of 44 Code of Federal Regulations (CFR). In the event of a major disaster event impacting Devens, the Community may update the plan at that time with actions to address unexpected impacts resulting from the damage to the Community, if needed.

FEDERAL AND STATE FUNDING SOURCES

Several of the proposed hazard mitigation projects and actions may be eligible activities for funding under FEMA Hazard Mitigation Assistance (HMA) Grant Programs and/or Hazard Mitigation Grant Program. State and federal funding source details are presented in **Attachment 5.**

Attachment 1: Community Profile

Attachment 1: Community Profile

Community Profile Overview:

This section of the Plan presents details about the Community assets which categorically include:

- People;
- Support, High Occupancy, and Vulnerable Population Facilities;
- Essential Facilities including emergency response, police, fire, hospitals, etc.;
- Lifeline Systems including water, wastewater, electrical power, etc.;
- High Potential Loss Facilities, including high hazard dams; and
- Transportation Infrastructure.

Demographic Overview

Per the 2020 US Census and 2023 American Community Survey (https://data.census.gov/profile/Devens_CDP,_Massachusetts?g=160XX00US2516840)

Age and Sex:

Population:	1,697
Population change since 2010:	-7.7%
Percent female:	22.3%
Percent male:	77.7%
Age:	
persons <5 years:	0
persons <18 years:	196
persons > 65 years:	218

Race:

White alone:	61.3%
Black or African American alone:	23.9%
American Indian and Alaska Native alone:	1.4%
Asian alone:	6%
Two or more races:	4.8%
Hispanic or Latino:	17.3%

Health:

With disability, under 65 years:	3%
Persons w/o health insurance, under 65 years:	2.8%

Education:

High school graduate or higher, > 25 years:	81.7%
Bachelor's degree or higher, > 25 years:	27.7%

Economy:

In civilian labor force, total, > 16 years:	29.8%
In civilian labor force, female, > 16 years:	69.9%

Income and Poverty:

Median household income:	$113,125
Per capita income:	$30,905
Persons in poverty:	9.6%

Family and Living Arrangements:

Households:	305
Average persons per household:	3.48
Language spoken at home other than English, greater than 5 years:	27%

Housing:

Median house cost:	$464,000
Median gross rent:	$1,628/month
Percent owner-occupied:	73.9%

Population Density: 250.3/sq. mile

Social Vulnerability Index:

Devens Overall Social Vulnerability:

- Low to Medium: 0.3977

*Possible scores range from 0 (lowest vulnerability) to 1 (highest vulnerability). The score in Worcester County, MA is 0.51, and the score for Middlesex County, MA is 0.2854. As Devens spans both of these counties, the Social Vulnerability Index has been calculated by averaging these two scores.

Demographics

Based on the 2020 U.S. Census, the population per square mile in Devens is 250.3, which is lower than the average for Massachusetts as a whole (901.2), and lower than both Middlesex County (1,995.4) and Worcester County (570.7). (**Figure 1-1**)

The number of residents decreased from 1,840 based on the 2010 U.S. Census to 1,697 based on the 2020 Decennial Census. Devens includes a largely white population, representing 61.3% of all residents. The largest minority group in Devens is Black or African American at 23.9% of all residents.

Based on the 2022 ACS Demographic and Housing Estimates, the population includes 14.2% of residents under the age of 18, 3.6% between the ages of 20 to 24, 26.7% between the ages of 25 to 44, 39.6% between the ages of 45 to 64, and 12.9% who are 65 years or older.

There are 305 households with an average household size of 3.48. The median household income in Devens is $113,125, which is above the median average of $104,828 for the State, below the $133,617 median household income for Middlesex County, and above the $96,602 median household income for Worcester County. Poverty in Devens is at 9.6% which is lower than the State rate of 9.7%, higher than the Middlesex County rate of 7.9%, and equal to the Worcester County rate of 9.6%.

Housing costs are $464,000 for the median value, owner-occupied housing unit compared to the State at $607,400, Middlesex County at $759,800, and Worcester County at $465,500. In Devens, 73.9% of the housing units are owner-occupied compared to the state at 57.7%.

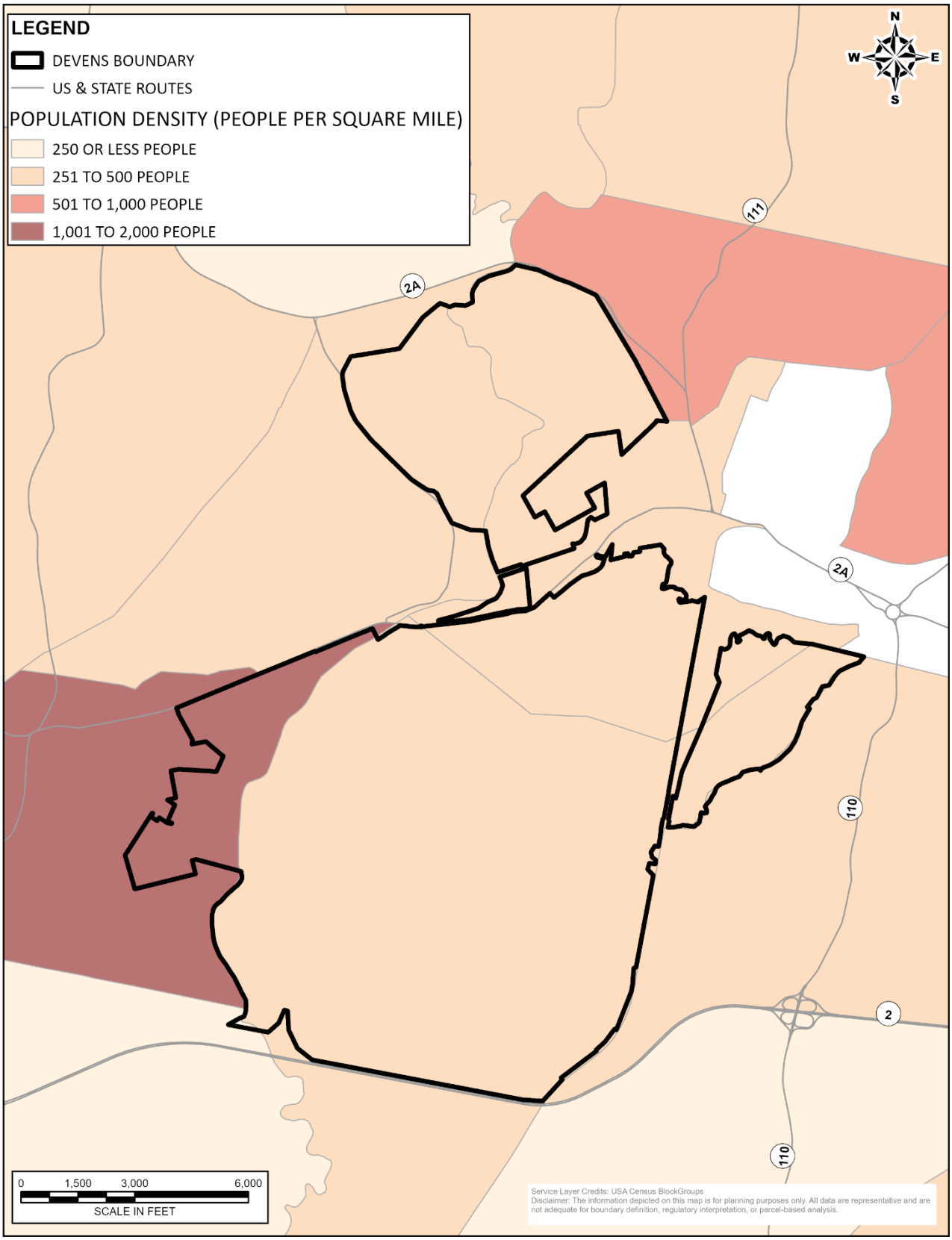


Figure 1-1: Population Density

Social Vulnerability

The term Social Vulnerability describes how resilient a community is to external stresses, such as natural hazards, on human health. The Social Vulnerability Index (SVI) employs U.S. Census Bureau variables to identify neighborhoods that may need additional support in preparing for hazards or recovering from disasters and is a useful tool for emergency response planners and public health officials. U.S. Census Bureau data are used to determine the social vulnerability of every census tract (census tracts are subdivisions of counties for which the Census Bureau collects statistical data). The SVI ranks each tract on 15 social factors, including poverty, lack of vehicle access, and crowded housing, and groups them into four related themes: 1) Socioeconomic; 2) Household Composition/Disability; 3) Race/Ethnicity/Language; and 4) Housing/Transportation. Each tract receives a separate ranking for each of the four themes, as well as an overall ranking.

2022 mapping of the SVI for Devens is categorized as Low to Medium based on the results of the two U.S. Census tracts for Middlesex County and Worcester County, as shown in **Figure 1-2**.

MassEnviroScreen is a draft tool released by the Massachusetts Office of Environmental Justice and Equity in November 2025. The goal of this tool is to identify and prioritize the most environmentally vulnerable or burdened communities in Massachusetts. Communities are evaluated using a cumulative burden score that incorporates pollution and climate burden and population characteristics, as well as whether the community meets the criterion related to low household income. Burdened Areas as defined by the draft MassEnviroScreen tool are communities (census block groups) that meet one or both of the following criteria:

- cumulative burden percentile score of 75 or greater, OR
- annual median household income is 65 percent or less of the statewide annual median household income.

The draft MassEnviroScreen tool identifies the northeastern portion of Devens (Block Group 5, Census Tract 3251.02, Middlesex County) as a Burdened Area due to a cumulative burden percentile score of 80.6. This score is calculated based on factors including Environmental Exposures, Environmental Effects, Climate Risks, Sensitive Populations, and Socioeconomic Factors.

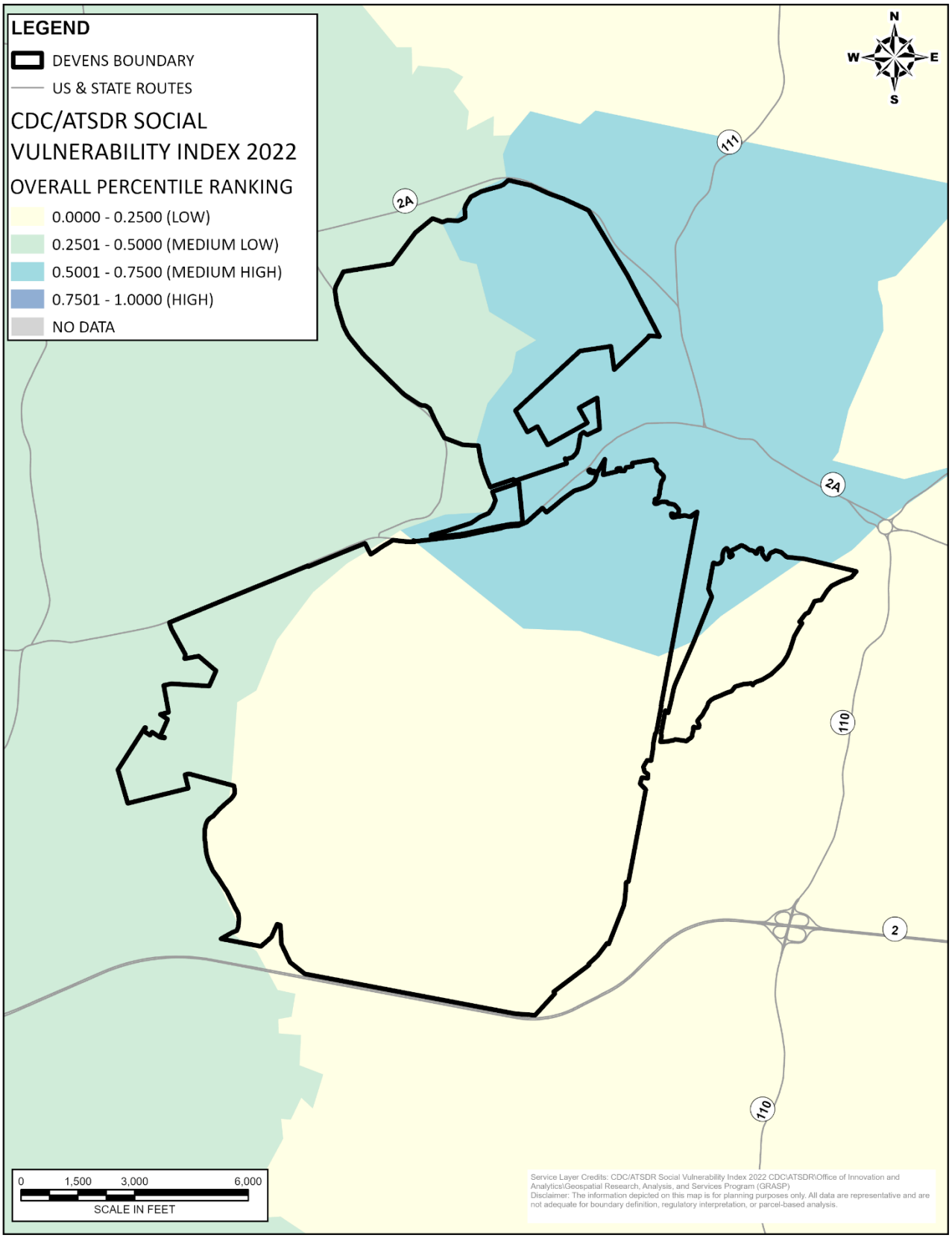


Figure 1-2: Social Vulnerability Index

Support, High Occupancy and Vulnerable Population Facilities

Support, High Occupancy, and Vulnerable Population Facilities in Devens include:

- Administration Buildings
- Athletic Fields
- Community Centers and Recreational Facilities
- Grocery and Supply Stores
- Hotels
- Long-Term Care Facilities
- Museums and Galleries
- Pre-Schools and Children's Care Facilities
- Religious Institutions
- Schools
- Theaters

The Devens Support, High Occupancy, and Vulnerable Population Facilities map is shown below in **Figure 1-3** with an overlay of FEMA designated flood zones. A map showing the centralized area of these facilities is shown in **Figure 1-4**.

Macpherson Road at Railroad Bridge during flood event

Macpherson Road under normal conditions

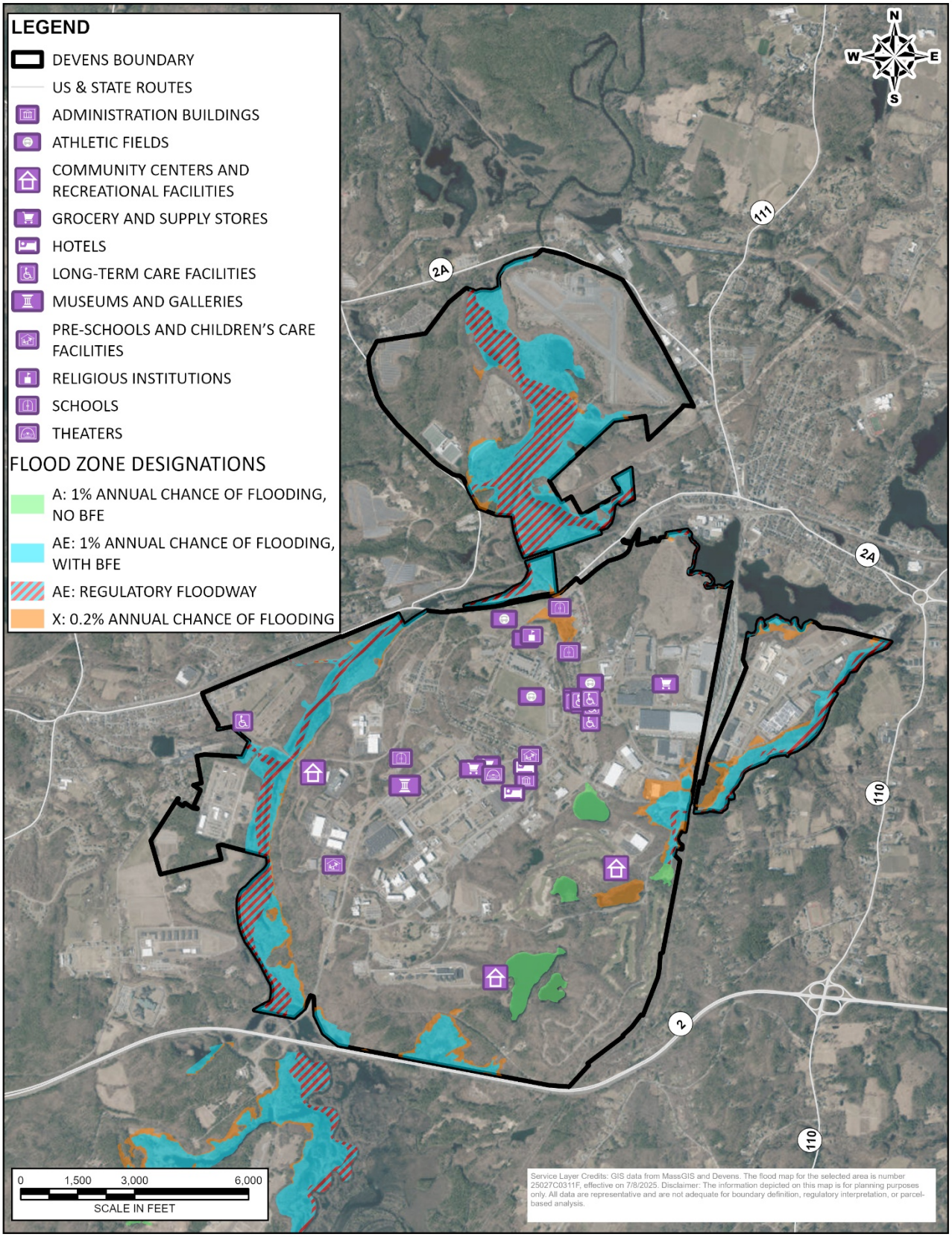


Figure 1-3: Support, High Occupancy and Vulnerable Population Facilities

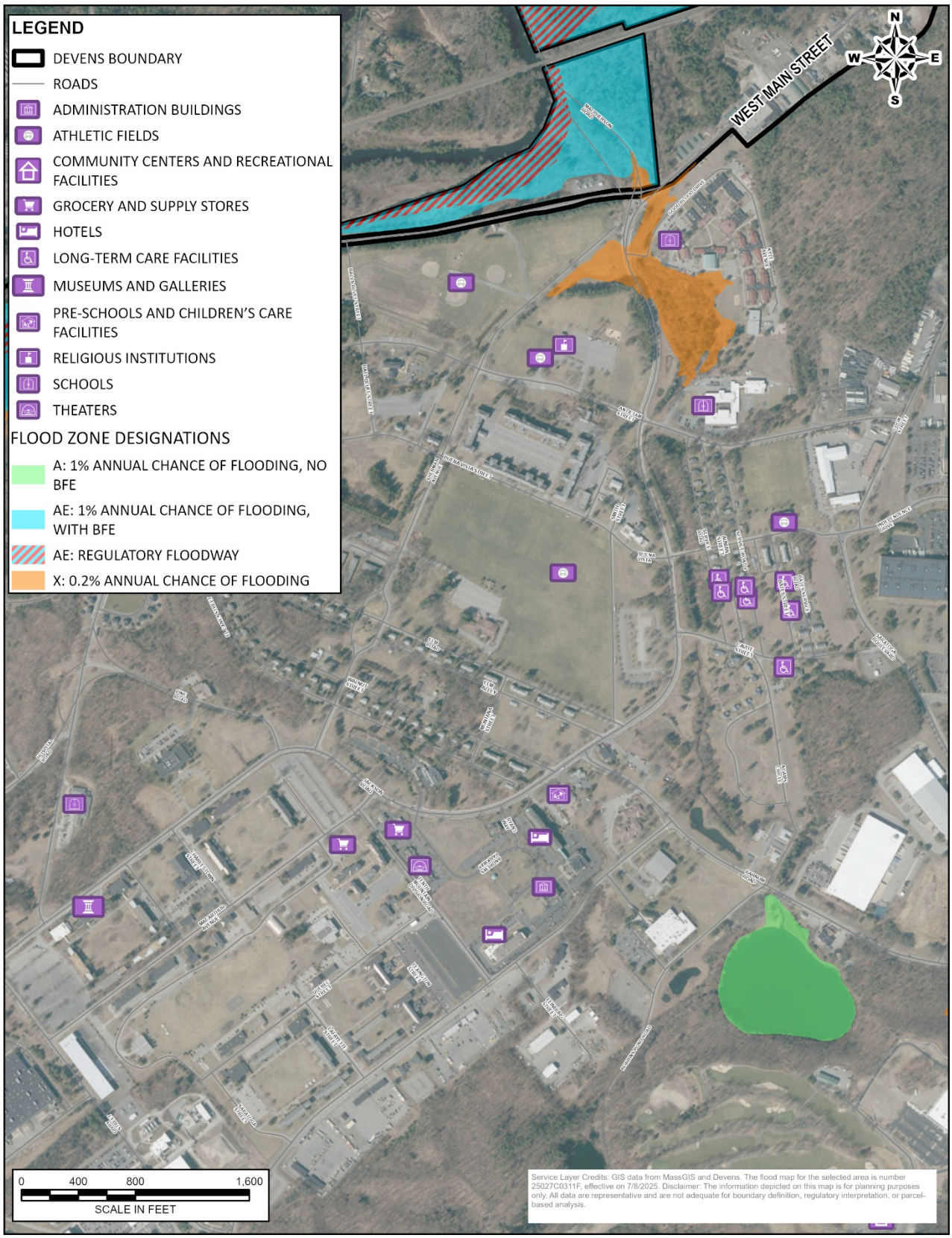


Figure 1-4: Support, High Occupancy and Vulnerable Population Facilities (Central Area)

Zoning and Existing Land Cover

Devens has thirteen (13) zoning districts as shown in **Figure 1-5**. Zoning districts include:

- 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

Devens is about 6.87 square miles and contains approximately 6.78 square miles of land area and 0.09 square miles of water. More than 2.6 square miles of Devens is designated as open space, accounting for approximately one-third of the Community area. A Land Cover Map for Devens is shown in **Figure 1-6**.

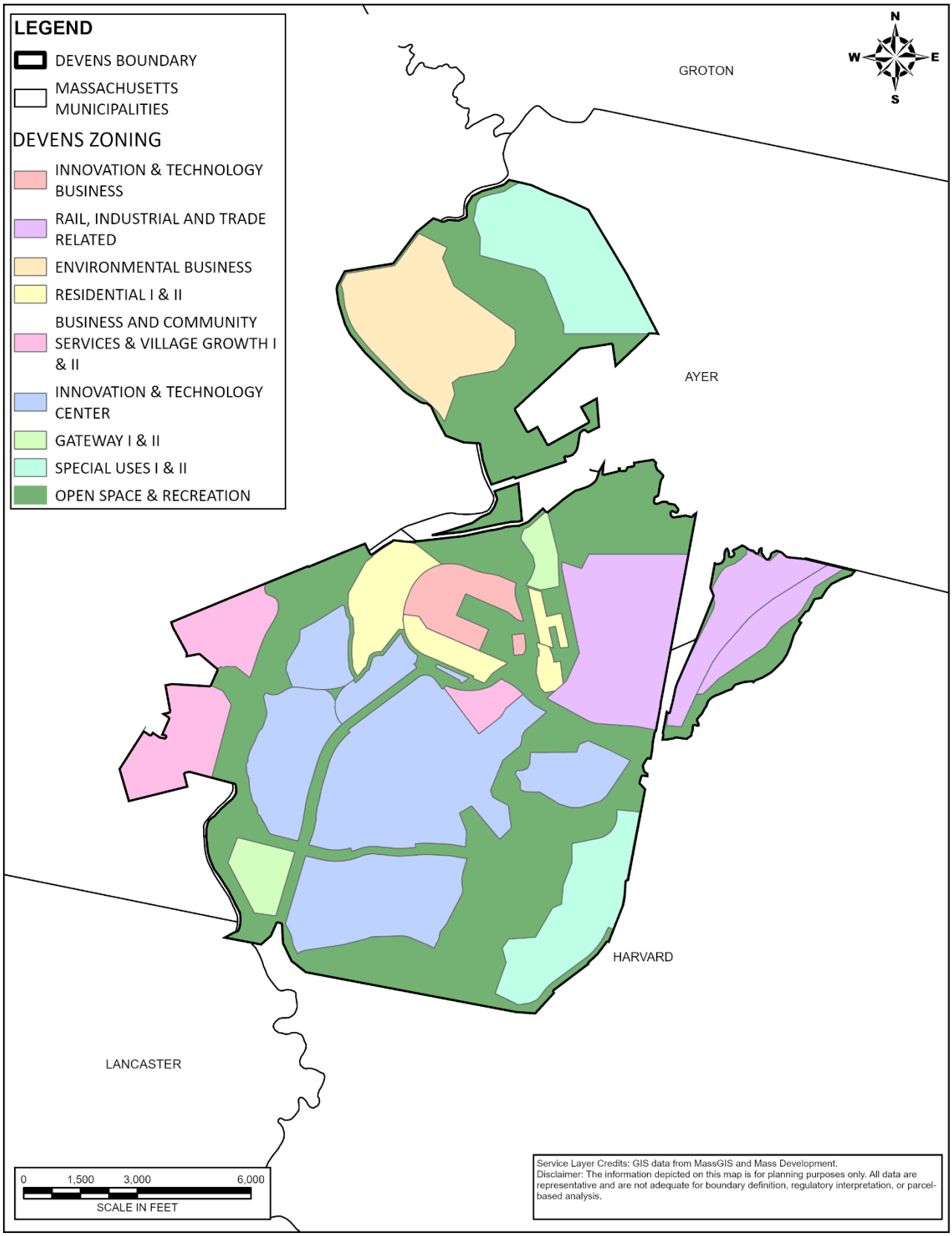


Figure 1-5: Devens Zoning Map

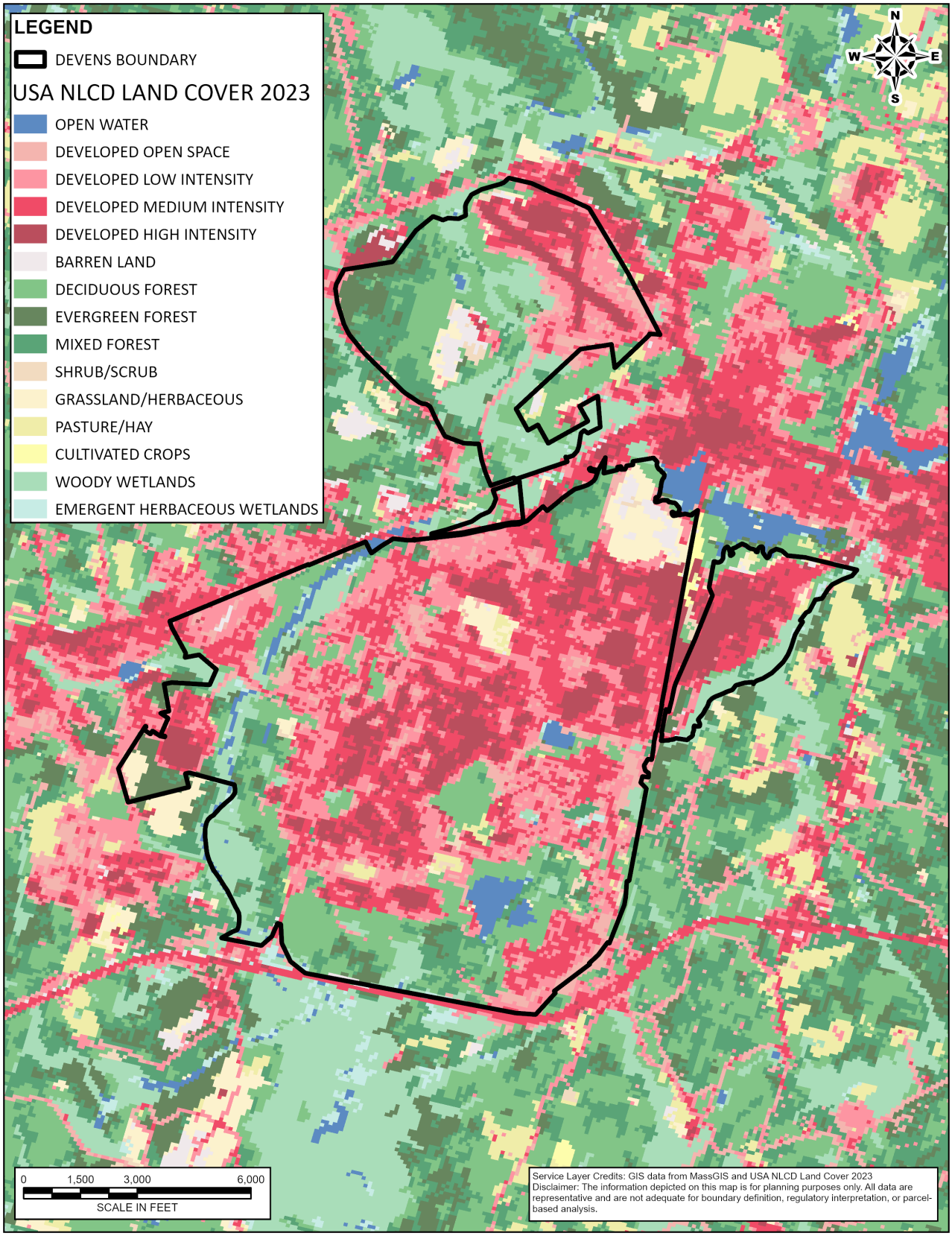


Figure 1-6: Devens Land Cover Map

Existing and Future Land Use

Figure 1-7 shows the existing general land use in Devens. Aside from open space land uses, approximately 90% of the land area is currently industrial and commercial use, with the remaining being residential areas.

There have not been significant changes in development within hazard-prone areas since the prior plan that have increased the vulnerability of Devens. As a master-planned community, development and re-development was planned to avoid impacts to areas of important natural resources and floodplains, and such areas were designated as protected open space. This approach reduces the impacts to infrastructure that may result when development encroaches on waterways, wetlands, and floodplains. Future development will continue to adhere to these principles and it is not expected that future development would occur within hazard-prone areas.

In December 2025, MassDevelopment issued Requests for Proposals (RFPs) for the disposition and development of multiple residentially zoned sites in Devens totaling approximately 69.3 acres, including 6.6 acres at Adams Circle, an existing residential neighborhood within Devens, and 62.7 acres on Grant Road, which would expand one of the largest residential neighborhoods in Devens. This development would be for single-family homes, town homes, duplexes, and multifamily buildings. In November 2024, Governor Healey signed into law the Mass Leads Act, which removed the cap of 282 housing units allowed in Devens. The Mass Leads Act also established the Devens Housing Working Group to determine a strategy for increased housing production elsewhere in Devens, including in the Innovation and Technology Center zoning district, with the group releasing a final report in May 2025 that recommended amending local zoning bylaws to allow for housing in that district.

The Devens Reuse Plan (1994) outlines goals and proposed future uses in Devens, focusing on sustainable development, creating a diversity of land uses, and maintaining a balance of meeting local, regional, and state interests. As a master-planned community, development and re-development are planned to avoid impacts on areas of important natural resources and open space. A map of proposed future land uses as shown in the Devens Reuse Plan is shown in **Figure 1-8**.

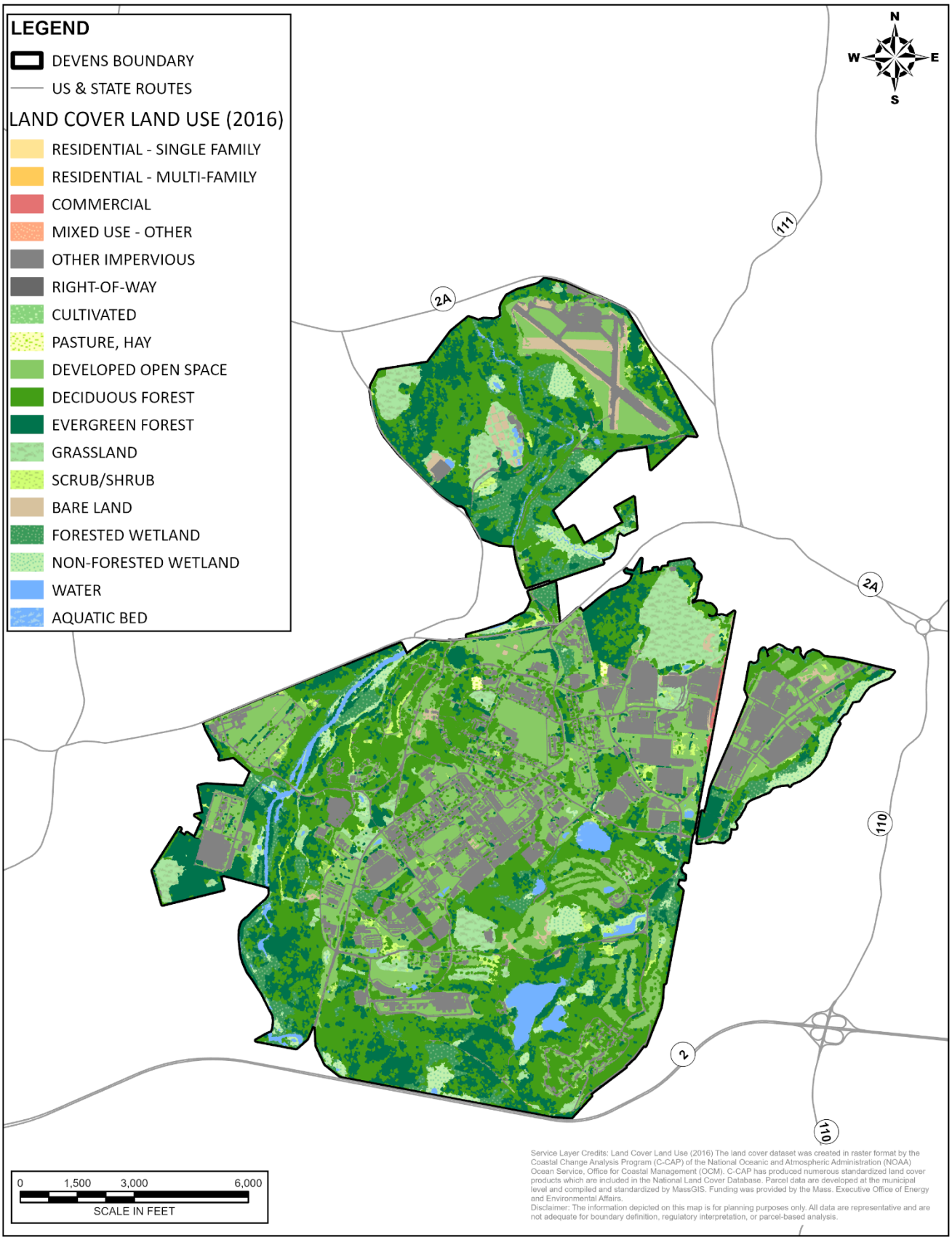


Figure 1-7: Existing General Land Use

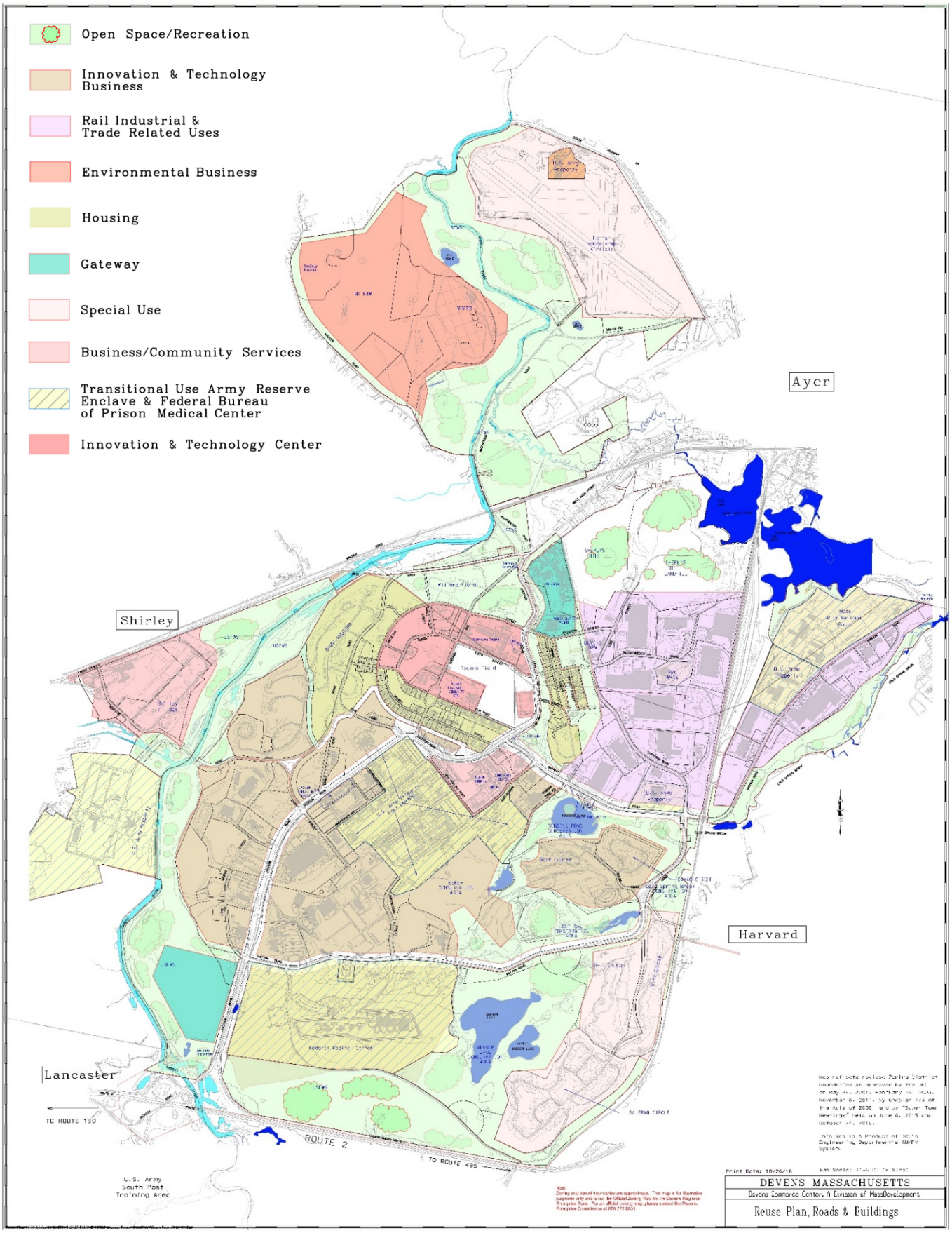


Figure 1-8: Devens Reuse Plan - Roads & Buildings Map

Transportation Infrastructure

Devens is served by Massachusetts Route 2, the nearby Interstate 495, and local roadways such as Jackson Road, Barnum Road, and Hospital Road which serve as collectors for major arterials and highways. The Massachusetts Bay Transportation Authority Fitchburg Line runs through Devens, with rail stations in Shirley and Ayer. **Figure 1-9** below shows the transportation infrastructure in and around Devens.

Bridges

There are two bridges within the boundary of Devens. The Hospital Road Bridge carries Hospital Road over the Nashua River between the towns of Harvard and Shirley within the Devens area and replaced the previous structure in 2008. The Lovell Road Bridge carries Lovell Road over Catacoonamug Brook which drains into the Nashua River and underwent surface repairs and drainage improvements in 2024.

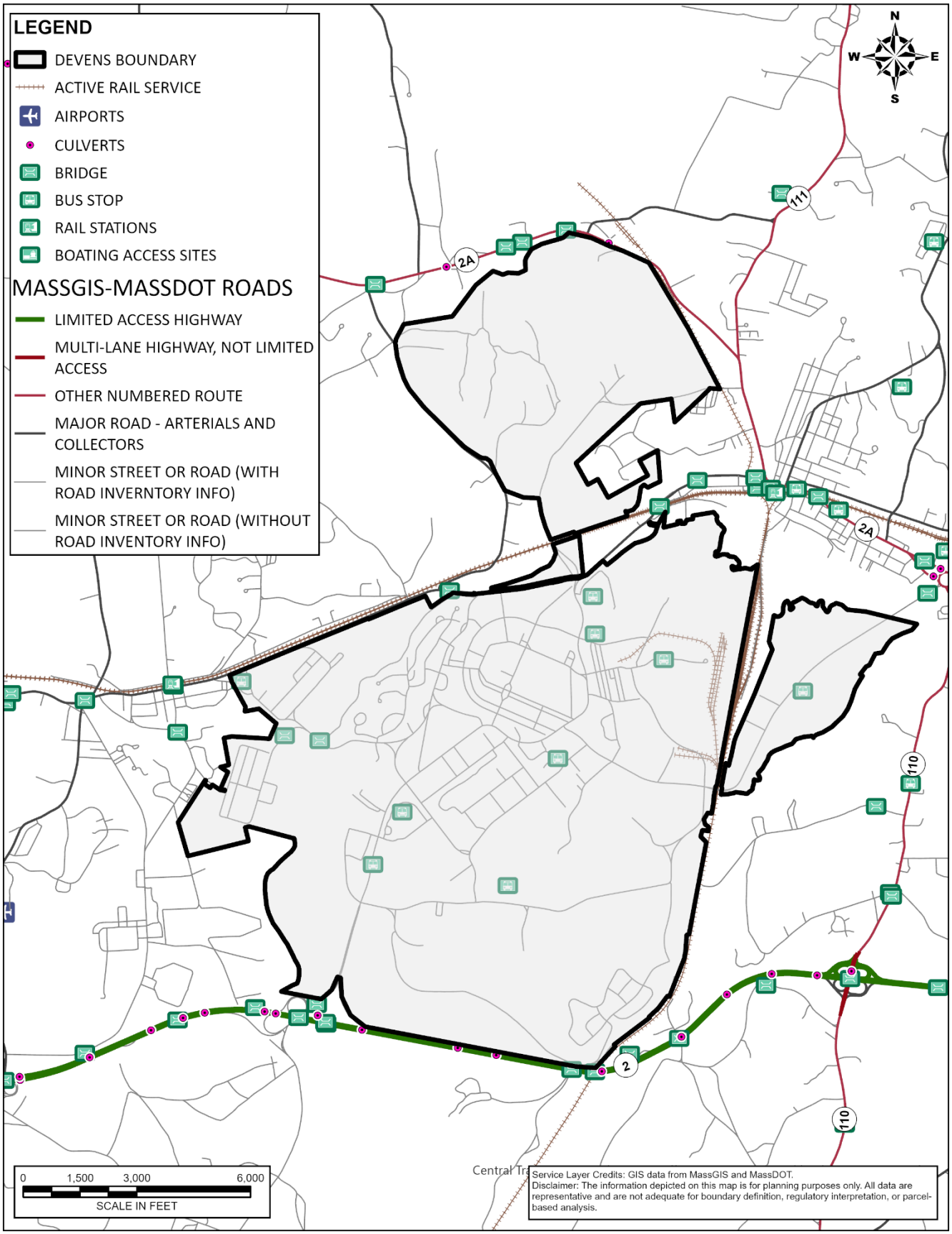


Figure 1-9: Transportation Infrastructure

Essential Facilities and Lifeline Systems

Essential Facilities in Devens are presented in **Figure 1-10**. Essential facilities include emergency shelters, emergency vehicle garages, fire and rescue facilities, local law enforcement facilities, hospitals, and healthcare centers. More information about these services is described below.

Public Safety and Health Care

Public safety within Devens is managed by MassDevelopment, which contracts with the Massachusetts State Police for law enforcement and maintains its own dedicated Fire Department. Dispatch services for the area are centralized through the Nashoba Valley Regional Dispatch District (NVRDD), located at 270 Barnum Road in Devens.

The Massachusetts State Police Devens Barracks (Troop C) is located at 59 Buena Vista Street in Devens. The State Police deliver a full range of municipal-style policing, including 24-hour patrol and investigations of the approximately 90 miles of roadway within the Devens community.

The Devens Fire Department headquarters is located at 270 Barnum Road, led by Fire Chief Timothy Kelly. The Fire Department consists of 30 full time members and is tasked with fire suppression, hazardous materials response, search and rescue, fire prevention/education, and emergency medical services.

At the time of the drafting of this Plan Update, the State Police barracks and Fire Department headquarters are anticipated to be moved to the new Public Safety Building at 115 Queenstown Street by 2027.

Emergency management operations are coordinated by MassDevelopment in connection with the Massachusetts Emergency Management Agency (MEMA). The Devens Community Center on Antietam Street has historically served as a primary community hub and emergency intake center.

There are no major hospitals located directly within Devens. The closest regional facility is the UMass Memorial Health Alliance-Hospital, Leominster Campus, located approximately 10 miles away at 60 Hospital Road, Leominster, MA which provides 24/7 emergency medical services, diagnostic imaging (X-rays, CT scans, MRIs), and specialized care.

Utilities

The Devens' Utilities Department provides natural gas, water, and sewer services to the Devens community. The infrastructure includes approximately 68 miles of power transmission line, 30 miles of gas line, 50 miles of water and sewer line, 5 electrical substations, 3 wells, 6 sewer lift pumps, and a wastewater treatment facility. Littleton Electric Light & Water Departments (LELWD) manages and maintains the local electrical system. LELWD has an on-going program of system resilience to minimize outages, particularly focused on tree trimming to prevent outages due to fallen limbs on power lines, and promoting utility maintenance. **Figure 1-11** shows the lifeline systems located in Devens, including electric power transmission, communication systems, and commercial and potable water supply areas.

Water Supply

A Water Resources Map for Devens is shown in **Figure 1-12**. The following is information provided by MassDevelopment in the most recent annual Consumer Confidence water quality report:

MassDevelopment contracts a company (Veolia) to operate and maintain the Devens Water System. The Devens water system includes three active gravel-packed wells and the inactive well field at the Grove Pond pumping station. It also includes more than 50 miles of water mains and two 1-million-gallon storage tanks. The Devens water supply has a permit to pump up to 4.8 million gallons per day. In 2023 the new Patton Well Water Treatment Plant was completed and in the following year, 2024, the new Shabokin Well Water Treatment Plant was completed, and both have since been placed in service. The new water treatment plants use greensand filtration media to remove iron and manganese from the water produced at the Patton and Shabokin Wells. The new treatment plants also consist of granular activated carbon and resin exchange filters to remove PFAS.

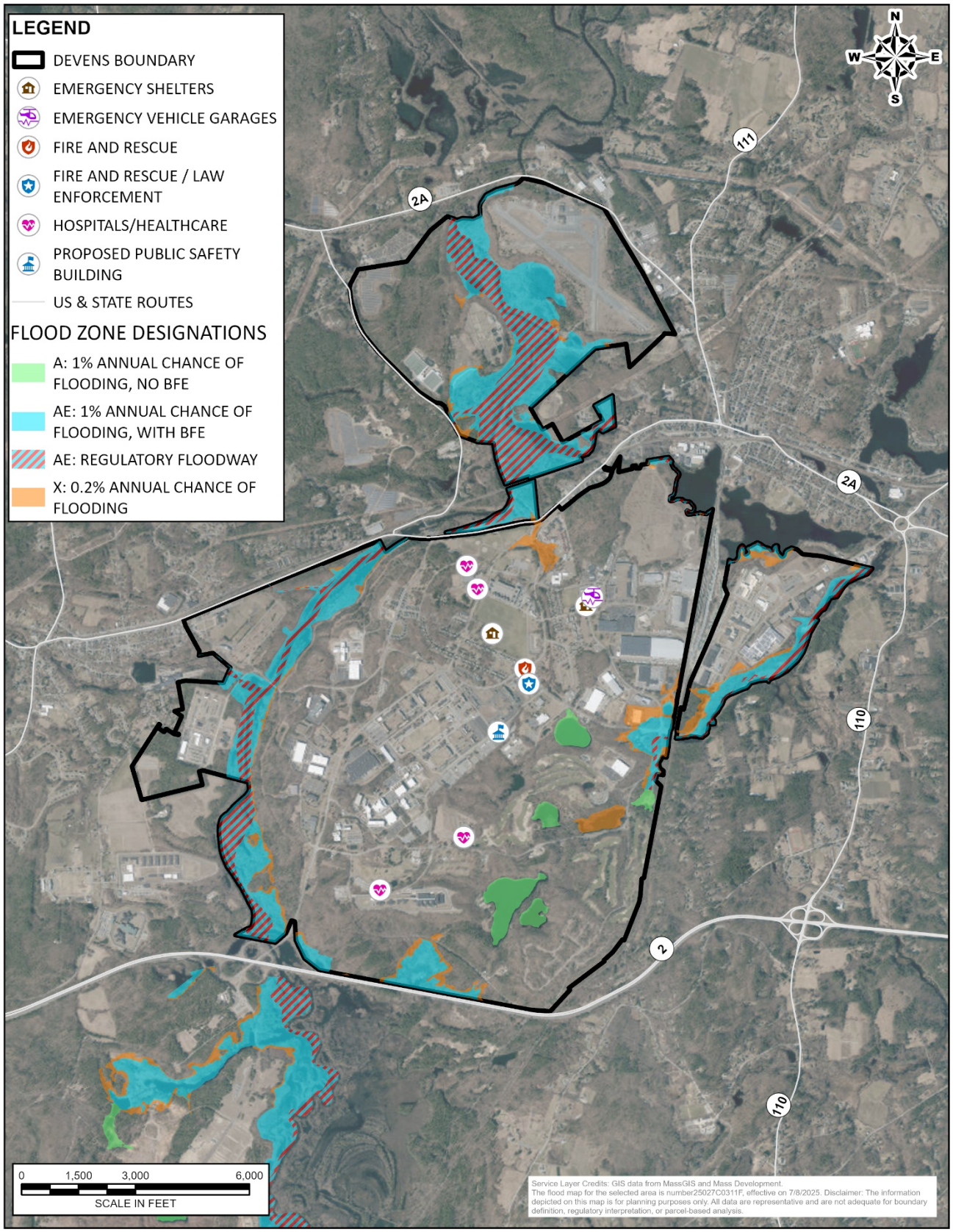


Figure 1-10: Essential Facilities

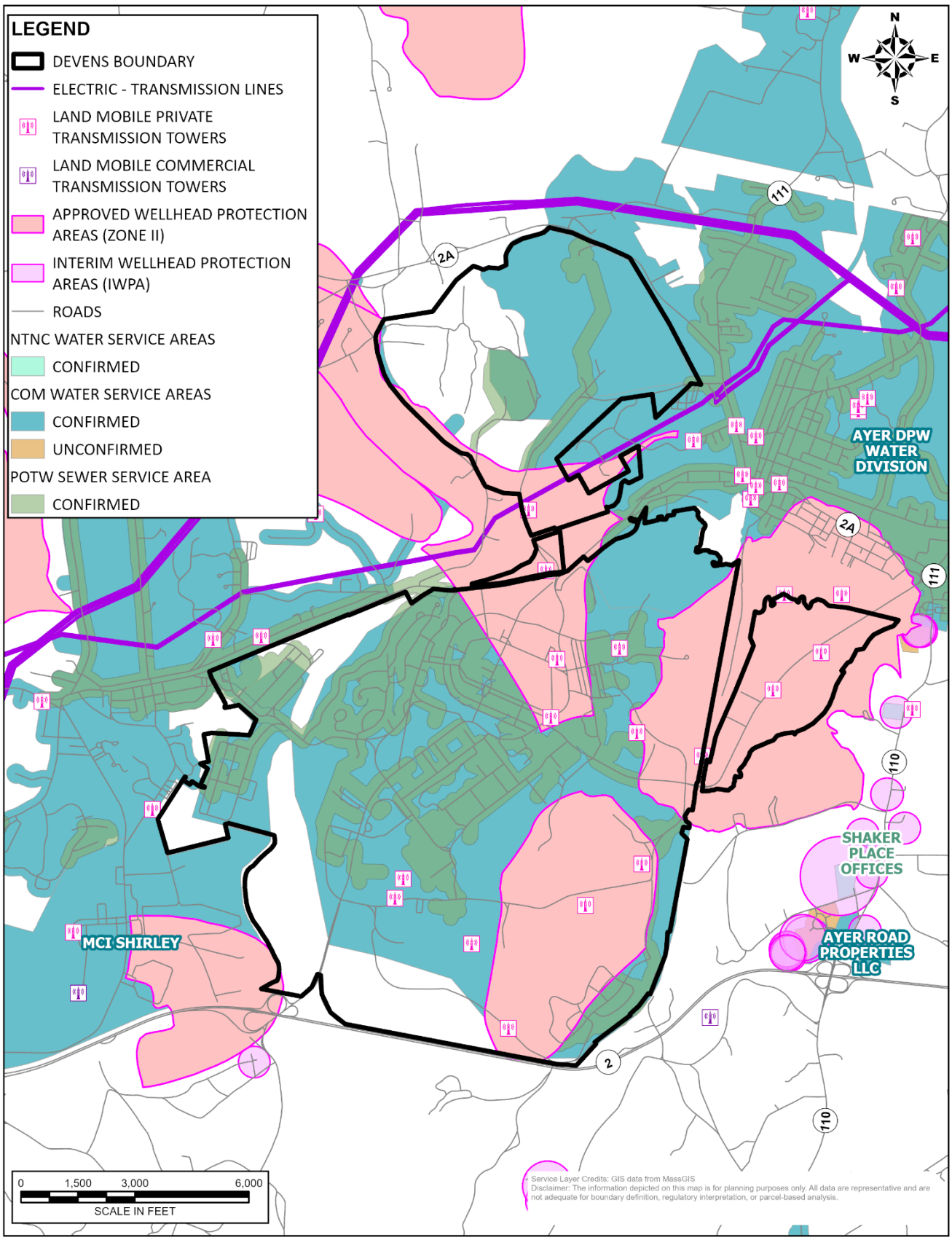


Figure 1-11: Lifeline Systems

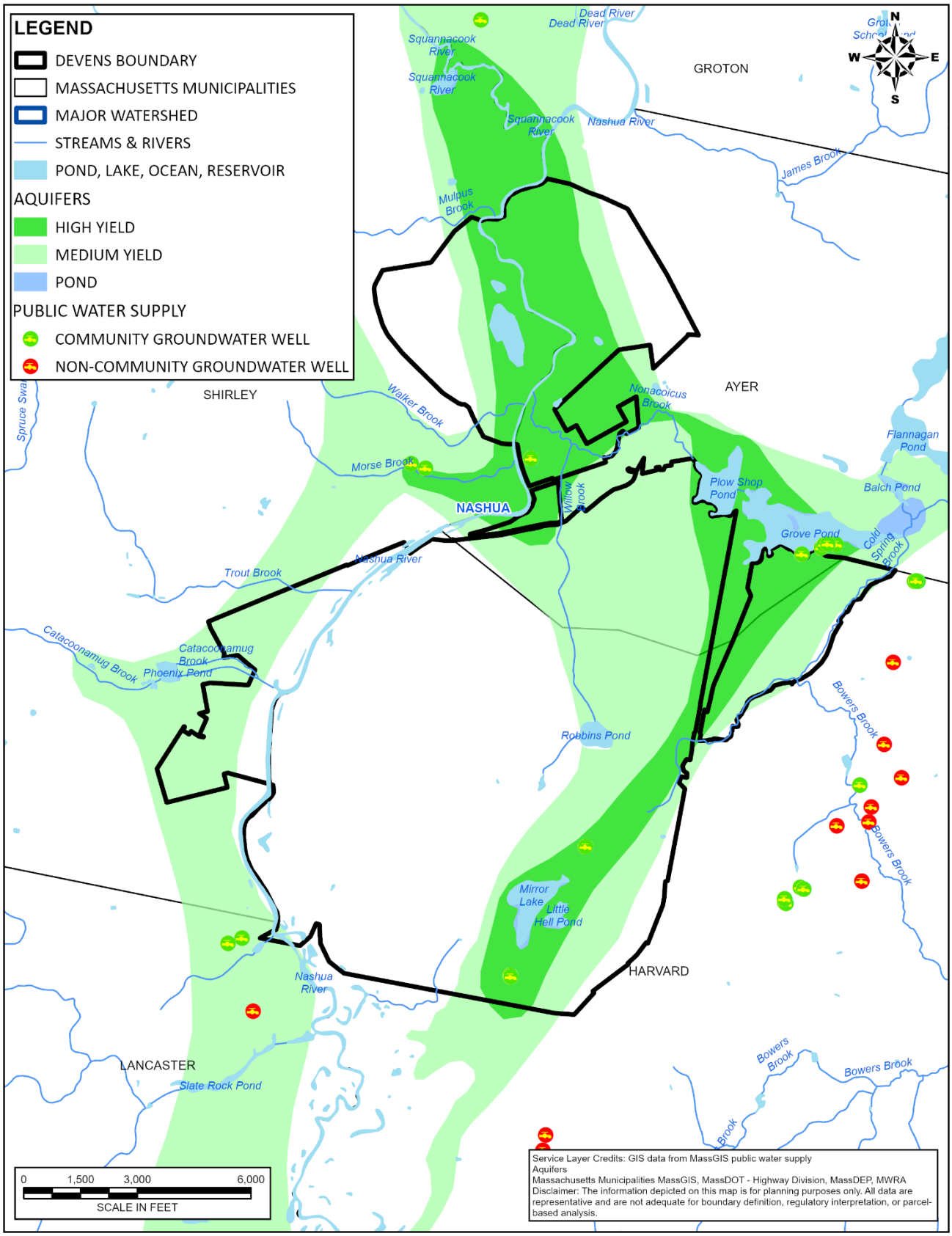


Figure 1-12: Water Resources

High Potential Loss Facilities: Dams

High potential loss are those facilities, such as dams, whose failure can result in catastrophic loss of human life. In Massachusetts, the Department of Conservation & Recreation (DCR) Office of Dam Safety (ODS) regulates dams and uses a hazard classification system to rank the risks posed by failures of dams. High Hazard (Class I) dams are those where failure is likely to cause loss of life and serious damage to homes, industrial facilities, and main highways. Owners of these dams are required by 302 CMR 10.11 to maintain Emergency Action Plans (EAPs) and inundation maps. Registered dams in and around Devens are shown in **Figure 1-13** in the following categories: High Hazard, Significant Hazard, and Low Hazard.

Grady Dam (Groton/Pepperell)

While not located within Devens, Grady Dam (and the associated Lake Grady/Bell Creek system) is part of the broader Nashua River watershed. A failure here would contribute significant volume to the Nashua River, which forms the northern and western boundaries of Devens. A breach at Grady Dam could lead to rapid water rise, impacting low-lying areas and infrastructure that are adjacent to the riverbank. Grady Dam is designated as a Significant Hazard Dam, and the most recent EAP was updated in 2024.

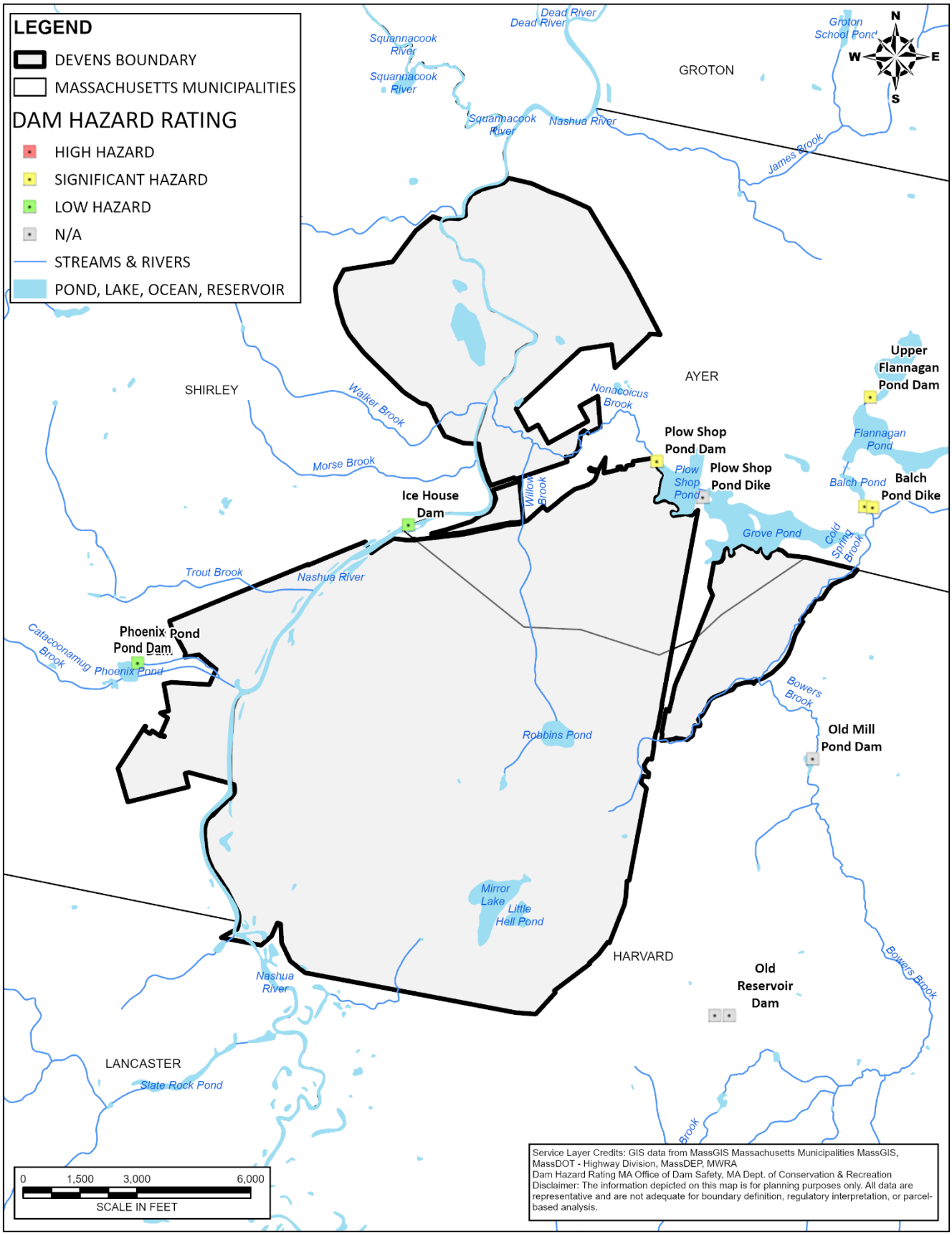


Figure 1-13: Dam Locations

Stormwater Management

Devens was master planned and designed as a planned "Eco-Industrial Park," and is a leader in low-impact development and green infrastructure. MassDevelopment owns and operates the stormwater system, with fully digitized GIS mapping of the entire drainage network.

The Devens Enterprise Commission (DEC) requires developers to use on-site filtrations, such as rain gardens, bioswales, and permeable pavement to manage stormwater and mimic natural hydrology. Stormwater in Devens drains toward the Nashua River and various kettle ponds, including Mirror Lake. Hydrodynamic Separators (Vortechs units) are used to remove sediment and oil before water reaches any outfalls. The pump stations in Devens include some localized lift stations to manage stormwater runoff in certain industrial areas of the Community.

Sewer System

Devens is almost entirely sewered, with nearly all residential and commercial properties connected to a central sanitary sewer system. The Wastewater Treatment Facility is located at 85 Walker Road Shirley, MA 01464. This plant treats approximately 1.5 to 2 million gallons per day and utilizes a sequencing batch reactor system that provides secondary treatment and nitrogen removal before discharging treated sewage into the Nashua River. Devens also has an Industrial Pre-treatment Program (IPP), which ensures that industrial discharge does not overwhelm the municipal system.

Natural Resources

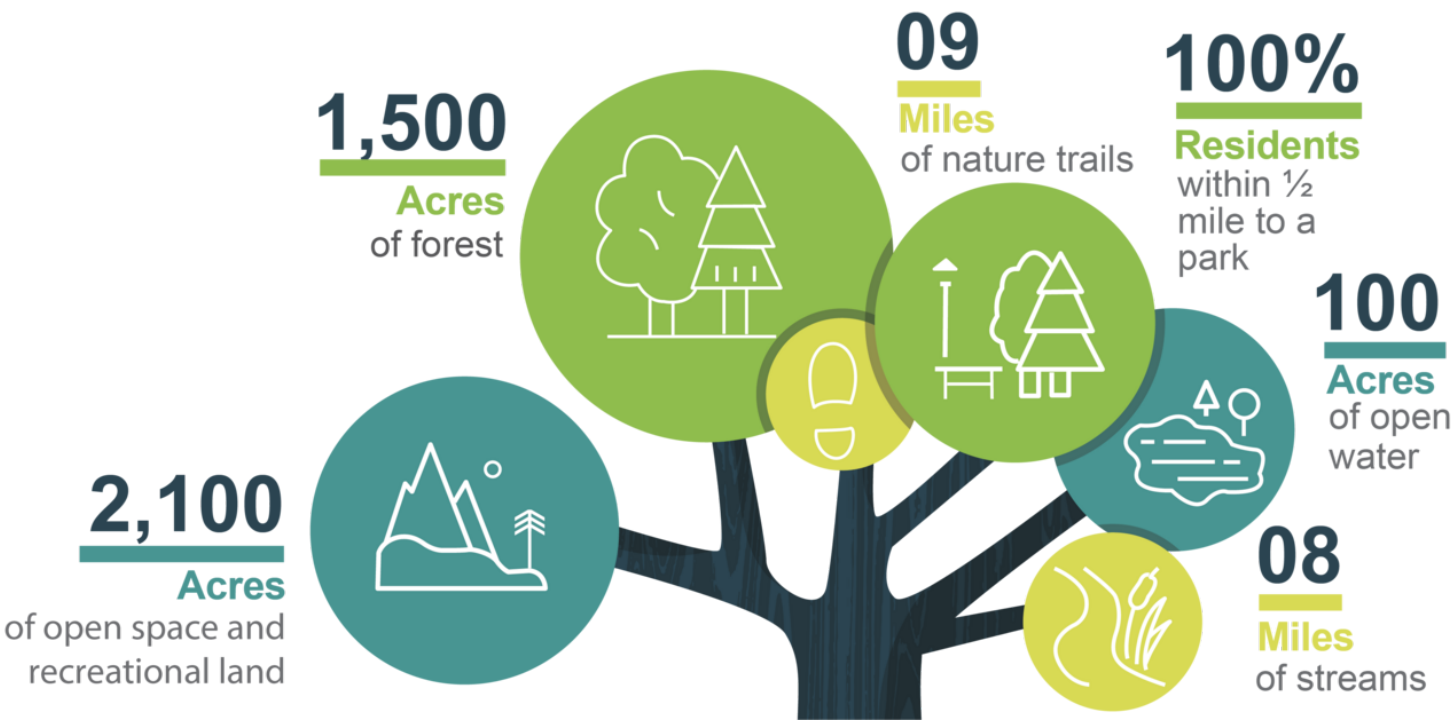
The natural resources found in Devens are defined by its inland glacial geology and its location within the Nashua River watershed. Mirror Lake and Little Mirror Lake are glacial kettle holes formed by melting ice blocks that maintain higher water quality and cooler temperatures than standard New England ponds, supporting diverse aquatic life.

Mirror Lake in Devens, MA

The Nashua River serves as the northern and western boundary of Devens. It is a designated Wild and Scenic River, recognized for its biological diversity and recreational value. The river's winding path has created numerous "oxbow" ponds, or crescent-shaped wetlands that were once part of the main river channel. These are now stagnant, nutrient-rich habitats for turtles and amphibians. Floodplain forests, dominated by Silver Maple, are located along the Nashua River within Devens. These forests act as sponges that help prevent downstream flooding in the towns of Ayer and Shirley.

The Oxbow National Wildlife Refuge encompasses approximately 1,600 acres along the Nashua River within Devens. It is a vital sanctuary for migratory birds, waterfowl, and rare reptiles, including the Blanding's turtle.

The Black Spruce Bog is an acidic peatland in Devens, characterized by stunted Black Spruce and Tamarack trees, a thick carpet of Sphagnum moss, and specialized plants like pitcher plants and sundews.



Graphic from Devens Forward

Attachment 2: Natural Hazards

NATURAL HAZARDS OVERVIEW

Natural hazards are natural events that threaten lives, property, and other assets. Within Massachusetts, natural hazards typically include:

- Severe Weather Hazards such as hurricanes, lightning, tornadoes, strong wind, riverine flooding, hail, winter weather and ice storms;
- Climate-Related Hazards such as heat and cold wave, drought and wildfire;
- Geologic Hazards such as earthquakes and landslides.

Severe weather hazards, including hurricanes, tropical storms and nor'easters can result in high winds and flooding. These floods will become worse in the future due to climate-related changes to storm frequency and intensity. Flooding can result in the secondary hazards of erosion and scour, leading to bridge or culvert failure. Severe weather hazards can also result in high winds, lightning, hail, intense rainfall and tornadoes.

Localized intense rainfall can result in urban flooding where existing stormwater management capacity is exceeded. It can also result in flash flooding of streams and rivers.

Hazard Probability

Natural hazards can often be predicted, including predicting their likelihood of occurrence. The probability of a specific natural hazard occurring is typically defined in terms of its annual exceedance probability (AEP). This refers to the probability that a hazard condition will be met or exceeded in any given year. In lieu of the AEP, the term recurrence interval (in years) is often used.

The Historic Loss Ratio is the representative percentage of a location's hazard exposure that experiences loss due to a hazard occurrence, or the average rate of loss associated with a hazard occurrence.

Table 2-1: Devens Natural Hazards

Natural Hazards	
Cold Wave	
Drought	
Earthquake	
Hail	
Heat Wave	
Hurricanes	
Ice Storm	
Landslide	
Lightning	
Riverine Flooding	
Strong Wind	
Tornadoes	
Wildfire	
Winter Weather	

Devens Natural Hazards

GZA performed an analysis of multiple natural hazards and identified those hazards that are relevant to the Town. These are presented in Table 2-1. These hazards are characterized in detail in the following pages.

COLD WAVE

Extreme cold events are generally defined as a prolonged period of excessively cold weather. Extreme cold conditions are often, but not always, part of winter storms. Winter in Massachusetts almost always includes periods of extreme cold weather. Exposure to cold can cause frostbite or hypothermia and has the potential to become life-threatening. Although anyone can suffer from cold-related health issues, some people are at greater risk than others, such as older adults, young children, those who are sick, and those without adequate shelter.

Heating sources can be impacted by power failures due to winter storms. Infants and the elderly are more at risk of serious or life-threatening health problems from extreme cold. Secondary hazards may include risk of fires or carbon monoxide poisoning from space heaters, generators, inadequately cleaned or vented fireplaces, or use of candles.

The following extreme cold warnings and advisories are issued by the National Weather Service (NWS):

- Freezing Warning - When minimum shelter temperature drops to 32°F or less during growing season. The minimum shelter temperature is the lowest temperature expected in a shaded, naturally ventilated area.
- Frost Advisory - Issued under clear, light wind conditions with forecast minimum shelter temperature at 33-36°F during the growing season.
- Wind Chill Warning - Wind chill index is -25 °F or less for at least three hours using only sustained wind.
- Wind Chill Advisory - Wind chill index between -15 °F and -24 °F for at least three hours using only sustained wind.

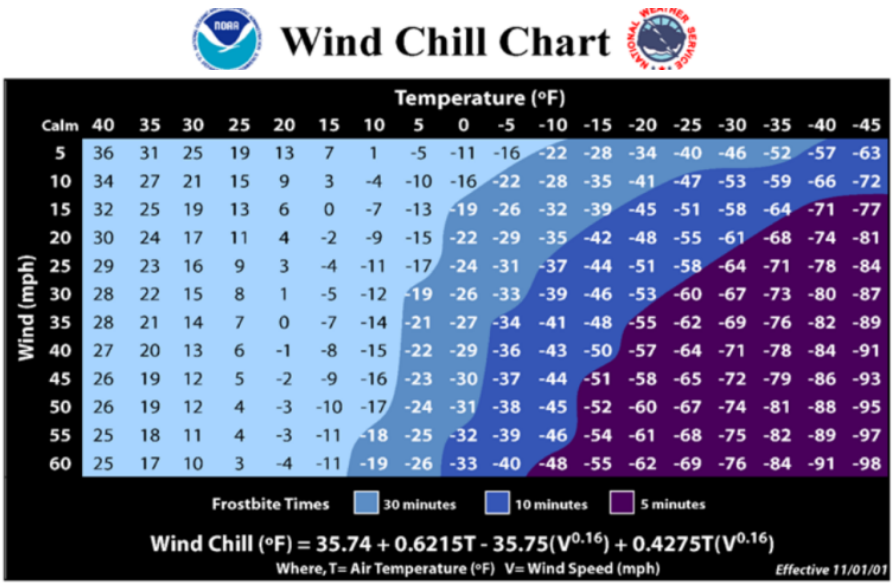


Figure 2-1: Wind Chill Chart

The National Weather Service Wind Chill Chart indicates the amount of time in which frostbite may occur on exposed skin based on temperature and wind speed. The National Weather Service maintains a Wind Chill Calculator, which calculates wind chill based on temperature and wind speed. A period of extremely low temperatures or wind chill temperatures reaching locally/regionally defined warning criteria, typical value around -35 °F or colder) (Reference http://www.wpc.ncep.noaa.gov/html/windchill.shtml).

The lowest temperature recorded in Massachusetts was -35 °F on January 5, 1904 in Taunton, February 15, 1943 in Coldbrook, and January 12, 1981 in Chester, according to NOAA. Nationally, there were 46 recorded cold fatalities in 2024 (https://www.weather.gov/hazstat/).

Historical Occurrence at Devens and Vicinity

From 2005 through 2021, Middlesex County experienced 9 cold wave events, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 0.6 cold wave events per year at and near Devens.

DROUGHT

Droughts occur when there has not been enough rainfall and water levels get low, in particular when precipitation and other water resources fall below expectations but the demand for water remains. They can happen anywhere in the United States, and droughts increase the risk of other hazards like wildfires, flash floods, and possible landslides or debris flows. Drought is a slow-onset hazard that can last for months or years. Droughts are generally classified into different types including:

- Meteorological drought - lack of precipitation
- Agricultural drought - lack of soil moisture
- Hydrologic drought - reduced streamflow or groundwater levels

As a hazard, it has the potential to impact many aspects of life, including two of our most important needs: drinking water and food. Due to the long duration of droughts, the impacts last for years and can ripple through a community over time.

Drought is an important issue in Massachusetts and the Community due to effects on agricultural and water resources. Community residents obtain their drinking water from surface water supplies, which can be affected by drought.

Massachusetts maintains a Drought Management Plan and five levels of drought are used to characterize drought severity and response: Normal; Advisory; Watch; Warning; and Emergency. A determination of drought level in Massachusetts is based on seven indices: Standardized Precipitation Index (SPI); Crop Moisture Index; Keetch-Byram Drought Index (KBDI); Precipitation Index; Groundwater Level Index; Stream Flow Index; and Reservoir Index. Additional climatological indices used nationally include: Standardized Precipitation-Evapotranspiration Index (SPEI), Palmer Drought Severity Index (PDSI) and Rainfall Deciles. Drought levels are declared on a regional basis. Massachusetts has identified six state-wide drought regions. The Community is located within the Central Region.

During the summer of 2002, one-third of the U.S., including Massachusetts, experienced drought conditions. Based on historical Palmer Drought Severity Indices, Massachusetts has experienced multi-year drought periods in 1879-83, 1910-19, 1928-39, 1964-69, and 1985-95. The most severe drought on record in the northeastern United States was during 1961-69. For the period from 1895 to 1995, Massachusetts experienced low PDSIs (indicating drought conditions) about 6 to 10 percent of the time, indicating the relative probability of drought. Water supplies and agriculture were affected because of the severity and long duration of the drought. Precipitation was less than average beginning in 1960 in western Massachusetts and beginning in 1962 in eastern Massachusetts.

Historical Occurrence at Devens and Vicinity

From 2000 through 2021, Middlesex County experienced 126 drought events, with a 'very high' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 5.7 drought events per year at and near Devens.

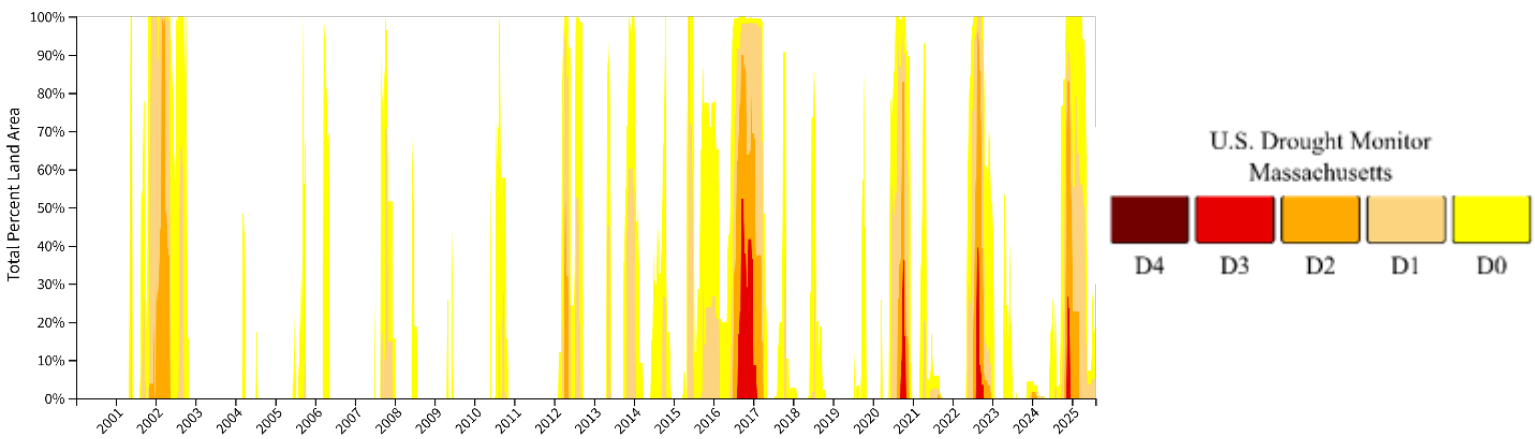


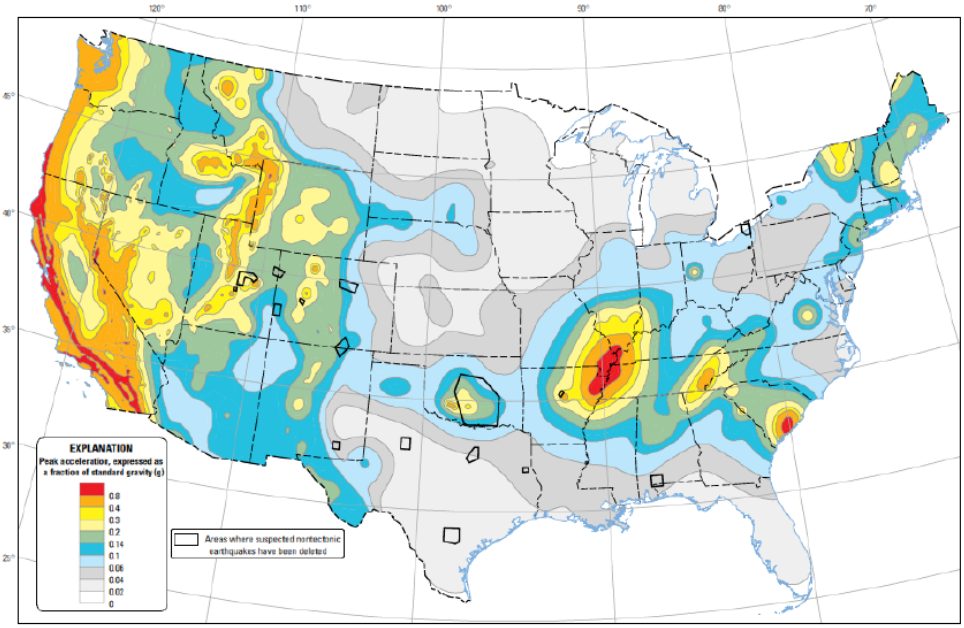
Figure 2-2: Massachusetts Drought History

EARTHQUAKE

Earthquakes occur as the result of tectonic activity. An earthquake is sudden ground motion or trembling caused by an abrupt release of accumulated strain acting on the tectonic plates that comprise the Earth's crust along faults. Although earthquakes have caused much less economic loss annually in the United States than other hazards such as floods, they have the potential for causing great and sudden loss. Within 1 to 2 minutes, an earthquake can devastate part of an area through ground-shaking, surface fault ruptures, and ground failures. The location of an earthquake is commonly described by the geographic position of its epicenter and by its focal depth. The focal depth of an earthquake is the depth from the surface to the region where the earthquake's energy originates (the focus). The epicenter of an earthquake is the point on the Earth's surface directly above the focus. The effects of earthquakes are: 1) ground shaking; 2) ground displacement; and 3) loss of soil strength (liquefaction). Ground shaking is represented by the Peak Ground Acceleration (PGA) and spectral acceleration (SA) response. The PGA reflects the ground acceleration at the top of bedrock. Thick deposits of soil over bedrock will modify (typically increase) the acceleration, resulting in ground surface accelerations that are greater than the PGA. Liquefaction is a function of soil type and density. Earthquake intensity is characterized by: 1) the Richter Scale (**Table 2-2**); and 2) the Modified Mercalli Scale. Seismic hazards include damage to structures and infrastructure, landslides and tsunamis.The National Seismic Hazard Maps (NSHMs), and the hazard model from which they are derived, are used by engineers who construct buildings and need to know how strongly a particular site might be shaken by earthquakes. The NSHMs compile known earthquake sources, their distance from the site in question, and other seismological and geological information to project potential maximum expected ground motions at a site over a particular period of time (50 years).

Figure 2-3 presents the 2% probability of exceedance in 50 years PGA. The 2% in 50 years PGA in the vicinity of Devens is 0.14g, where g is the acceleration of gravity (32.2 ft/sec^2).

Figure 2-3: 2% Probability of Exceedance in 50 yrs Peak Ground Acceleration



Historical Occurrence at Devens and Vicinity

According to the USGS Earthquake Catalog data search, there have been 21 earthquakes of magnitude 2.5 or greater which have occurred in Massachusetts or off the coast since 1974. The largest was a magnitude 3.7 which occurred near the Quabbin Reservoir in 1994. There was one aftershock of magnitude 3.3 associated with this earthquake. The second largest occurred in 2020 near Bliss Corner (Dartmouth) and had a magnitude of 3.6.

Estimated Probability of Occurrence at and Near Devens

The estimated probability of an earthquake near Devens is 0.083% per year.

Table 2-2: Richter Scale

Richter Scale	Earthquake Effects
2.5 or less	Not felt or felt mildly near the epicenter, but can be recorded by seismographs
2.5 to 5.4	Often felt, but only causes minor damage
5.5 to 6.0	Slight damage to buildings and other structures
6.1 to 6.9	May cause a lot of damage in very populated areas
7.0 to 7.9	Major earthquake; serious damage
8.0 or greater	Great earthquake; can totally destroy communities near the epicenter

HAIL

NOAA defines hail as a form of precipitation consisting of solid ice that forms inside thunderstorm updrafts. Hailstorms are a potentially damaging outgrowth of severe thunderstorms. Hailstorms frequently accompany thunderstorms, so their locations and spatial extents overlap. Large hail (greater than 1 inch in diameter) can be destructive. Hail can cause substantial damage to vehicles, roofs, landscaping, and other areas of the built environment. U.S. agriculture is typically the resource most affected by hailstorms, which cause severe crop damage even during minor events. A recent risk, due to the widespread use of solar panels, is hail-related damage to solar panels.

Hail storms are fairly common in Massachusetts, including Devens. For this period of 1990-2021, Massachusetts hail data indicates:

- 1990-2004: 127 days (an average of 8 events per year), with 0 injuries, 0 deaths, and $222K in property damage
- 2005-2009: 78 days (an average of 16 events per year), with 0 injuries, 0 deaths, and $269K in property damage
- 2010-2021: 114 days (an average of 9.5 events per year), with 0 injuries, 0 deaths, and $3.035M in property damage

Per HomeAdvisor.com, the average per building cost, nationally, to repair hail, wind, or storm damage is $10,265 ranging from $350 to $55,000.

The Hail Risk Score (**Table 2-3**) provides a short-to-medium term view of future hail risk based on the last 10 years of ultra-high resolution radar data. The score is based on a scale of 1 to 10, with the lowest score of 1 representing Very Low hail risk (damaging hail unlikely in the next 5-10 years) and the highest score of 10 representing Extreme hail risk (damaging hail very likely every year). Note that the hail risk score is for damaging hail events, not just an occurrence of a hail event.

Historical Occurrence at Devens and Vicinity

From 1986 through 2021, Middlesex County experienced 86 hail events, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 2.5 hail events per year at and near Devens.

Hail Risk Score	Hail Risk	Hail Risk Guidance
1	Very Low	Damaging Hail unlikely in next 5 to 10 years
2	Very Low to Low	Damaging Hail likely every 5 years
3	Low	Damaging Hail likely every 2 to 4 years
4	Low to Moderate	Damaging Hail likely every 2 to 3 years
5	Moderate	Damaging Hail likely every other year
6	Moderate	Damaging Hail very likely every other year
7	Moderate to High	Damaging Hail likely every 1 to 2 years
8	High	Damaging Hail very likely every 1 to 2 years
9	Very High	Damaging Hail likely every year
10	Extreme	Damaging Hail very likely every year

Table 2-3: Hail Risk Score Classifications

HEAT WAVE

The National Weather Service in Taunton issues:

- Excessive Heat Warnings when the daytime heat indices reach 105° F or greater for 2 or more hours
- A Heat Advisory is issued when the daytime heat indices reach 100-104°F for 2 or more hours
- A Heat Wave is defined as 3 or more days of temperatures of 90° F or above.

Heat Index

The Heat Index, also known as the Apparent Temperature, is a subjective measure of what it feels like to the human body when relative humidity is factored into the actual air temperature. Relative humidity is a measure of the amount of water in the air compared with the amount of water that air can hold at the current temperature. The body cools itself through the evaporation of perspiration or sweat. However, when the relative humidity is high, the increased moisture content in the air decreases the evaporation of perspiration or sweat. For example, a hot and very humid air mass with a temperature of 94°F and a relative humidity of 45 percent yields an apparent temperature of 100°F. Holding the temperature constant and increasing the relative humidity to 60 percent yields an apparent temperature of 110°F.

The National Weather Service will initiate alert procedures when the Heat Index is expected to exceed 104°F (depending on local climate). Under these conditions, sunstroke and heat exhaustion are likely, and physical activity or being outside for long periods is risky, potentially leading to heat stroke.

These dangerous heat days pose the greatest threat to children and the elderly, and to people who don't have easy access to air conditioning. The Heat Index values were derived for shady, light wind conditions, and exposure to full sunshine can increase heat index values by up to 15°F (https://www.wpc.ncep.noaa.gov/html/heatindex.shtml).

From 1979-2014, excessive heat exposure caused in excess of 8,000 fatalities in the United States (EPA, May 2014). During this period, more people in this country died from extreme heat than from hurricanes, lightning, tornadoes, floods, and earthquakes combined.

The highest temperature recorded in Massachusetts was 107°F on August 2, 1975, in Chester and New Bedford According to the 2018 State Hazard Mitigation and Climate Adaptation Plan, there have been 43 warm weather events since 1995, ranging from Record Warmth/Heat to Excessive Heat events. During the period from 1985 to 2016, the heat-related mortality rate was about 2.9 per 100,000 people in Boston (Climate Ready Boston Executive Summary, December 2016).

Additional Heat Effects

In addition to the Heat Index, air quality is a significant issue related to extreme temperature. Summers in the U.S. bring more than just searing, dangerously hot days. When the air is stagnant and there is little air circulation, hot weather can trigger high levels of air pollution that can have health consequences. High temperatures on sunny days make ground-level ozone (a major component of smog) form much more readily. An EPA study looking at more than 20 years of measurements across most of the rural areas in the eastern U.S. found that harmful ozone concentrations increased nearly linearly as temperatures increased and named the effect the "climate penalty on ozone."

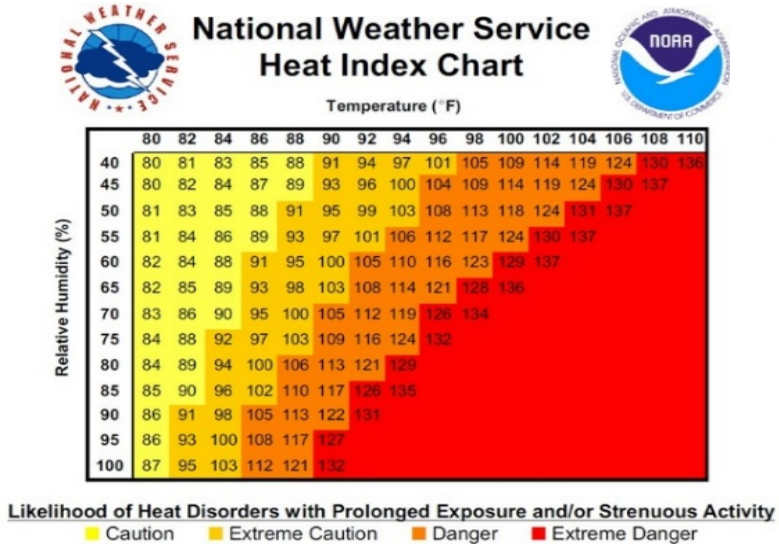


Figure 2-3: Heat Index Chart

Occurrence in Devens and Vicinity

From 2005 through 2021, Middlesex County experienced 7 heat wave events, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 0.4 heat wave events per year at and near Devens.

HURRICANES

Hurricanes, tropical storms and tropical depressions are tropical cyclones (rotating low pressure weather systems that have organized thunderstorms but no pressure fronts – a boundary separating two air masses of different densities). Tropical cyclones with maximum sustained surface winds of less than 39 miles per hour (mph) are called tropical depressions. Those with maximum sustained winds between 39 mph and 73 mph are tropical storms. Hurricanes are tropical cyclones with sustained wind speeds of 74 mph or higher.

East Coast hurricanes originate in the Atlantic basin, which includes the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico. A six-year rotating list of names, updated and maintained by the World Meteorological Organization, is used to identify these storms. "Hurricane Season" begins on June 1 and ends on November 30, although hurricanes can, and have, occurred outside of this time frame (NOAA National Ocean Service).

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating, or category, based on a hurricane's maximum sustained winds. The higher the category, the greater the hurricane's potential for property damage (NOAA National Ocean Service). A major hurricane (Categories 3, 4 and 5) has sustained wind speeds of 111 mph or higher on the Saffir-Simpson Hurricane Wind Scale.

Historic hurricane and tropical storm tracks which have passed within 100 nautical miles of Devens are presented in **Figure 2-5** (source: Historical Hurricane Tracks). Historic hurricane tracks which have passed within 100 nautical miles of Devens are presented in **Figure 2-6**.

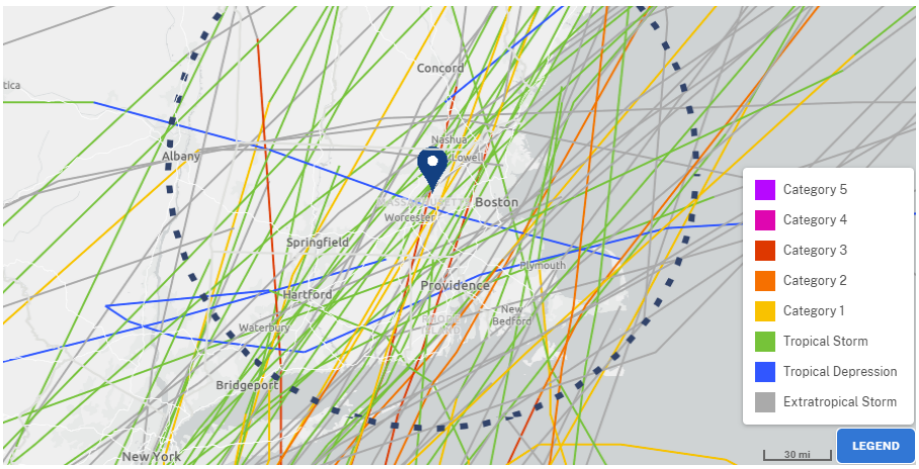


Figure 2-4: Hurricanes and Tropical Storms within 100 Nautical Miles of Devens

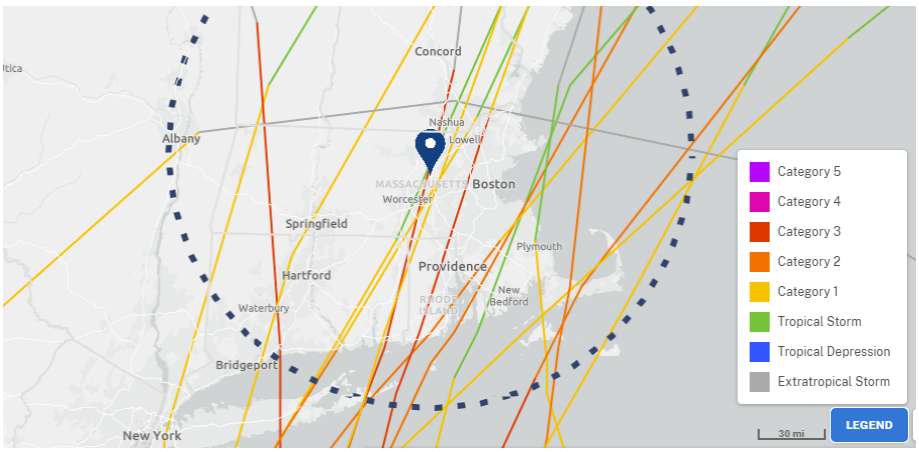


Figure 2-5: Hurricanes within 100 Nautical Miles of Devens

Notable hurricanes to pass within 100 nautical miles of Devens include the Unnamed Hurricanes of 1938 and 1944 (Category 5), Hurricane Donna (1960) and Gloria (1985) (Category 4) and Hurricane Carol (1954), Edna (1954), and Bob (1991) (Category 3).

Historical Occurrence at Devens and Vicinity

From 1851 through 2021, Middlesex County experienced 13 hurricane events, with a 'relatively low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 0.2 hurricane events per year at and near Devens.

ICE STORM

Ice storms are an occasional component of severe winter weather. Rain that falls and freezes on contact with cold surfaces is called freezing rain, while sleet is precipitation that freezes in the air before hitting the ground in the form of ice pellets. Heavy accumulations of ice can bring down trees or tree branches that may damage utility wires, causing power and communications outages, which may take days to repair. Ice can increase the weight of branches by 30 times. A 1/2-inch accumulation on power lines can add 500 lbs. of weight. Even slight accumulations of ice result in slippery conditions for motorists and pedestrians.

The National Weather Service issues:

- Ice Storm Warning for a quarter-inch or more of ice accumulation
- Freezing Rain Advisory for ice accumulation of less than one quarter-inch

Historical Occurrence at Devens and Vicinity

From 1946 through 2021, Middlesex County experienced 191 ice storm events, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 2.8 ice storm events per year at and near Devens.

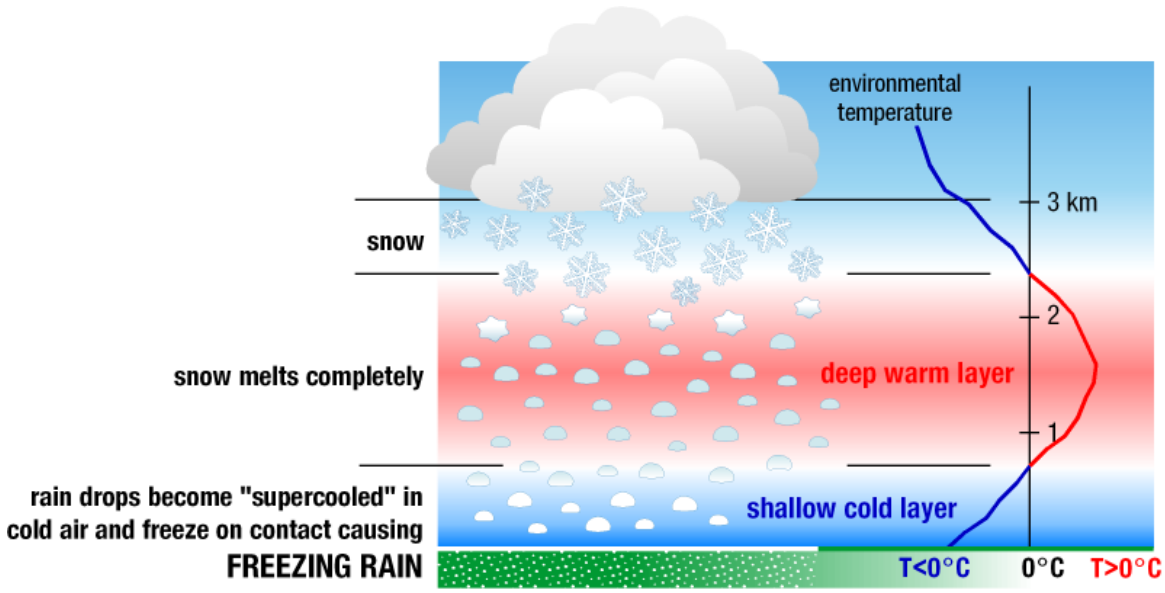


Figure 2-6: Winter Precipitation Progression

LANDSLIDE

A landslide is the movement of a mass of rocks, debris, or earth down a slope. Landslides are a type of "mass wasting," which denotes any down-slope movement of soil and rock under the direct influence of gravity. The term "landslide" encompasses five modes of slope movement: falls, topples, slides, spreads, and flows. These are further subdivided by the type of geologic material (bedrock, debris, or earth). Debris flows (commonly referred to as mudflows or mudslides) and rock falls are examples of common landslide types. Almost every landslide has multiple causes. Slope movement occurs when forces acting down-slope (mainly due to gravity) exceed the strength of the earth materials that compose the slope. Causes include factors that increase the effects of down-slope forces and factors that contribute to low or reduced strength. Landslides can be initiated in slopes already on the verge of movement by rainfall, snowmelt, changes in water level, stream erosion, changes in ground water, earthquakes, volcanic activity, disturbance by human activities, or any combination of these factors (source: USGS).

The topography of the Devens study area includes eskers and steep slopes, many of which are protected through permanently protected open space and DEC Slope Resource Area regulations that protect steep slopes from development and preserve existing stabilizing vegetative cover. Landslides may pose a risk to transportation infrastructure by way of landslide risk to roadway embankments. Landslide risk is spatially analyzed using gridded data which classifies the landslide hazard susceptibility of an area (**Figure 2-8**). The entire Devens area is considered to have moderate susceptibility, with low incidence.

Historical Occurrence at Devens and Vicinity

From 2010 through 2021, Middlesex County experienced 0 landslide events, with a ‘very low’ historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 0 landslide events per year at and near Devens.

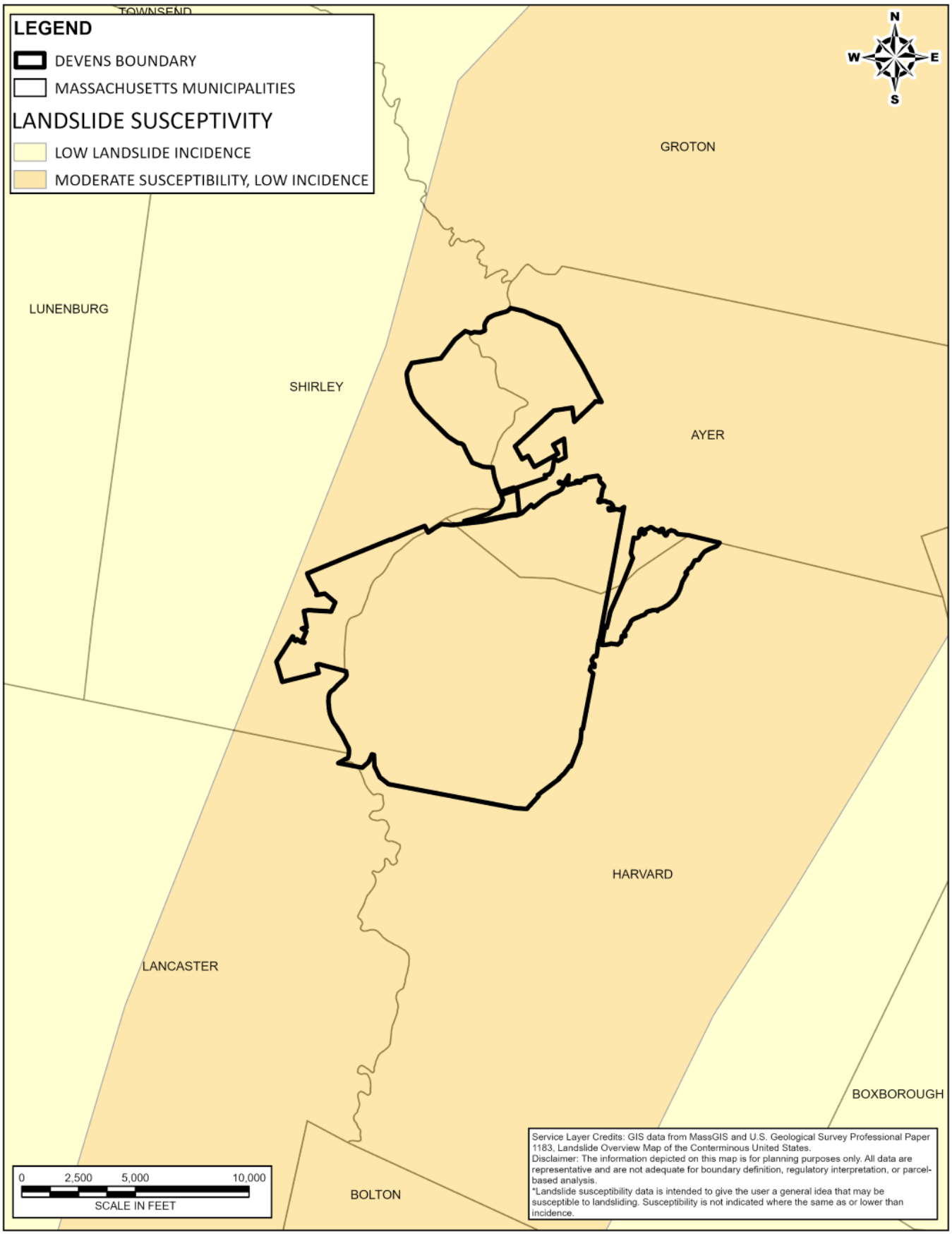


Figure 2-7: Landslide Hazard Susceptibility

LIGHTNING

Lightning is the second most common storm-related killer in the United States. It causes several billion dollars in property damage each year and kills several dozen people. It is a frequent cause of wildfires and costs airlines billions of dollars per year in extra operating expenses.

Lightning is a giant spark of electricity in the atmosphere between clouds, the air, or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges builds up enough, this insulating capacity of the air breaks down and there is a rapid discharge of electricity that we know as lightning. The flash of lightning temporarily equalizes the charged regions in the atmosphere until the opposite charges build up again. Lightning can occur between opposite charges within the thunderstorm cloud (intra-cloud lightning) or between opposite charges in the cloud and on the ground (cloud-to-ground lightning).

Massachusetts, including Worcester County, has a moderate risk associated with Lightning strikes relative to other states. **Figure 2-9 and Figure 2-10** show the number of fatalities and relative fatality rates by state. In Massachusetts, there have been 6 Lightning fatalities during the period of 2005 and 2014 (an average of less than 1 per year).

Historical Occurrence at Devens and Vicinity

From 1991 through 2021, Middlesex County experienced 268 lightning events, with a 'relatively high' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 12.1 lightning events per year at and near Devens.

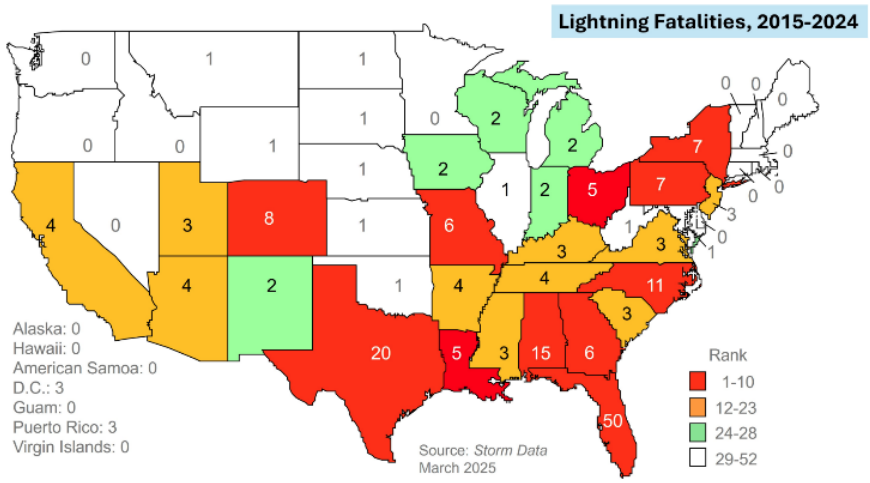


Figure 2-9: Lightning Fatalities by State, 2015-2024 (Source: Vaisala)

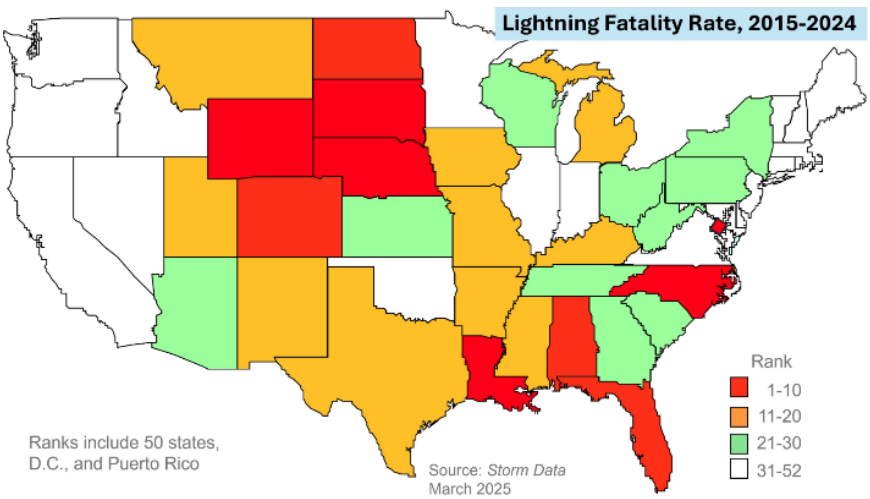


Figure 2-8: Lightning Fatalities Weighted by Population, 2015-2024 (Source: Vaisala)

RIVERINE FLOODING

A flood is the partial or complete inundation of normally dry land. The various types of flooding include riverine flooding, coastal flooding, and shallow flooding. Common impacts of flooding include damage to personal property, buildings and infrastructure; bridge and road closures; service disruptions; and injuries or even fatalities. Riverine flooding includes flooding caused by river flows which overtop the riverbanks and spread into the surrounding floodplain or other low-lying areas. Flooding is often caused by heavy rain resulting from thunderstorms, nor'easters, tropical storms, and hurricanes. In addition, the spring rainy season is a particularly hazardous time, as runoff from winter snowfalls can saturate wetlands and fill the streams and brooks. A heavy or severe rain event at this time of year can often overwhelm natural flood storage and create flood hazards on streets and residential areas. In addition to flooding from riverine sources, localized intense precipitation has become increasingly hazardous for communities. Also known as flash flooding, intense precipitation may overwhelm a community's stormwater system and flood roadways. Preservation of riparian corridor vegetation and adjacent floodplains, as well as no net loss in wetlands, helps reduce riverine flooding in Devens.

FEMA Flood Hazard Determination

Through FEMA's flood hazard mapping program, Risk Mapping, Assessment and Planning (MAP), FEMA identifies flood hazards, assesses flood risks and partners with states and communities to provide accurate flood hazard and risk data to guide them to mitigation actions. Flood hazard mapping is an important part of the National Flood Insurance Program (NFIP), as it is the basis of the NFIP regulations and flood insurance requirements. FEMA maintains and updates data through Flood Insurance Rate Maps (FIRMs) and risk assessments. The Flood Insurance Study (FIS) for Middlesex County and Worcester County were both last revised in July 2025. The Special Flood Hazard Areas (shaded areas) shown on the FIRM are designated Zone A and all other (unshaded) are designated Zone X (**Figure 2-11**). Zone A is the flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood". These areas within Devens are associated with the Nashua River. The Zone A areas in Devens have Base Flood Elevations (BFEs) ranging from 216 feet at the northern boundary to 227 feet at the southern boundary.

Historical Occurrence at Devens and Vicinity

From 1996 through 2021, Middlesex County experienced 85 riverine flooding events, with a 'relatively low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 3.5 riverine flooding events per year at and near Devens.

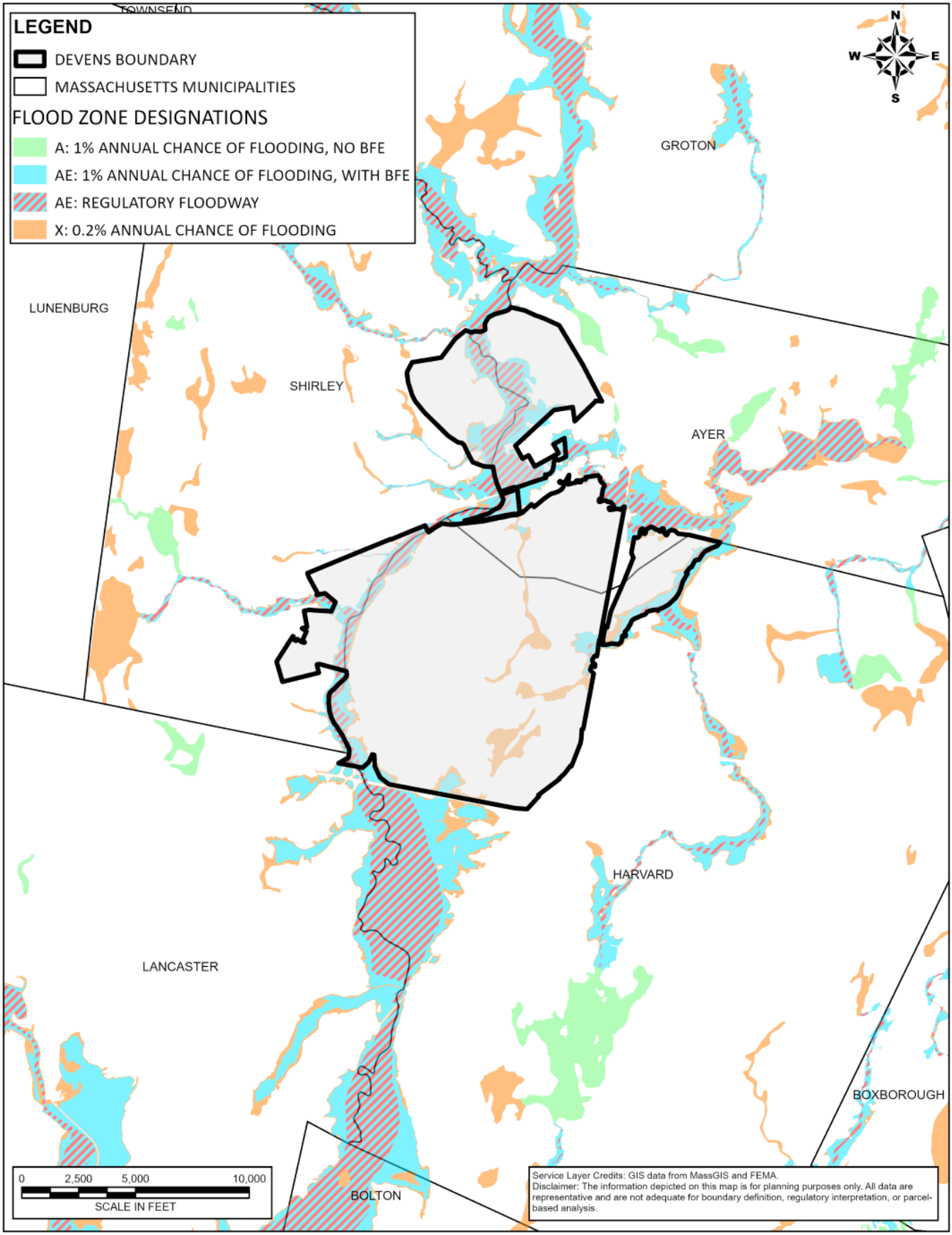


Figure 2-10: FEMA Flood Hazard Areas

STRONG WIND

Severe wind, sometimes referred to as Damaging wind, is wind that can result in damaging impacts to infrastructure or vegetation. Severe wind (including high to extreme wind) will typically occur in the Town as a result of: 1) tropical storms and hurricanes; 2) extratropical nor'easters; 3) severe thunderstorms; and 4) tornadoes. Severe thunderstorms and tornadoes are convective weather events. Extreme "straight line" convective wind events include microbursts, macrobursts and derechos. Derechos are widespread, long-lived, and violent convectively-induced "straight-line" windstorms associated with a fast moving band of severe thunderstorms. "Thunderstorm winds," arising from convection are winds with speeds greater than 58 mph or winds of any speed producing damage, injury, or fatality.

Severe wind poses a threat to life, building structures, and essential facilities (e.g., electrical utilities) due to the effects of wind loads, flying debris, and/or downed trees and power lines. Severe wind will typically cause the greatest damage to lightly-constructed structures, in particular manufactured homes. Downed tree limbs can also cause property and vehicle damage, impact roadways, and in rare instances, cause loss of life. These storms may be accompanied by lightning, which can spark fires. During hurricanes and tropical storms, high winds can also occur coincident with intense rainfall and during nor'easters, high winds can occur coincident with snow (blizzards), rain and a snow/rain mix. Preservation of existing vegetation and strategic re-planting in Devens helps provide wind breaks and reduce wind impacts.

Wind speeds are categorized by the National Weather Service based on potential for structure damage and public health risk, with a distinction between sustained (1- minute duration) wind speeds and gust (3 second duration) wind speeds:

- Wind Advisory: 1) sustained winds of 31 to 39 mph for an hour or more; and/or 2) wind gusts of 46 to 57 mph for any duration.
- High Wind Watch/Warning: 1) sustained winds of 40 mph for one hour or more; or 2) wind gusts of 58 mph or higher for any duration.
- Hurricane Warning: sustained winds of 74 mph or higher or frequent (for more than 2 hours) gusts of 74 mph or greater associated with a tropical cyclone.
- Extreme Wind: 1) surface winds of 115 mph or greater associated with a derecho or sustained hurricane winds.
- Severe Thunderstorm Watch/Warning: winds of 58 mph or higher and/or hail 1- inch in diameter or larger.

The 10th edition of the Massachusetts State Building Code utilizes wind gusts as the basis for structure design. The wind speed design requirements (in terms of 3-second gust) are presented in **Table 2-4**.

Risk Category	3-second Gust (mph)
Risk Category I	107
Risk Category II	116
Risk Category III	125
Risk Category IV	129

Table 2-4: MA Building Code Wind Speed Mean Design Requirements

Historical Occurrence at Devens and Vicinity

From 1986 through 2021, Middlesex County experienced 31 days of strong wind events, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and near Devens

The historical occurrences indicate an annualized frequency of 0.9 strong wind events per year at and near Devens.

TORNADOES

A tornado is a violently rotating column of air that has contact with the ground and is often visible as a funnel cloud. The destruction caused by tornadoes ranges from light to catastrophic depending on the intensity, size, and duration of the storm. Typically, tornadoes cause the greatest damage to structures of light construction, including residential dwellings and particularly manufactured homes. Tornadoes are more likely to occur during the months of March through May and tend to form in the late afternoon and early evening.

Since 2007, tornadoes have been categorized according to the Enhanced Fujita scale:

Scale	Wind speed estimate		Potential damage
	mph	km/h	
EF0	65–85	105–137	Minor damage. Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over. Confirmed tornadoes with no reported damage (i.e., those that remain in open fields) are always rated EF0.
EF1	86–110	138–177	Moderate damage. Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
EF2	111–135	178–217	Considerable damage. Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes completely destroyed; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.
EF3	136–165	218–266	Severe damage. Entire stories of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations are badly damaged.
EF4	166–200	267–322	Devastating damage. Well-constructed and whole frame houses completely leveled; cars and other large objects thrown and small missiles generated.
EF5	>200	>322	Incredible damage. Strong-framed, well-built houses leveled off foundations are swept away; steel-reinforced concrete structures are critically damaged; tall buildings collapse or have severe structural deformations; some cars, trucks, and train cars can be thrown approximately 1 mile (1.6 km).

Table 2-5: Enhanced Fujita Scale for Tornadoes

Historical Occurrence at Devens Vicinity

From 1950 through 2021, Middlesex County experienced 1 tornado event, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and Near Devens

The historical occurrences indicate an annualized frequency of 0.01 tornado events per year at and near Devens.

WILDFIRE

A wildfire is a non-structure/vehicle fire that occurs in undeveloped, wildland vegetated areas, including grass, brush/shrub, and forested areas. Wildfires occur when natural vegetation is ignited naturally, such as by lightning, or by human activity. Sometimes, wildfires are set intentionally for management of vegetation or to limit accidental fire risk. Wildfires may be unnoticed at first. Unnoticed fires often spread to the urban-wildland interface and threaten developed areas. Devens is largely developed. According to the Wildfire Hazard Potential (WHP), developed by the U.S. Forest Service (**Figure 2-12**), there is generally low WHP in Devens. Most of the southern portion of the community is classified as 'non-burnable' area; however, if wildfires do occur in certain areas within Devens, they may expand into larger areas that are off limits to fire fighters due to the presence of potential unexploded ordnance associated with the former Army base.

In addition to the area of Devens under control of MassDevelopment and the Devens Enterprise Commission, the Devens Department of Public Safety provides services to the Devens Reserve Forces Training Area (DRFTA) that encompasses 5220 acres (8.2 Sq. Miles) under control of the US Army. While this is outside of the Devens Community boundary, it is noted that this area has several munition-caused fires annually that can reach over 100 acres.

Historical Occurrence at Devens and Vicinity

In Devens, there have been no reports of significant property damage or deaths related to brush fires or wildfire.

Estimated Probability of Occurrence at and Near Devens

The estimated probability of wildfire near Devens is 0.023% per year (source: FEMA National Risk Index).

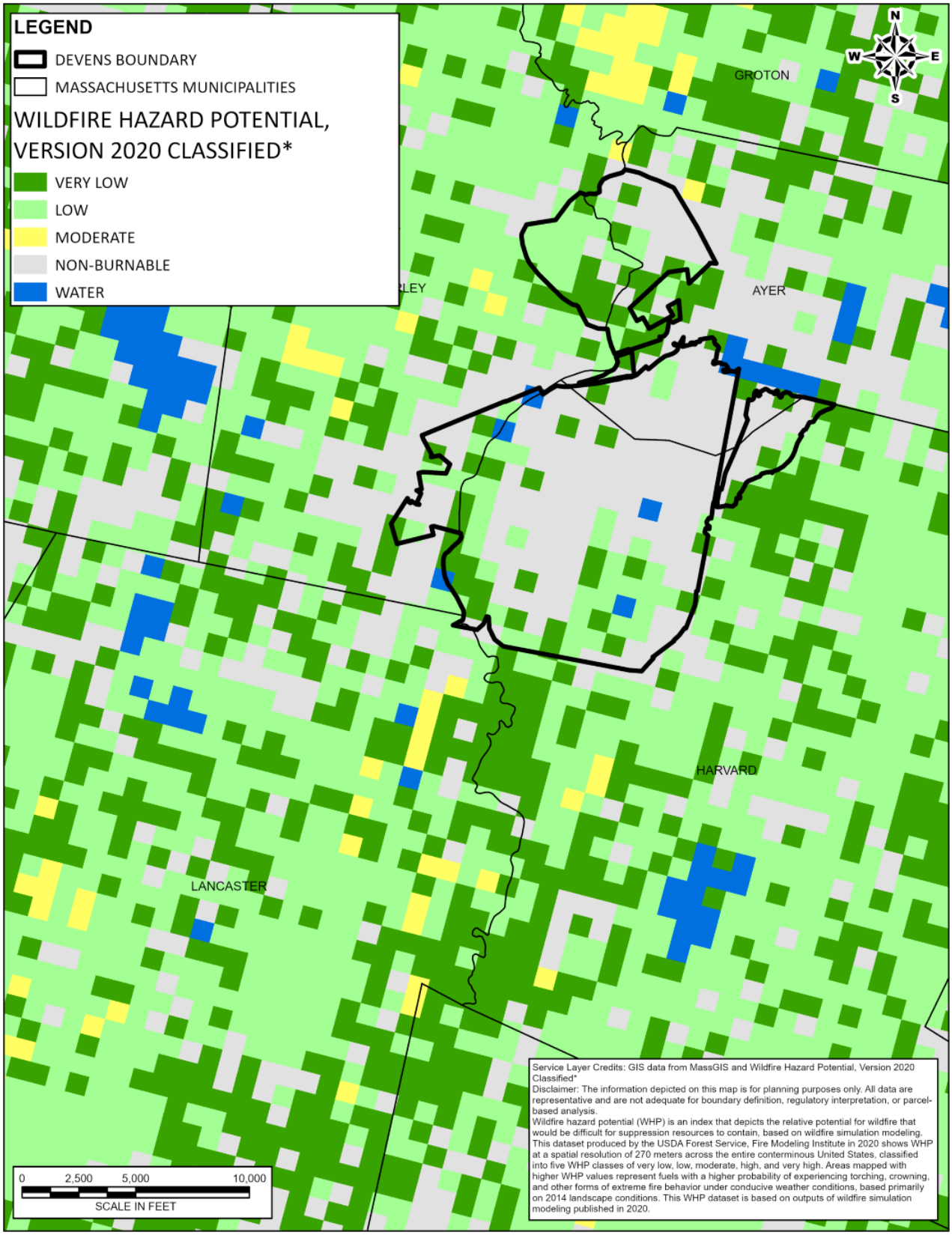


Figure 2-11: U.S. Forest Service Wildfire Hazard Potential

WINTER WEATHER

Severe winter weather includes large snow events, blizzards and ice storms. As defined by the National Weather Service, a blizzard is a snowstorm with sustained winds or frequent gusts of 35 miles an hour or greater and considerable falling and/or blowing snow (i.e., reducing visibility frequently to less than a quarter of a mile) for a period of 3 hours or longer. NOAA's National Centers for Environmental Information produces the Regional Snowfall Index (RSI) for significant snowstorms that impact the eastern two thirds of the U.S. The RSI ranks snowstorm impacts on a scale from 1 to 5, as shown in **Table 2-6**. RSI is based on the spatial extent of the storm, the amount of snowfall, and the juxtaposition of these elements with population density and societal impacts. Currently, the index uses population data based on the 2000 Census. A similar storm index is the Northeast Snowfall Impact Scale (NESIS), also shown below. (Reference: NOAA; https://www.ncdc.noaa.gov/snow-and-ice/rsi/

Table 2-6: Regional Snowfall Index and Northeast Snowfall Impact Scale

Category	RSI Value	Description	Category	NESIS Value	Description
1	1-3	Notable	1	1-2.5	Notable
2	3-6	Significant	2	2.5-4	Significant
3	6-10	Major	3	4-6	Major
4	10-18	Crippling	4	6-10	Crippling
5	18+	Extreme	5	10+	Extreme

Severe winter weather in Massachusetts is almost always associated with nor'easters. Notable winter weather events to impact Massachusetts are listed in **Table 2-7**.

Table 2-7: Major Historical Nor'easters in New England

Event	RSI Value	NESIS Value
February Blizzard (1969)	34.0	5
Northeastern United States Blizzard of 1978	18.4	5
1993 Storm of the Century	22.1	5
North American Blizzard of 1996	21.8	5

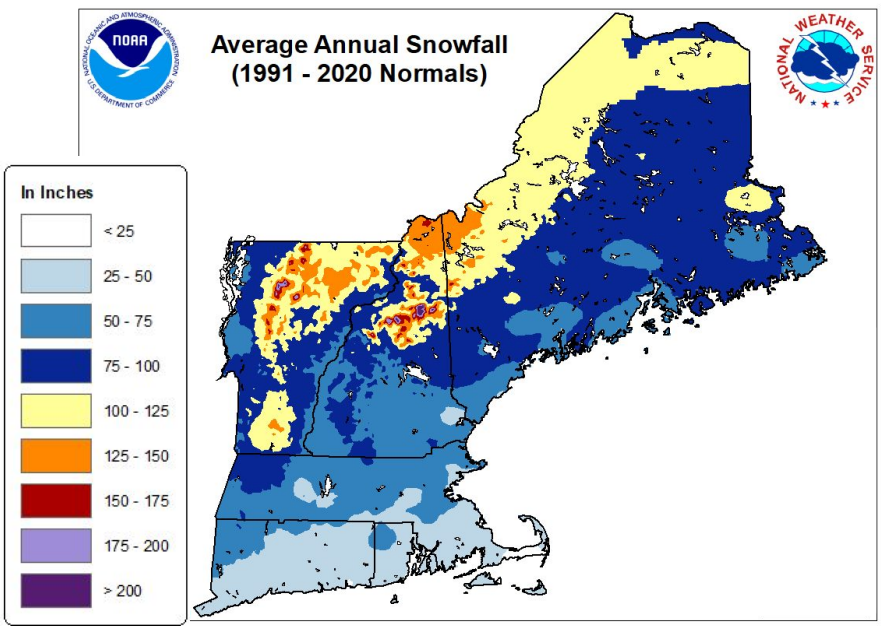


Figure 2-13: Northeast Average Annual Snowfall

Figure 2-13 indicates the average annual snowfall amounts for the Northeast U.S. The average snowfall per year near Devens in eastern Massachusetts is about 50 to 75 inches, with generally lower snowfall rates than far western Massachusetts.

Historical Occurrence at Devens and Vicinity

From 2005 through 2021, Middlesex County experienced 112 winter weather events, with a 'very low' historic loss ratio (source: FEMA National Risk Index).

Estimated Probability of Occurrence at and near Devens

The historical occurrences indicate an annualized frequency of 6.8 winter weather events per year at and near Devens.

Attachment 3: Natural Hazard Risk

Attachment 3: Natural Hazard Risk

Natural Hazard Risk Overview

A Natural Hazard Risk Assessment was conducted by GZA to evaluate the potential consequences of natural hazards to the people, economy, and built and natural environments of Devens. The risk assessment was performed based on guidance provided by the FEMA Local Mitigation Planning Handbook and included the Local Planning Team (LPT). Six planning meetings were held monthly, on average, throughout the project. The Natural Hazard Risk Assessment evaluates the effects of the relevant natural hazards (described in Attachment 2) on the community assets (identified in Attachment 1). The methodology assesses risk in terms of: 1) the likelihood (i.e., frequency) of the natural hazard occurring; 2) the predicted effects (damages, losses, etc.); and 3) the consequences (e.g., costs) associated with those effects.

A vulnerability analysis was performed based on historical data and by spatially comparing the hazard data to the community assets. In particular, the vulnerability of the Community to flooding was assessed by identifying which assets are located within the FEMA flood zones (Special Flood Hazard Areas).

The FEMA Multi-Hazard MH-Hazus program was used to evaluate losses due to flood hazards. The FEMA National Risk Index was used to score all other hazards. The hazard index is a function of the exposure, annualized frequency, and historic loss ratio for a hazard, as well as the social vulnerability and community resilience for the community. The scoring process and results were reviewed by the LPT to assess Deven's current "perceived" risk.

Historical Hazard Events

Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207 (the Stafford Act), a Governor of a State affected by an emergency or a disaster can submit a request for a declaration by the President of the United States that a major disaster exists. The President can declare a major disaster for any natural event, including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought, or, regardless of cause, fire, flood, or explosion, that the President determines has caused damage of such severity that it is beyond the combined capabilities of state and local governments to respond.

A major disaster declaration provides a wide range of federal assistance programs for individuals and public infrastructure, including funds for both emergency and permanent work (FEMA, "The Disaster Declaration Process", https://www.fema.gov/disaster-declaration-process).

Table 3-1 presents disaster declarations which have been made since 1995 in Massachusetts (current through September 24, 2025). These disaster declarations included Middlesex or Worcester County. Based on past declarations, the most common natural disasters were Severe Weather Hazards, including flooding, winter storms, snowstorms; and hurricanes and tropical storms.

Table 3-1: Major Disaster Declarations in Massachusetts 1995 to 2025

Disaster	Declaration Date	Disaster	Declaration Date
Severe Storms and Flooding (DR-4780)	5/15/2024	Severe Storm and Flooding (DR-1895)	3/29/2010
Severe Winter Storm and Snowstorm (DR-4651)	4/18/2022	Severe Winter Storm and Flooding (DR-1813)	1/5/2009
Covid-19 Pandemic (DR-4496)	3/27/2020	Severe Storms and Flooding (DR-1642)	5/25/2006
Severe Winter Storm and Snowstorm (DR-4379)	7/19/2018	Severe Storms and Flooding (DR-1614)	11/10/2025
Severe Winter Snowstorm & Flooding (DR-4214)	4/13/2015	Flooding (DR-1512)	4/21/2004
Severe Winter Snowstorm & Flooding (DR-4110)	4/19/2013	Severe Storms & Flooding (DR-1364)	4/10/2001
Severe Storm and Snowstorm (DR-4051)	1/6/2012	Heavy Rain and Flooding (DR-1224)	6/23/1998
Severe Storms and Tornadoes (DR-1994)	6/15/2011	Severe Storms/Flooding (DR-1142)	10/25/1996
Severe Winter Storm and Snowstorm (DR-1959)	3/7/2011	Blizzard (DR-1090)	1/24/1996

Ranking Hazards

The natural hazards were ranked according to the FEMA National Risk Index (FEMA, 2021). The National Risk index is a dataset and online tool that utilizes available natural hazard and community risk factors data to develop a relative risk measurement for counties and census tracts. Its intended use is to help planners and emergency managers at the local, regional, state, and federal level better understand the natural hazard risk of their communities.

Risk is driven by loss due to natural hazard, social vulnerability, and community resilience. Risk is calculated using the following equation:

$$\text{Risk} = \frac{\text{Expected Annual Loss} \times \text{Social Vulnerability}}{\text{Community Resilience}}$$

The risk index scores are calculated for each natural hazard. The social vulnerability and community resilience scores remain the same for each hazard, while the expected annual loss (EAL) varies by hazard. Social vulnerability is the susceptibility of social groups to the adverse impacts of natural hazards. The score is a relative score and indicates the relative level of a community's social vulnerability compared to other communities at the same level. Community resilience is the ability of a community to prepare for a natural disaster, adapt to changing conditions, withstand and recover rapidly from disruptions. Similar to social vulnerability, it is a relative score and represents the community's relative level compared to other communities at the same level. The EAL represents the average economic loss in dollars resulting from a certain natural hazard each year. The EAL for each hazard is calculated as the product of exposure, annualized frequency, and historic loss ratio. Exposure represents the value of buildings, population, or agriculture potentially exposed to a natural hazard occurrence. Annualized frequency represents the expected frequency or probability of a natural hazard occurrence per year. Historic loss ratio represents the estimated percentage of the exposed building value, population, or agriculture value expected to be lost due to a natural hazard occurrence.

The FEMA National Risk Index provides risk index scores at county and census tract levels. As shown in **Figure 3-1**, the three census tracts within the Devens boundary rank as 'very low' or 'relatively low' for the overall risk index. Further breakdown of the risk index for each hazard is presented in **Table 3-2**.

There are qualitative ratings associated with each numerical score, ranging from "Very Low" to "Very High". There are no specific numeric values that determine the rating since the scores are relative to other communities at the same level. Numeric scores range from 1-100.

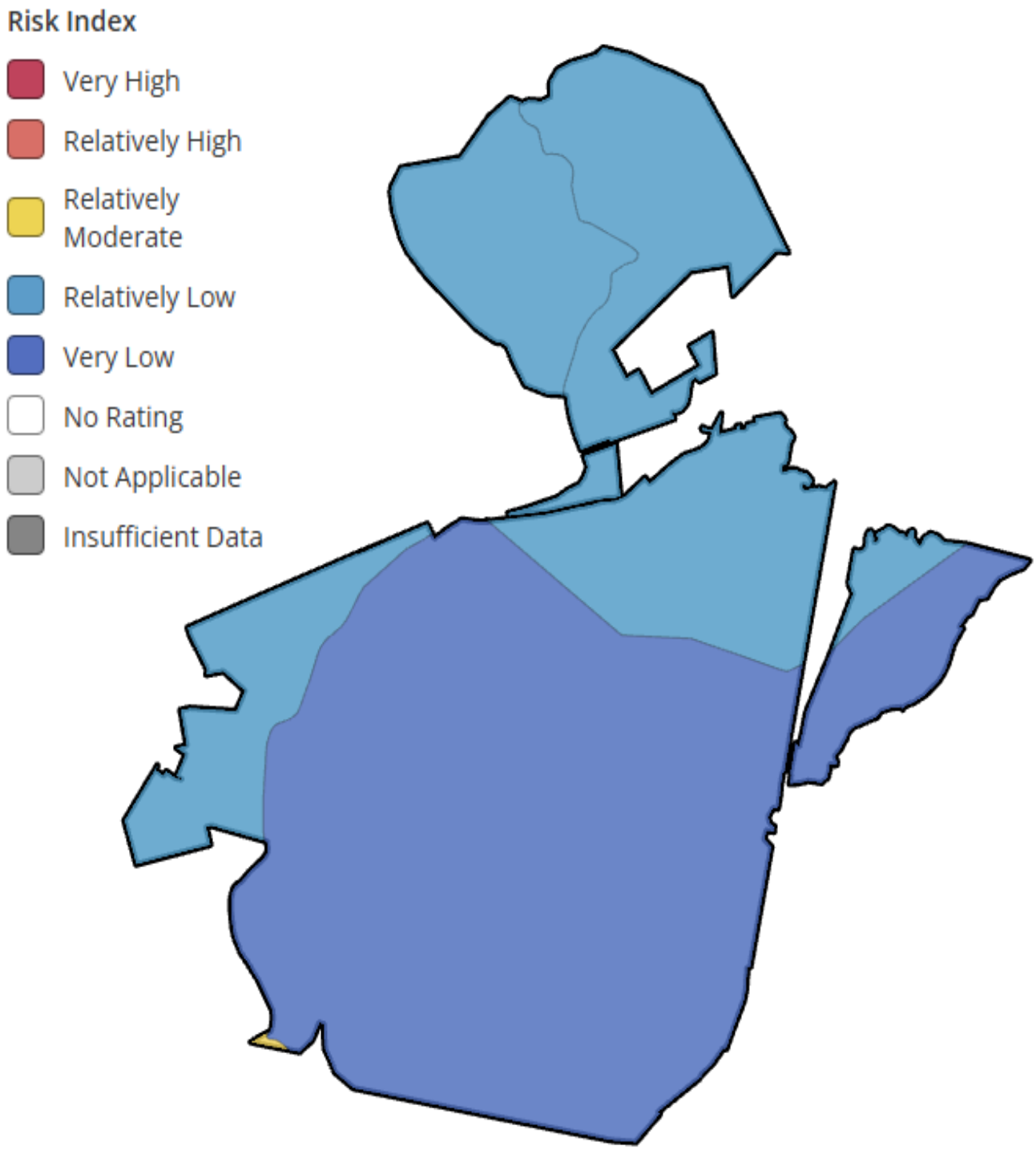


Figure 3-1: FEMA National Risk Index Rating by Census Tract

Table 3-2 presents the results of the hazard ranking for Devens. The top ranked hazards include: 1) riverine/overbank flooding and flooding caused by intense precipitation; 2) hurricanes/tropical storms, which include strong wind and precipitation flooding impacts; and 3) severe winter weather (large snowfall events and ice storms).

- Riverine/ Inland Flooding

  Riverine and other inland flooding is a top ranked hazard due to high economic loss associated with damages to buildings within the floodplain and impacts to transportation infrastructure. Although the 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. The Community has noted that local intense precipitation events have been occurring more frequently. However, as Devens is a master-planned community, careful consideration was given to avoiding development in wetlands and floodplains, thereby lowering the risk of adverse impacts from flooding.

- Winter Weather

  Severe winter weather most frequently occurs during nor'easters, coincident with high winds, cold temperatures, and/or blizzard conditions. Winter weather presents risks due to transportation impacts (limited use of roadways), cold temperatures, and the potential for structural damage (roof failures). Snowfall and ice accumulation can lead to downed trees or tree branches that can cause power outages or property damage. Although the risk index score for winter weather is relatively low, it is included as a top hazard due to committee feedback and experience.

- Hurricane

  Hurricane is ranked highly due to its severe wind coincidence with riverine flooding and its potential for widespread damage. A hurricane strike at or near Devens with a 1% probability of occurrence (100-year recurrence interval) would be catastrophic (similar to the 1938 and 1954 hurricanes). In addition to high winds, hurricanes will also create heavy rainfall.

- Drought/ Wildfire

  Drought and wildfire is ranked highly due to potential severity associated with an occurrence. Drought and Wildfire both have high risk index scores according to the FEMA National Risk Index. Although there is a relatively low probability of wildfire near Devens, there is an added risk due to firefighting access associated with Unexploded Ordnances (UXOs) in certain locations.

Table 3-2: Natural Hazard Rankings for Devens

Natural Hazards	Risk Index Score	Risk Index Rating (FEMA National Risk Index)
Cold Wave	57.9	Relatively Low
Drought	96.6	Relatively Moderate
Earthquake	72	Relatively Low
Hail	24.3	Very Low
Heat Wave	38.5	Relatively Low
Hurricane	81.7	Relatively Moderate
Ice Storms	63.8	Relatively Low
Landslides	65.1	Relatively Low
Lightning	68.3	Relatively Moderate
Riverine Flooding	80.3	Relatively Moderate
Strong Wind	19.3	Very Low
Tornado	42.1	Relatively Low
Wildfire	87.3	Relatively Moderate
Winter Weather	34.7	Relatively Low

For comparison of Devens's hazard ranking with the Commonwealth, all of the census blocks within the study area have an overall risk index rating that is lower than the Commonwealth's average.

Hazard Vulnerability Assessment

As indicated by the past Presidential Disaster Declarations (**Table 3-1**), Devens (like much of Massachusetts) is principally vulnerable to the following frequent severe weather hazards: 1) flooding that occurs during intense precipitation, hurricanes, and nor'easters; 2) severe winds due to tornadoes, thunderstorms, and hurricanes, which can occur coincident with flooding; and 3) heavy snowfall during winter nor'easters. Climate change has the potential to amplify the intensity and frequency of each of these hazards.

The Plow Shop Pond Dam is a significant hazard dam and presents a dam failure hazard.

Flood Vulnerability

The Community is vulnerable to riverine flood events. There are many surface waters throughout Devens that present flooding potential; however, FEMA-mapped floodplain areas are limited to the Nashua River and its tributaries. **Attachment 2** presents details about Devens' flood hazards. **Figure 3-2** presents the FEMA preliminary special flood hazard areas (SFHA) within Devens.

A screening level assessment of flood vulnerability relative to the FEMA 100-year (1% AEP) SFHAs indicates:

Essential Facilities

- Police (59 Buena Vista Street at the time of the Plan Update, and anticipated to be moved to 115 Queenstown Street by 2027): Not Vulnerable
- Fire and Rescue (270 Barnum Road at the time of the Plan Update, and anticipated to be moved to 115 Queenstown Street by 2027): Not Vulnerable
- Emergency Vehicle Garages (9 Cook Street): Not Vulnerable
- Emergency Shelters (100 Sherman Avenue, 99 Buena Vista Street): Not Vulnerable
- Hospitals/Healthcare (24 Patton Road, 85 Patton Road, 29 Buena Vista Street, 84 Antietam Street): Not Vulnerable

Lifeline Systems

- Electric Transmission Lines: Not Vulnerable
- Private Transmission Towers: Three Vulnerable (Devens Golf Course, MA Development Financial Agency)
- Commercial Transmission Towers: Not Vulnerable

Transportation Infrastructure

- Airports: None present
- Public Transit Stations: Not Vulnerable
- Roads and Bridges: Vulnerable (certain structures; see below)

Based on the FEMA Flood Insurance Rate Map (FIRM), certain roads are vulnerable to flooding, including:

- Barnum Road
- Hospital Road
- Jackson Road
- Lovell Street
- Macpherson Road
- Patton Road
- Saratoga Boulevard

Based on the FEMA Flood Insurance Rate Map (FIRM), certain bridges are vulnerable to flooding, including:

- Hospital Road Bridge
- Lovell Street Bridge

Support, High Occupancy, and Vulnerable Populations

- Administration Buildings: Not Vulnerable
- Athletic Fields: Not Vulnerable
- Community Centers & Rec Facilities: Not Vulnerable
- Grocery & Supply Stores: Not Vulnerable
- Hotels: Not Vulnerable
- Long-Term Care Facilities: Not Vulnerable
- Museums & Galleries: Not Vulnerable
- Pre-Schools & Children's Care Facilities: Not Vulnerable
- Religious Institutions: Not Vulnerable
- Schools: Not Vulnerable
- Theaters: Not Vulnerable

High Potential Loss Facilities

- No Dams located within the Community.
- Plow Shop Pond Dam located outside of the Community, however failure of the dam may result in downstream flooding within Devens.

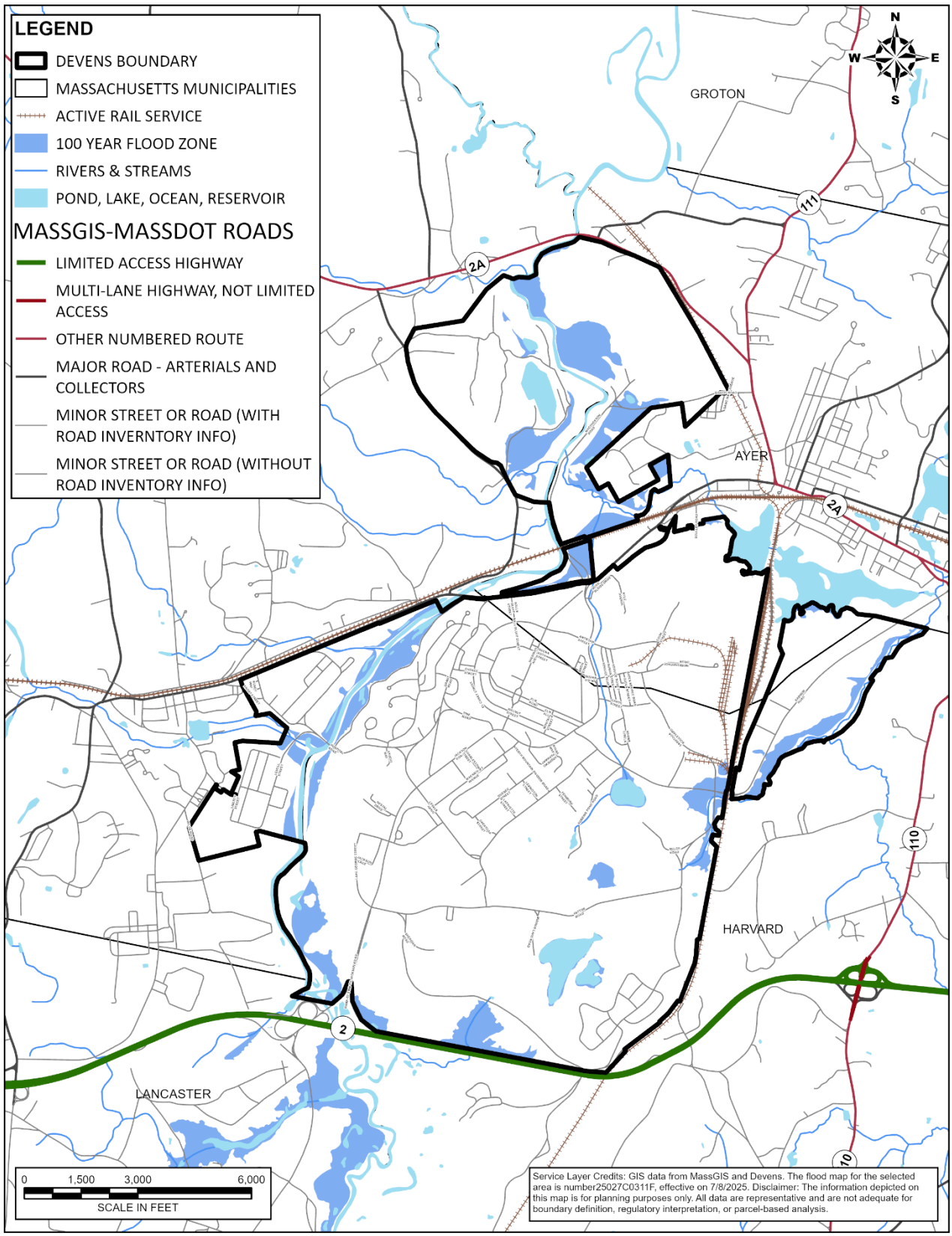


Figure 3-2: FEMA Special Flood Hazard Areas (SFHAs)

National Flood Insurance Program (NFIP) Repetitive Losses

According to the FEMA Flood Insurance Manual, Effective October 2025, a Repetitive Loss (RL) Structure is defined as a National Flood Insurance Program (NFIP)-insured structure that has had at least two paid flood losses of more than $1,000 each in any of the 10-year periods since 1978, and a Severe Repetitive Loss (SRL) Building is any building that:

1. Is covered under a Standard Flood Insurance Policy made available under this title;
2. Has incurred flood damage for which:
    a. Four or more separate claim payments have been made under a Standard Flood Insurance Policy issued pursuant to this title, with the amount of each such claim exceeding $5,000, and with the cumulative amount of such claims payments exceeding $20,000; or
    b. At least 2 separate claims payments have been made under a Standard Flood Insurance Policy, with the cumulative amount of such claim payments exceed the fair market value of the insured building on the day before each loss.

According to the Massachusetts Emergency Management Agency (MEMA), the Community of Devens does not have a Community Identification Number (CID) with FEMA therefore FEMA's data is not listed as being within Devens limits explicitly. As of 2025, Shirley has 1 NFIP RL structure but it is located outside of the Devens border while Ayer and Harvard do not contain any RL/SRL designations. There do not appear to be any NFIP policy holders within Devens based on FEMA's PIVOT database system.

Flood Risk Summary

As presented on the previous pages, although there are no essential services and limited lifeline systems located within the FEMA 100-year flood zone, there are several buildings and potential associated losses located within the 100 and 500-year floodplain, based on the HAZUS analysis described below and in **Attachment 4**.

Likelihood/ Frequency:

While flooding can occur more frequently at Devens, significant flood events are associated with the 1% AEP.

Severity/ Magnitude

As part of the Plan preparation, GZA completed a Level 1 HAZUS-MH damage analysis for flood scenario (based on FEMA flood hazard delineation). The results are presented in **Attachment 4**. The results estimate about $0.7M to $3.5M building and content damage for the 1% AEP (100-year recurrence interval) and the 0.2% (500-year recurrence interval flood, respectively.

Flooding is a top-ranked hazard due to 1) potential flood impacts to the Community's buildings and high associated economic losses; and impacts to transportation infrastructure.

The Level 1 HAZUS scenario analyses identified 1 and 2 buildings vulnerable to flood damage (ranging from slight to substantial) for the 1% AEP and 0.2% AEP floods, respectively. Substantial damage will trigger specific flood regulations within the State Building Code, requiring that building repair or replacement be in compliance with current flood regulations.

Impact Area

One building is expected to be impacted during the 1% AEP flood and two buildings are expected to be impacted during the 0.2% AEP flood. This number represents 0.6% and 1.2% of the total number of buildings in Devens, respectively.

Strong Winds/ Hurricanes Risk Summary

Devens is vulnerable to severe wind events due to hurricanes and tropical storms, nor'easters, thunderstorms and tornadoes. **Attachment 2** presents details about Devens' wind hazards. Severe winds at Devens occur most frequently due to hurricanes and tropical storms which can occur coincident with heavy precipitation and flooding. Severe winds can also occur at Devens during tornadoes and more frequently during severe thunderstorms. High winds can also occur, frequently, during nor'easters (along with heavy rain and snow).

Likelihood/ Frequency:

The historical occurrences indicate an annualized frequency of 0.9 strong wind events per year and 0.2 hurricane events per year at and near Devens.

Severity/ Magnitude

Damages due to severe winds include: 1) damage to trees, often resulting in power outages and also potentially fatal accidents related to treefalls; and 2) structure damage. **Table 3-3** presents the typical physical effects associated with different wind speeds. As shown on **Table 3-3**, significant, widespread damage can be expected due to sustained wind speeds of about 74 mph or greater.

Table 3-3: Physical Effects Associated with Different Wind Speeds

Sustained Wind Speed	Annual Recurrence Interval (years)	Physical Effects
6-38 kts (30-44 mph)	<1	Trees in motion. Light-weight loose objects (e.g., lawn furniture) tossed or toppled.
39-49 kts (45-57 mph)	2 to 10	Large trees bend; twigs, small limbs break, and a few larger dead or weak branches may break. Old/weak structures (e.g., sheds, barns) may sustain minor damage (roof, doors). Building partially under construction may be damaged. A few loose shingles removed from houses. Carports may be uplifted; minor cosmetic damage to mobile homes and pool lanai cages.
50-64 kts (58-74 mph)	10 to 70	Large limbs break; shallow rooted trees pushed over. Semi-trucks overturned. More significant damage to old/weak structures. Shingles, awnings removed from houses; damage to chimneys and antennas; mobile homes, carports incur minor structural damage; large billboard signs may be toppled.
65-77 kts (75-89 mph)	70 to 300	Widespread damage to trees with trees broken/uprooted. Mobile homes may incur more significant structural damage; be pushed off foundations or overturned. Roof may be partially peeled off industrial/commercial/warehouse buildings. Some minor roof damage to homes. Weak structures (e.g., farm buildings, airplane hangars) may be severely damaged.
78+ kts (90+ mph)	>300	Many large trees broken and uprooted. Mobile homes severely damaged; moderate roof damage to homes. Roofs partially peeled off homes and buildings. Moving automobiles pushed off dry roads. Barns, sheds demolished.

Severe Winter Weather Risk Summary

Devens is vulnerable to frequent snowstorms, usually associated with nor'easters. The U.S. Northeast annually experiences about 20 to 40 nor'easters. Beginning in October and ending in April, the nor'easter season runs for seven months. Out of the 20 to 40 annual storms, at least two are likely to be severe. **Attachment 2** presents details about Devens' severe winter weather hazards.

Damages due to severe winter weather include: 1) damage to trees, often resulting in power outages and also potentially fatal accidents related to treefalls; 2) structure damage, including roof collapse; and 3) roadway issues including access limitations and vehicular accidents.

Likelihood/ Frequency:

The historical occurrences indicate an annualized frequency of 6.8 severe winter weather events per year at and near Devens. The average snowfall per year near Devens in eastern Massachusetts is about 50 to 75 inches.

Severity/ Magnitude

The severity/magnitude of severe winter weather is a function of the type of vulnerability. Snowfall vulnerabilities generally include: 1) building damage (e.g., roof collapse) due to snow weight; 2) branch fall and power line failure due to snow and ice weight and wind; and 3) snow roadway clearance capabilities relative to snow fall rates.

Building Damage: The Massachusetts State Building Code requires that structures be constructed in Devens, at a minimum, to snow loads of 30 pounds per square foot (psf). The relationship of snow load to snow depth is a function of the water content of the snow (i.e., wet snow is heavier) and can be variable. In general, 30 psf snow loads correlate to about 24 inches of snow. For weight snow events (saturated snow = +/- 2 pcf), 30 psf correlates to about 15 inches of snow. During periods of cold, snow will not melt on roofs and will accumulate due to multiple snowfall events. Ref. https://www.mutualbenefitgroup.com/insurance-101/storm-center/prevent-roof-collapse-on-your-home/.

Tree and Powerline Damage: Greater than 6 to 8 inches of heavy snow accumulation on tree branches can result in significant tree damage.

Other Severe Winter Weather: Ice Storms Risk Summary

Other Devens severe winter events include ice storms. **Attachment 2** presents details for this hazard. Devens' vulnerability to ice storms is primarily loss of power and tree fall. The probability of damaging ice storms is high.

Likelihood/ Frequency:

The historical occurrences indicate an annualized frequency of 2.8 ice storm events per year at and near Devens.

Severity/ Magnitude

The severity/magnitude of ice storms is similar to that of severe winter weather. 1/2" of ice can add 500 pounds load on power lines and trees, resulting in extensive damage.

Drought/Wildfire Risk Summary

Devens is vulnerable to wildfire, usually associated with droughts. Drought is an important issue in Massachusetts and the Community due to effects on agricultural and water resources. Community residents obtain their drinking water from surface water supplies, which can be affected by drought. Dry conditions may also lead to a greater risk of wildfire. **Attachment 2** presents details about Devens' drought and wildfire hazards.

Likelihood/ Frequency:

The historical occurrences indicate an annualized frequency of 5.7 drought events per year at and near Devens. The estimated probability of wildfire near Devens is 0.023% per year (source: FEMA National Risk Index).

Severity/ Magnitude

Although there is a relatively low probability of wildfire near Devens, there is an added risk due to firefighting access. There are areas within Devens that emergency responders cannot enter to fight wildfire due to the presence of unexploded ordnances (UXOs). If a wildfire were to start in these areas, it could have the potential to expand up to 200 to 300 acres in size because of limited access to fight the wildfire. **Figure 3-3** shows an example of area that is impacted by UXOs[1], shown as "37 mm Impact Area".

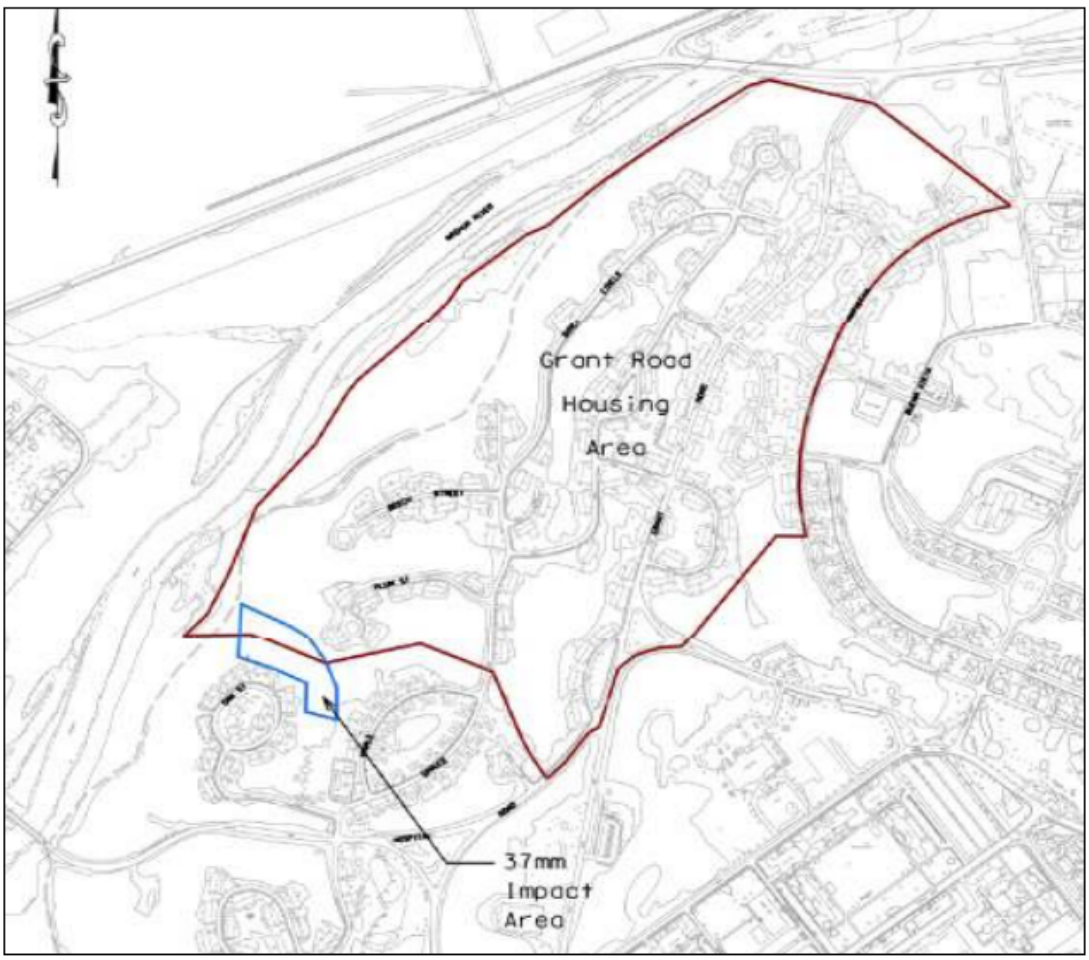


Figure 3-3: Map of Grant Road Housing Area and discontinued 1930's firing range

[1] Devens Enterprise Commission, "Important Information About Unexploded Ordnance (UXO) For Devens Residents, Employees, And Visitors", Updated 9-21-11.

Attachment 4: FEMA HAZUS-MH Simulation Results

Attachment 4: Natural Hazard Risk - FEMA HAZUS-MH Results

FEMA HAZUS-MH HAZARD SCENARIO ANALYSES

Scenario analyses predict the impacts of an event or particular type of an event. This level of analysis considers potential impacts to infrastructure, people, and cost, as well as likelihood or frequency of the event. Scenario analyses were performed using the FEMA Multi-Hazard HAZUS-MH software. This software utilizes data on occupied buildings.

Level 1 HAZUS analyses were performed using the HAZUS Flood, Hurricane and Earthquake modules included in the HAZUS 6.1 software. A Level 1 HAZUS analysis calculates basic estimates of flood and hurricane wind losses based on national databases and expert-based analysis parameters included in the HAZUS 6.1 software. This analysis is based on the default data provided by the HAZUS 6.1 software, along with 2020 U.S. Census data. Level 1 analyses are appropriate for initial loss estimation at the planning level, and are not intended for establishing the flood-, earthquake-, or hurricane-related risk of any specific parcel or property.

Potential losses estimated by HAZUS include:

- **Physical damage,** to residential and commercial buildings, schools, critical facilities, and infrastructure;
- **Economic loss**, including lost jobs, business interruptions, repair, and reconstruction costs; and
- **Social impacts**, including estimates of shelter requirements, displaced households, and population exposed to scenario floods, earthquakes, and hurricanes.

https://www.fema.gov/HAZUS

There are 172 buildings in the 13 census blocks that make up the Devens study area (2020 census) with a total building replacement value of about $400 million (2020 dollars). **Table 4-1** presents the total building value in Devens. Approximately 74% of the building value is education. **Table 4-2** provides an overview of the expected damage and loss categories that will be the focus of this scenario analysis based on the results generated from the Flood, Hurricane Wind, and Earthquake HAZUS module runs.

Table 4-1: Devens Building Exposure and Occupancy Type

Occupancy	Exposure ($1000)	Percent of Total
Residential	27,467	6.9%
Commercial	54,343	13.6%
Industrial	14,672	3.7%
Agricultural	0	0%
Religion	428	0.1%
Government	6,204	1.5%
Education	297,737	74.3%
Total	**400,851**	100%

Table 4-2: Damage and Loss Categories

DIRECT DAMAGE
General Building Stock
Essential Facilities
DIRECT LOSSES
Shelter Needs
INDIRECT LOSSES
Economic Loss Property Damage Business Interruption

Note that for the Hurricane Wind and Earthquake simulations, census tracts are the smallest available geographic level that may be used by the software to conduct the analyses. Therefore, the analyses were conducted with a study area covering the three census tracts containing the Devens study area, which also contain areas outside of Devens. There are 4,445 buildings in the three census tracts containing the Devens study area (2020 census) with a total building replacement value of $2.9 billion (2020 dollars). Therefore, the reported damages in **Table 4-4** and **Table 4-5** are higher than the total for just the Devens area. The software allows for the analysis boundary to be customized for the Flooding simulation; therefore, the reported damages in **Table 4-3** below are representative of the Devens area alone.

Flood Scenario

Devens is vulnerable to riverine flood events. The flood scenario analysis used the default building stock from HAZUS as presented categorically in **Table 4-1** and the FEMA-defined flood hazard zones and flood depths. **Table 4-3** presents the estimated damages and losses for the 100-year (1%), and 500-year (0.2%) flood events for buildings and essential facilities; displaced people and sheltering requirements; and economic losses.

Table 4-3: HAZUS Flood Scenario Results

Building Damages (# of Buildings)	**100-Yr**	**500-Yr**
# of Buildings with Slight Damage (1-10%)	1	1
# of Buildings with Moderate Damage (11-50%)	0	1
# of Buildings with Substantial Damage (>50%)	0	0
TOTAL	**1**	**2**
Essential Facilities Building Damages (Loss of Use > 1 Day)	100-Yr	500-Yr
Emergency Operations Center	0	0
Fire	0	0
Hospitals	0	0
Police	0	0
Schools	0	0
TOTAL	**0**	**0**
Sheltering Requirements	100-Yr	500-Yr
Displaced Population (# People)	14	22
Short-Term Shelter (# People)	7	7
Economic Losses	100-Yr	500-Yr
Residential Property	$110,000	$270,000
Total Property	$310,000	$1,510,000
Business Interruption	$410,000	$1,990,000
Total	**$720,000**	**$3,500,000**

Building Damages

One (1) building in Devens would experience slight damage from a 100-year recurrence interval flood event and two buildings would experience slight or moderate damage from a 500-year recurrence interval flood event. None of these buildings are predicted to be destroyed.

The associated economic losses (including business interruption) range from $720,000 (100-year event) to $3,500,000 (500-year event).

Essential Facilities

None of the essential facilities are expected to be moderately impacted during the 100-year or 500-year interval flood events. Note that HAZUS evaluates Emergency Operation Centers (EOCs), Fire Stations, Hospitals, Police Stations, and Schools as essential facilities. These categories may vary from those presented in the Essential Facilities **Figure 1-10** in **Attachment 1**.

Sheltering Requirements

Based on the HAZUS flood analysis, 14 people would be displaced, and 7 people would require temporary shelter for the 100-year flood event and 22 people would be displaced and 7 people would require temporary shelter for the 500-year flood event. The preceding statistics are based on census data, which may only represent primary residences.

Uncertainty

Loss estimations using HAZUS are highly uncertain, in particular relative to the predicted damage and resulting economic loss. The analysis is sensitive to flood depth and makes assumptions relative to: building floor elevations and percent damage (using generic depth-damage relationships). It also estimates loss based on a census block scale (i.e., not a building scale). HAZUS reasonably predicts the number of structures impacted. Significant uncertainty with economic loss analyses is also due to the uncertainty related to flood probability. Uncertainty can be reduced by performing more site-specific analysis (i.e., Level 2 and 3 analyses, using elevation certificates and building scale analyses). Uncertainty can also be reduced by comparing results to observed impact and losses. Unfortunately, there is limited historical loss data that is relevant to low probability storms (i.e., 50-year, 100-year and 500-year recurrence interval floods) in Massachusetts.

Hurricane Wind Scenario

Devens will likely experience increasing order of magnitude impacts from hurricane wind events. These events are expected to have increased intensity but a lower probability of occurrence, especially from hurricanes with storm tracks that move directly through or near Devens. **Table 4-4** shows the estimated damages for the 100-year (1%), and 500-year (0.2%) hurricane wind events for buildings and essential facilities, displaced people and sheltering requirements, and economic losses from the 100-year and 500-year hurricane wind events.

Table 4-4: HAZUS Hurricane Wind Scenario Results

Building Damages (# of Buildings)	**100-Yr**	**500-Yr**
# of Buildings with Slight Damage (1-10%)	150	622
# of Buildings with Moderate Damage (11-50%)	15	117
# of Buildings with Substantial Damage (>50%)	0	5
TOTAL	**165**	**744**
Essential Facilities Building Damages (Loss of Use > 1 Day)	100-Yr	500-Yr
Emergency Operations Center	0	0
Fire	0	0
Hospitals	0	0
Police	0	0
Schools	0	0
TOTAL	**0**	**0**
Sheltering Requirements	100-Yr	500-Yr
Displaced Households (# Households)	1	17
Short-Term Shelter (# People)	1	13
Economic Losses (in millions of dollars)	100-Yr	500-Yr
Residential Property	$12.37	$39.96
Total Property	$15.26	$50.29
Business Interruption	$0.92	$5.51
Total	**$16.19**	**$55.8**

Building Damages

Fifteen (15) buildings in Devens would experience moderate damage from a 100-year recurrence interval hurricane wind event and 122 buildings would experience moderate or substantial damage from a 500-year recurrence interval hurricane wind event. Five (5) of the buildings are predicted to be destroyed during the 500-year event. The associated economic losses (including business interruption) range from $16.19 million (100-year event) to $55.8 million (500-year event).

Essential Facilities

None of the essential facilities are expected to be moderately impacted during the 100-year or 500-year interval hurricane wind events.

Sheltering Requirements

Based on the HAZUS hurricane wind analysis, 1 household would be displaced, and 1 person would require temporary shelter for the 100-year hurricane wind event and 17 households would be displaced and 13 people would require temporary shelter for the 500-year hurricane wind event. The preceding statistics are based on census data, which may only represent primary residences.

Uncertainty

Loss estimations using HAZUS are highly uncertain, in particular relative to the predicted damage and resulting economic loss. The analysis is sensitive to wind damages and makes assumptions relative to: building floor elevations and percent damage (using generic depth-damage relationships). It also estimates loss based on a census block scale (i.e., not a building scale). HAZUS reasonably predicts the number of structures impacted. Significant uncertainty with economic loss analyses is also due to the uncertainty related to hurricane-wind probability. Uncertainty can be reduced by performing more site-specific analysis (i.e., Level 2 and 3 analyses, using building scale analyses). Uncertainty can also be reduced by comparing results to observed impact and losses. Unfortunately, there is limited historical loss data that is relevant to low probability storms (i.e., 50-year, 100-year and 500-year recurrence hurricane-wind events) in Massachusetts.

Earthquake Scenario

This earthquake analysis was conducted assuming an earthquake of magnitude 5 on the Richter scale. **Table 4-5** summarizes the estimated damages and economic losses for buildings and essential facilities, displaced people, and sheltering requirements from the 1,000-year and 2,500-year recurrence interval earthquake events.

Table 4-5: HAZUS Earthquake Scenario Results

Building Damages (# of Buildings)	**1,000-Yr**	**2,500-Yr**
# of Buildings with Slight Damage	193	481
# of Buildings with Moderate Damage	41	132
# of Buildings with Extensive Damage	4	15
# of Buildings with Complete Damage	0	1
TOTAL	**138**	**629**
Essential Facilities Building Damages (Loss of Use > 1 Day)	1,000-Yr	2,500-Yr
Emergency Operations Center	0	0
Fire	0	0
Hospitals	0	0
Police	0	0
Schools	0	0
TOTAL	**0**	**0**
Sheltering Requirements	1,000-Yr	2,500-Yr
Displaced Households (# Households)	0	3
Short-Term Shelter (# People)	0	1
Economic Losses (in millions of dollars)	1,000-Yr	2,500-Yr
Residential Property	$4.98	$19.95
Total Property	$15.57	$57.33
Business Interruption	$2.99	$9.08
Total	**$18.56**	**$66.41**

Building Damages

Forty-five (45) buildings in Devens would experience moderate or extensive damage from a 1,000-year recurrence interval earthquake event and 148 buildings would experience moderate, extensive or complete damage from a 2,500-year recurrence interval earthquake event. One of these buildings is predicted to be destroyed during the 2,500-year recurrence event.

The associated economic losses (including business interruption) range from $18.56 million (1,000-year event) to $66.41 million (2,500-year event).

Essential Facilities

None of the essential facilities are expected to be moderately impacted during the 100-year or 500-year interval earthquake events.

Sheltering Requirements

Based on the HAZUS earthquake analysis, 0 households would be displaced, and 0 people would require shelter for the 1,000-year earthquake event and 3 households would be displaced and 1 person would require temporary shelter for the 2,500-year earthquake event. The preceding statistics are based on census data, which may only represent primary residences.

Uncertainty

The estimates of social and economic impacts contained in this report were produced using HAZUS loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.

Attachment 5: Potential State and Federal Funding Sources

FEMA HAZARD MITIGATION ASSISTANCE AND DISASTER RECOVERY GRANTS

Several of the proposed hazard mitigation projects and actions may be eligible activities for funding under FEMA Hazard Mitigation Assistance (HMA) Grant Programs. As of October 2025, the FEMA HMA Grant Programs includes the Flood Mitigation Assistance (FMA) grant program, a non-disaster mitigation program. The Hazard Mitigation Grant Program (HMGP) is a disaster mitigation HMA grant program. This funding information was updated in October 2025 and is subject to change. An overview of each program is outlined as follows:

Flood Mitigation Assistance (FMA)

The purpose of the FMA program is to reduce or eliminate the risk of repetitive flood damage to buildings and structures insured under the National Flood Insurance Program (NFIP). The FMA Program makes federal funds available to state, local, tribal, and territorial governments for: 1) Project Scoping (previously Advance Assistance); 2) Community Flood Mitigation Projects; 3) Technical Assistance; 4) Flood Hazard Mitigation Planning; and 5) Individual Flood Mitigation Projects. FEMA Funding for FMA is appropriated by Congress annually and awarded on a nationally competitive basis. In FY 2024, $500 Million was available for the FMA grant program. Applications were due to FEMA by May 31, 2025. Devens will be eligible as a sub-applicant to the Massachusetts Emergency Management Agency (MEMA) for FMA funding in FY 2025. For more program information on the FMA program please go to Flood Mitigation Assistance Grant Program | FEMA.gov. (10/6/25)

Hazard Mitigation Grant Program (HMGP)

The HMGP provides funds to states, territories, tribal governments, and other communities after a disaster declaration, to reduce or eliminate future risk to lives and property from natural hazards. Funding for FEMA's HMGP is 15% of the total assessed damages for a given disaster for states meeting FEMA's standard Mitigation Plan requirements, which applies to Massachusetts. HMGP application periods are open for one year from a disaster declaration date.

The federal share of HMGP assistance is up to 75% of eligible costs. The HMGP requires a 25% local match for traditional Hazard Mitigation Assistance (HMA) projects. The most recent declared disaster in Worcester County was announced on May 15, 2024 – Massachusetts Severe Storms and Flooding (DR-4780-MA). The most recent declared disaster in Middlesex County was announced on September 15, 2023 – Massachusetts Hurricane Lee (EM-3599-MA). Future HMGP funding will become available following the next open disaster declaration. https://www.fema.gov/hazard-mitigation-grant-program. (10/6/25)

MEMA manages the HMGP application process by providing a state application for eligible entities to complete and submit to MEMA electronically. Both programs are managed by MEMA. Contact MEMA at mitigation@mass.gov for more information on each of these HMA grant programs.

Public Assistance (PA)

FEMA's Public Assistance (PA) grant program provides federal assistance to governmental organizations and certain private nonprofit (PNP) organizations following a Presidential disaster declaration. Through the program, FEMA provides supplemental federal disaster grant assistance for debris removal, life-saving emergency protective measures, and the repair, replacement, or restoration of disaster-damaged publicly-owned facilities, and facilities of certain PNP organizations. The PA program also encourages protection of these damaged facilities from future events by providing assistance for hazard mitigation measures during the recovery process. The federal share of assistance is not less than 75 percent of the eligible cost. The Recipient (usually the state) determines how the non-federal share (up to 25 percent) is split with the subrecipients (eligible applicants). Assistance for Governments and Private Non-Profits After a Disaster | FEMA.gov (1/8/25)

FEMA HAZARD MITIGATION ASSISTANCE AND DISASTER RECOVERY GRANTS CONT.

HUD Disaster Recovery and Resiliency Grants

Community Development Block Grant – Disaster Recovery (CDBG-DR)

Similar to FEMA's HMGP, HUD provides disaster recovery grants to help communities like Devens and the State recover from Presidentially-declared disasters in low and moderate income areas. The goal of these grants is to rebuild impacted areas and provide critical seed funding to start the recovery process. The CDBG-DR program funds a wide range of recovery activities, including planning to aid communities and neighborhoods that may otherwise not recover because of a lack of resources. CDBG-DR Overview - HUD Exchange

U.S. Department of Agriculture's (USDA) Grants

Natural Resources Conservation Services (NRCS)

NRCS is the U.S. Department of Agriculture's (USDA) leading agency providing voluntary technical and financial assistance to conservation districts, private landowners, tribal governments, and other organizations to help sustainably manage, conserve, and improve natural resources at the local level. Two financial programs that offer funding in response to natural hazards are outlined as follows:

Emergency Watershed Protection Program (EWP)

Congress established the EWP to assist public and private landowners in response to emergencies resulting from natural hazards including riverine flooding and storms. The mission of the EWP program is to assist people and conserve natural resources by reducing future impacts to public safety and property caused by floods, storms, and other natural hazards. The EWP program includes two focus areas: EWP-Recovery and EWP-Floodplain Easement (FPE).

EWP-Recovery provides recovery assistance to public and private landowners following a natural disaster that requires a 25% local match with the NRCS providing 75% of the construction cost for emergency measures. The EWP-FPE provides assistance to privately owned lands or lands owned by a local or state government that have been damaged by flooding at least once within the previous calendar year or have been subject to flood damage at least twice within the previous ten years. Emergency Watershed Protection | Natural Resources Conservation Service

Watershed & Flood Prevention Operations (WFPO) Program

The Watershed Protection and Flood Prevention Act of 1954 authorizes the NRCS to provide technical and financial assistance to states, local and tribal governments (project sponsors) for the planning and implementation of approved watershed plans. The NRCS works with local sponsors to protect and restore watersheds from damage caused by erosion, floodwater, and sediment, to conserve and develop water and land resources, and to solve natural resource and related economic problems on a watershed basis. The project sponsor can be a locally-led government agency or conservation district. The project sponsor provides assistance for the implementation of measures outlined in approved plans. Additional eligibility details are available here: Watershed Protection and Flood Prevention Operations (WFPO) Program | Natural Resources Conservation Service

U.S. Department of Commerce Economic Development Administration Disaster Recovery Grants

The Economic Development Administration (EDA) often releases a Disaster Recovery Supplemental grant program to address economic development challenges caused by a disaster. For example, in June 2025, EDA made $1.4 billion available in additional Economic Adjustment Assistance (EAA) Program funds. These funds will support costs related to flood mitigation, disaster relief, long-term recovery, and restoration of infrastructure in areas impacted by Presidentially-declared major natural disasters in 2023 and 2024. Applications are accepted on a rolling basis until March 3, 2026. EAA funds can be awarded to assist a wide variety of activities related to disaster recovery focused on economic development, including economic recovery strategic planning grants and construction assistance. Through this program, EDA can support both the development of disaster recovery strategies and the implementation of recovery projects identified with those strategies, including construction activities, targeted industry development, and a variety of others. Disaster recovery project activities that may be eligible for Disaster Supplemental grants include, but are not limited to, economic recovery and resiliency projects that:

FEMA HAZARD MITIGATION ASSISTANCE AND DISASTER RECOVERY GRANTS CONT.

- Support the creation of new businesses and jobs in a variety of industry sectors, including, but not limited to advanced manufacturing, agriculture, energy, information technology, healthcare, telecommunications, tourism and recreation, transportation, and cultural and natural assets.
- Implement local and regional job creation and growth, and economic diversification strategies to benefit affected workers and businesses.
- Construction activities, including restoring damaged infrastructure, enhancing infrastructure, and building new infrastructure including high performance and resilient infrastructure.
- Strengthening or developing industry clusters.
- Developing business incubator programs.
- Enhancing access to and use of broadband services to support job growth through business creation and expansion.
- The development of economic development diversification strategies in accordance with EDA CEDS recommendations.
- Resiliency projects to increase the ability of a community or region to anticipate, withstand, and bounce back from future economic injuries and disasters. This may include: ensuring redundancy in telecommunications and broadband networks; promoting business continuity and preparedness; industrial diversification; employing safe development practices in business districts and surrounding communities; conducting disaster recovery planning with key stakeholders; and other methods that strengthen local and regional capacity to troubleshoot and address vulnerabilities within the regional economy.
- Facilitating access to private capital investment and providing related capacity building and technical assistance, such as effective utilization of capital investment for business development and job creation.
- Facilitating and promoting market access for goods and services.

Disaster Recovery | U.S. Economic Development Administration

State of Massachusetts Grants

Executive Office for Administration & Finance (A&F) Federal Funds & Infrastructure Office (FFIO) Massachusetts Federal Grant Matching Funds

Up to $50 million is available to meet non-federal match requirements for awarded federal grants in Massachusetts.

The Matching Funds request form should be completed at least three (3) weeks prior to the federal grant application due date. Massachusetts Federal Grant Matching Funds | Mass.gov

Department of Environmental Protection (DEP) Clean Water Act Section 319 Nonpoint Source Grants

Section 319 Grants support projects that reduce the spread of nonpoint source pollutants, including bacteria, nutrients, sediment, salt, petroleum products, heavy metals, pesticides, and debris. Projects that meet permit requirements are not eligible but may be eligible if they go beyond permit requirements. Projects that include nature-based solutions that improve resilience to natural hazards are being prioritized by DEP, as well as larger, contiguous projects that build on ongoing activities.

A 40% non-federal match is required. More information is available on the DEP website: Grants & Financial Assistance: Watersheds & Water Quality | Mass.gov.

Executive Office of Energy and Environmental Affairs (EEA) Environment & Climate One Stop (ECO One Stop)

ECO One Stop is a single application process for seven (7) state climate and environmental resilience grants. The application period is expected to open in early 2026.

A 10% match is required, with exemptions for tribal governments, and rural and small towns.

Environment & Climate One Stop | Mass.gov

FEMA HAZARD MITIGATION ASSISTANCE AND DISASTER RECOVERY GRANTS CONT.

Executive Office of Economic Development (EOED) Community One Stop for Growth

A single application for 12 grant programs related to economic and housing development. The program uses a Development Continuum that includes the following phases:

1. Community Activation & Placemaking;
2. Planning & Zoning;
3. Site Preparation; and
4. Catalyzing Specific Properties through Building and Infrastructure projects.

Eligible projects include activities that encourage and prepare for housing and economic development, such as investing in public infrastructure, site preparation, brownfield cleanup, and spurring downtown development, among others. Community One Stop for Growth | Mass.gov

Executive Office of Housing and Livable Communities (EOHLC) Community Development Block Grant (CDBG) Community Development Fund (CDF)

Communities with populations under 50,000 that do not qualify for the Mini-Entitlement program are eligible to apply for CDF grants. Projects must address one of the following objectives:

1. Support low- and moderate-income people;
2. Prevent or eliminate slums and blight; or
3. Meet an urgent need.

Eligible projects may include, but are not limited to planning, infrastructure, public facilities, and economic or housing development. FY25 applications were due April 14, 2025 at 3pm.

EEA Division of Ecological Restoration (DER) Priority Projects Program

Supports wetland and river restoration projects that offer significant ecological and community benefits. The program opens to competitive applications on a periodic basis. Applications were last due May 17, 2021.

Become a DER Priority Project | Mass.gov (10/6/25)

Climate Smart Communities Initiative (CSCI)

Focuses on communities facing significant climate-related challenges related to environmental and socio-economic factors. Supports projects in local communities with a population under 300,000 and regional projects with populations under 500,000. Eligible activities include assessments, planning, community engagement, and/or project implementation.

Applicant teams must consist of a climate adaptation professional (GZA is a qualified adaptation professional), a community-based organization (CBO), and a government partner. The partnership can be an ongoing or new collaboration.

Climate Smart Communities Initiative – Helping communities prepare for the future (10/6/25)

Attachment 6: Public Meeting Documentation

Devens, MA Natural Hazard Mitigation Plan (NHMP) 2026 Update

PUBLIC OUTREACH SESSION – Please join us to provide your input!

Wednesday, December 3rd at 6:30 p.m., part of the Devens Committee Meeting

Join in Person or via Zoom Meeting
https://us06web.zoom.us/j/87667290225?pwd=1rcRqLhfo2zG5eddPjf0IENabaqb9I.1

Meeting ID: 876 6729 0225
Passcode: 01434

Vicksburg Conference Room, First Floor
33 Andrews Parkway, Devens, MA 01434

MACPHERSON ROAD AT RAILROAD BRIDGE VIEW NORTH

Learn about updating the Devens Natural Hazard Mitigation Plan and the community's vulnerability to natural hazards, with opportunity to provide your input.

The Update to the Devens Natural Hazard Mitigation Plan will include an updated assessment of natural hazard risk and risk mitigation strategies. The components of the Plan Update include:

- Characterization of the natural hazards impacting Devens, such as extreme temperatures, severe weather, and winter storms.
- Inventory of the Community assets (public buildings, critical facilities, natural resources, etc.).
- Identification of the hazard vulnerability and risk of key assets to the multiple hazards.
- Developing Mitigation Strategies and Actions.

Devens, MA Natural Hazard Mitigation Plan (NHMP) 2026 Update

PUBLIC OUTREACH SESSION – Please join us to provide your input!

Vicksburg Conference Room, First Floor
33 Andrews Parkway, Devens, MA 01434

Learn about updating the Devens Natural Hazard Mitigation Plan and the community's vulnerability to natural hazards, with opportunity to provide your input.

DEVENS
A MASSDEVELOPMENT COMMUNITY

DEVENS COMMITTEE
December 3, 2025
6:30 PM
Agenda

In-Person	Virtually via Zoom*
Vicksburg Conference Room First Floor 33 Andrews Parkway Devens, MA 01434	https://us06web.zoom.us/j/87667290225?pwd=1rcRqLhfo2zG5eddPjf0IENabaqb9I.1 Meeting ID: 876 6729 0225 Passcode: 01434 Dial by your location: 1 929 205 6099 US (New York)

This Devens Committee Regular Meeting is being held both virtually and in-person pursuant to Chapter 2 of the Acts of 2023 - An Act Making Appropriations for the Fiscal Year 2023 signed into law on March 29, 2023. Interested individuals may attend in-person at the above address or listen in and participate by phone and/or on-line by following the link and/or phone number above.

Agenda Items

1. Call to Order
2. Chair's overview of agenda and hybrid meeting process and procedures**
3. Approval of November 5, 2025 meeting minutes
4. Devens, MA Natural Hazard Mitigation Plan 2026 Update public outreach session – Shane Melone, Director of Public Works and Recreation
5. Summary of November 8, 2025 joint Devens Connect and Devens Committee meeting
6. Devens Committee election
7. Potential discussion of proposed amendment to the Devens Committee Bylaws
8. General public comments
9. Adjourn

*All meeting materials will be presented live and will be included in the meeting minutes. If you do not have a Zoom account, you can sign up for free at: https://zoom.us/signup

****Anyone wishing to record this meeting must notify the chair in advance.**

Upcoming Devens Committee Meeting Dates 2026
January 7, February 4, March 4, April 1, May 6, June3, July 1, August 5, September 2, October 7, November 4

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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

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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

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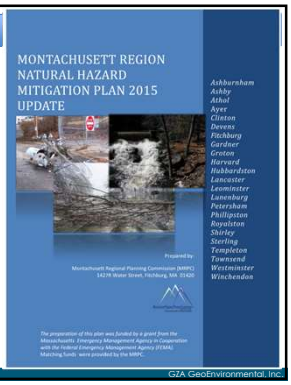
Devens HMP Update



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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.

Planning Team Meetings	Date
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
Committee Meeting	2/2/2026

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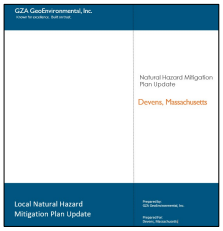
HAZARD MITIGATION PLANNING BACKGROUND

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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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

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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

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Planning Process

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

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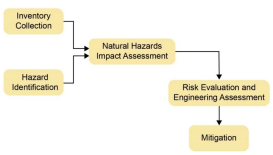
Plan Components



2025 HMP Update Table of Contents

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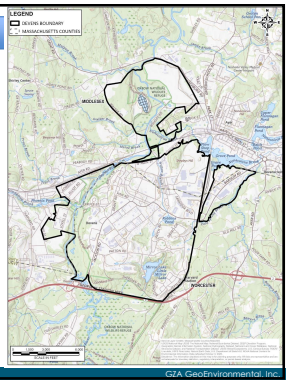
Devens Community Setting

- 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



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Community Profile: People

Per 2020 Census Data:

Population
- 1,697 people

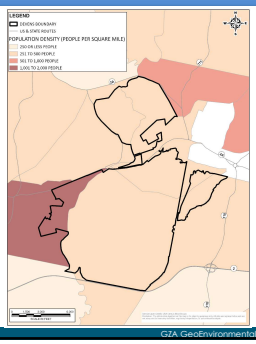
Land Area
- 6.78 square miles

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)



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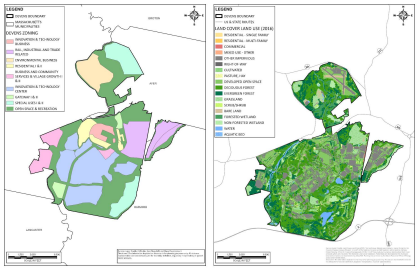
Community Profile: Land Use and Zoning

- 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



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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

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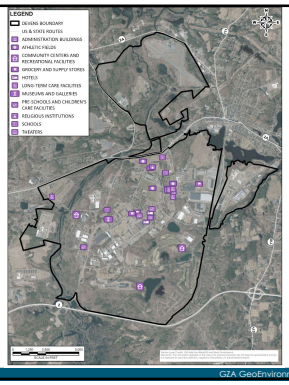
Support, High Occupancy, and Vulnerable Populations

- 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



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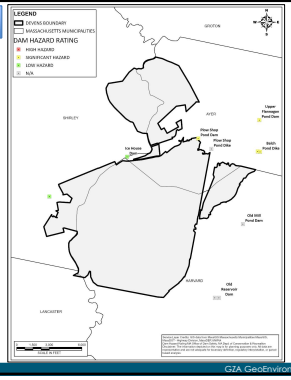
High Potential Loss Facilities

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



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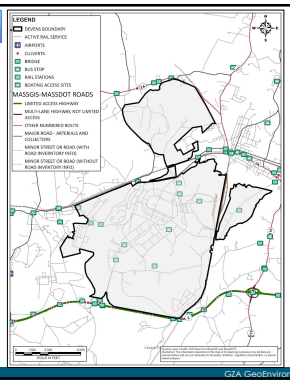
Transportation Systems

- 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



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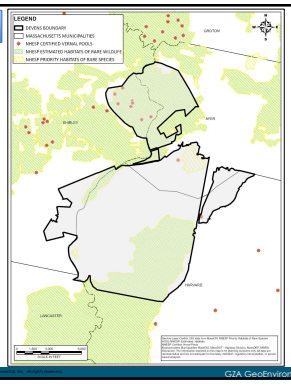
Natural Resources

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



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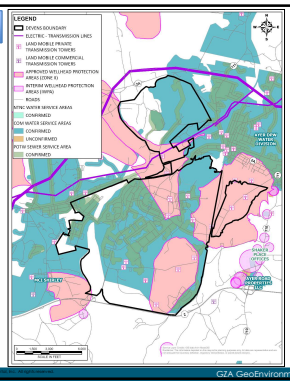
Lifeline Systems

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



19 GZA GeoEnvironmental, Inc.

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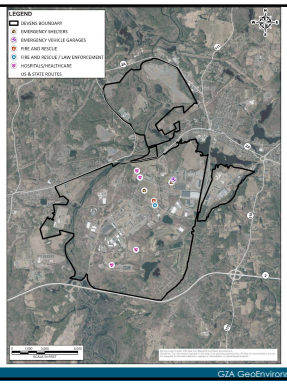
Essential Facilities

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



20 GZA GeoEnvironmental, Inc.

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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

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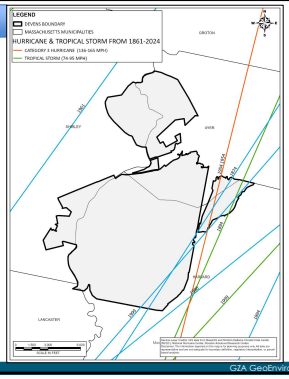
Severe Weather Hazards

Hurricanes and Tropical Storms

- Notable hurricane tracks through and around Devens



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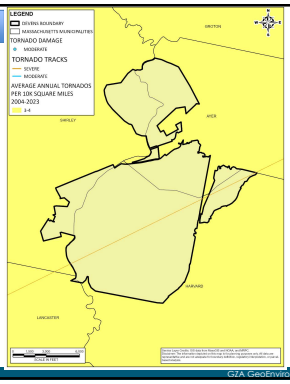
Severe Weather Hazards

Tornados

- Severe tornado through Devens



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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.

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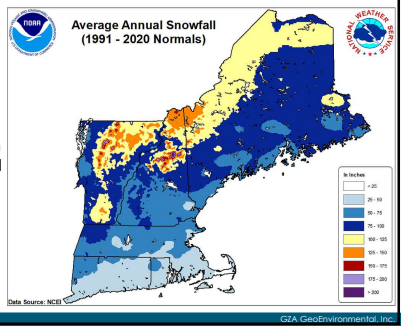
Severe Weather Hazards

Winter Weather

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



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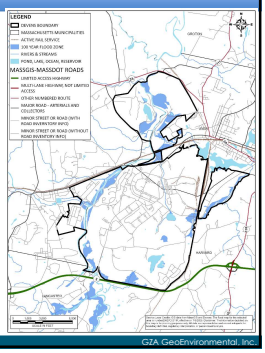
Severe Weather Hazards

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)



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Severe Weather Hazards — Riverine & Intense Precipitation Flooding


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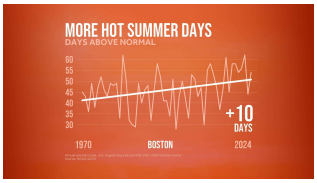
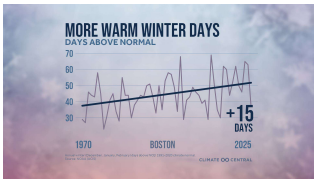
Climate Related Hazards

Extreme Temperature





Source: Climate Central

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

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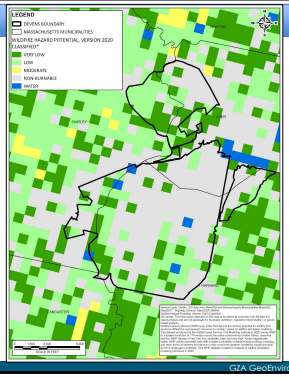
Climate Related Hazards

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.



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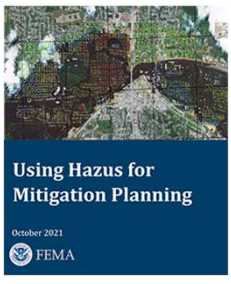
FEMA RISK ASSESSMENT HAZUS

- **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.



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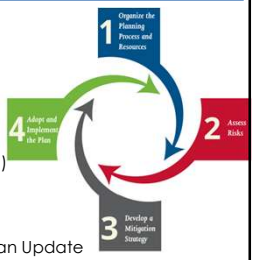
Next Steps

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



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Thank you for attending!

Questions? Comments?

Joseph Bisceglia, MassDevelopment
jbisceglia@massdevelopment.com
Direct: (978) 784-2905

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

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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
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

DEVENS DEVENS ENTERPRISE COMMISSION DEVENSFORWARD

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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 2nd 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.

DEVENS DEVENS ENTERPRISE COMMISSION DEVENSFORWARD

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Devens, MA
Hazard Mitigation Plan Update
Public Meeting
December 3, 2025

SIGN-IN SHEET

NAME	ORGANIZATION	EMAIL
Ralph Fehlberg	Resident	f2zoo@duck.com
Laura Scott	Resident	SCOTTLJUSA@yahoo.com
Michael Alves	Resident	mike@mikealves.com
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Susan Gabriel	Resident	sgabriel222@gmail.com
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Janet Duston		
Beth Suedmeyer		
Aaron Farber-Chen		
Neil Angus		

Attachment 7: References and Resources

- Montachusett Region Natural Hazard Mitigation Plan 2015 Update. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwigsYnejuaRAxVjKlkFHfs0G8gQFnoECBkQAQ&url=https%3A%2F%2Fwww.mrpc.org%2Fsites%2Fg%2Ffiles%2Fvyhlif3491%2Ff%2Fuploads%2Fmontachusett_region_natural_hazard_mitigation_plan_2015_update_adopted_by_communities.pdf&usg=AOvVaw1ebkUzR708reN-zTQtiQqp&opi=89978449
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- Federal Emergency Management Agency (FEMA), Local Mitigation Plan Review Guide, October 2011. (https://www.fema.gov/media-library-data/20130726-1809-25045-7498/planreviewguidefinal93011.pdf)
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- Devens Bylaws. (Devens By-Laws 11/18/1994, Table of Contents)
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- Devens Water Resource Protection Map. (https://www.devensec.com/maps/devens_water_res_map.pdf)
- Sustainable Devens Webpage. (https://www.devensec.com/sustain.html)
- Devens Stormwater Management Plan (Updated June 2022). (Environmental Site Assessment)
- Town of Harvard, MA Hazard Mitigation Plan Update (July 2022).
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- DEC Green Building Incentive Grants. (DEC Green Building Incentive Grants)
- Devens Green Infrastructure Guidelines. (https://www.devensec.com/development/Green_Infrastructure_Guidelines_Final_8-12-14.pdf)

Attachment 8: Key Contacts

KEY CONTACTS

MASSACHUSETTS EMERGENCY MANAGEMENT AGENCY (MEMA)

MEMA Headquarters
400 Worcester Road (Route 9 East)
Framingham, MA 01702-5399

Shelly O'Toole
Hazard Mitigation Unit Supervisor
Michelle.OToole@mass.gov

Jeff Zukowski
Hazard Mitigation Planner
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David Woodbury
Hazard Mitigation Grants Coordinator
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MEMA Headquarters & 24x7 Communications Center
508-820-2000

MEMA Region I Office
978-328-1500

MEMA Region II Office
774-762-4877

MEMA Region III & IV Office
413-750-1400

MEMA Training & Exercise
508-820-1408

https://www.mass.gov/orgs/massachusetts-emergency-management-agency\

https://www.mass.gov/topics/mema-resources-for-public-officials

DIRECTORATE OF EMERGENCY SERVICES (DES)

47 Quebec Street, BLDG. 681
Devens RFTA, MA 01434

Chief of Police

(978) 615-6847

Station Commander

(978) 615-6848

Non-Emergency Message Line

(978) 615-6846

DEVENS COMMUNITY CONTACTS

Devens Operations

Shane Melone, Director of Operations
Karen Montoya, Executive Assistant
Rosie Hunter, Office Assistant
33 Andrews Parkway, Devens
978-784-2933

Devens Enterprise Commission

Neil Angus, FAICP CEP, LEED AP, Director/Land Use Administrator
Beth Suedmeyer, Associate Planner
Dawn Babcock, Executive Assistant
33 Andrews Parkway, Devens
978-772-8831

Devens Fire Department

Timothy Kelly, Fire Chief
Amanda Dack, Administrative Assistant
182 Jackson Road, Devens
978-772-4600 (non-emergency)

Department of Public Works (DPW)

Shane Melone, Director
Beau Forgues, Foreman
Andrew Pelletier, Foreman
Melissa Finlay, Administrative Assistant
99 Buena Vista Street, Devens
978-772-1864

Massachusetts State Police

Station Commander: Lt. Commander James Frohock C-Troop
Community Liaison: Trooper Samuel Watson
59 Buena Vista Street, Devens
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KEY CONTACTS Cont.

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA):

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99 High St.
Boston, MA 02110
1-877-336-2734
fema-r1-info@fema.dhs.gov

Brigitte Ndikum-Nyada, Community Planner

Risk Analysis Branch, Mitigation Division

brigitte.ndikum-nyada@fema.dhs.gov

Office: 617.956.7614

DEPARTMENT OF CONSERVATION AND RECREATION (DCR)

DCR Office of Water Resources (OWR)

Main Office

251 Causeway St., Suite 900

Boston, MA 02114

617-626-1250

State National Floodplain Insurance Coordinator
Joy Duperault, CFM
MA Dept. of Conservation & Recreation, Flood Hazard Mgmt.
251 Causeway Street, 8th Floor
Boston, MA 02114
(617) 626-1406
joy.duperault@mass.gov

AMERICAN RED CROSS:

Massachusetts Contacts

101 Station Landing
Suite 510
Medford, MA 02155

1-781-410-3670
800-564-1234 (24/7)
http://www.redcross.org/local/massachusetts/disaster-services

SALVATION ARMY

Fitchburg Corps Community Center
739 Water Street
Fitchburg, MA 01420
978-342-3300
Lynnette.Valentine@use.salvationarmy.org

Massachusetts Division - Fitchburg/Montachusett Corps Communit y Center (salvationarmy.org)