

Municipal Vulnerability Preparedness (MVP) Program

2018 Town of Montague Report Summary



Climate Change Impacts

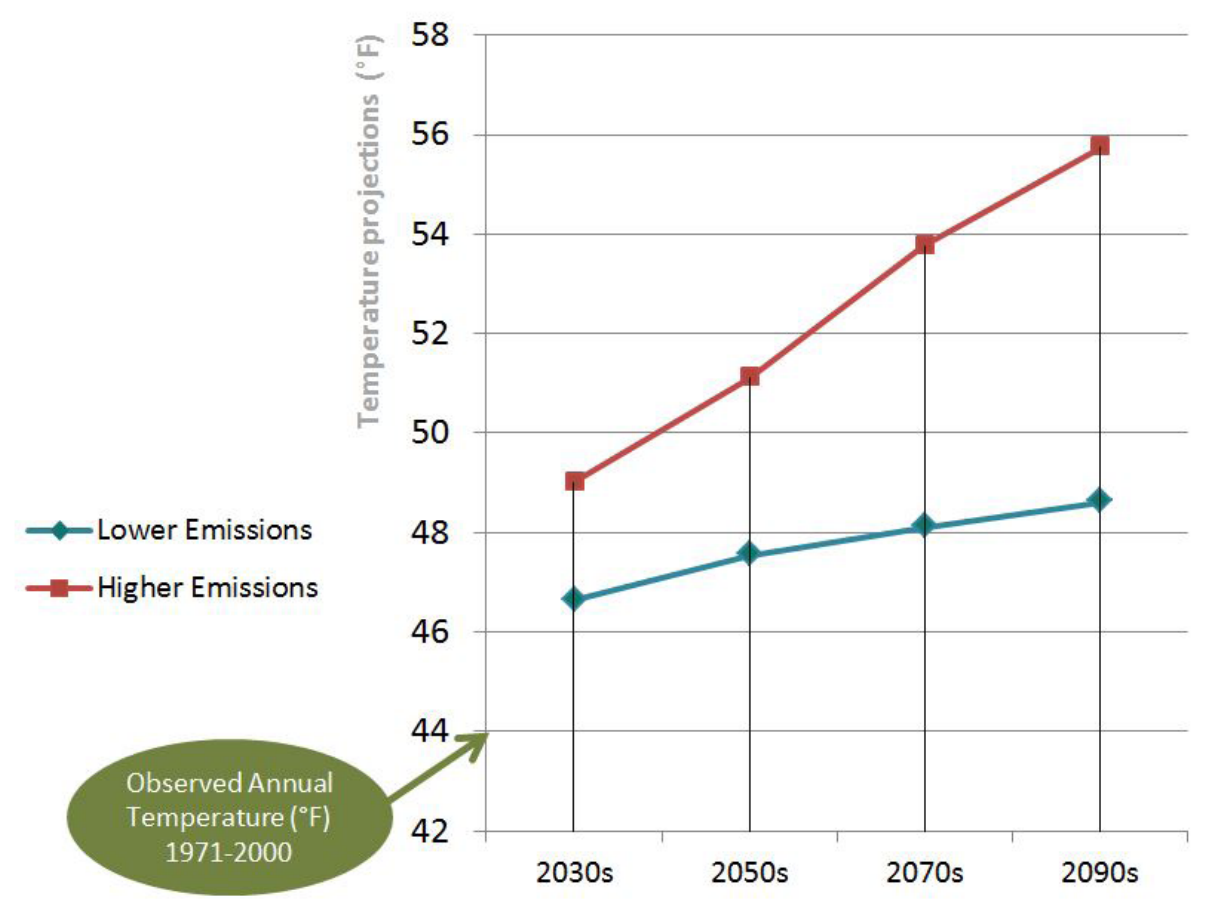
The Municipal Vulnerability Preparedness grant program (MVP) provides support for cities and towns in Massachusetts to begin the process of planning for climate change resiliency and implementing priority projects. Here in Franklin County, communities are experiencing more extreme weather events – especially heavy rains and flooding – along with higher temperatures and other climate-related conditions, increasing the urgency to address resilience and adaptation.

Increased Temperatures

Increased Precipitation

More Extreme Weather

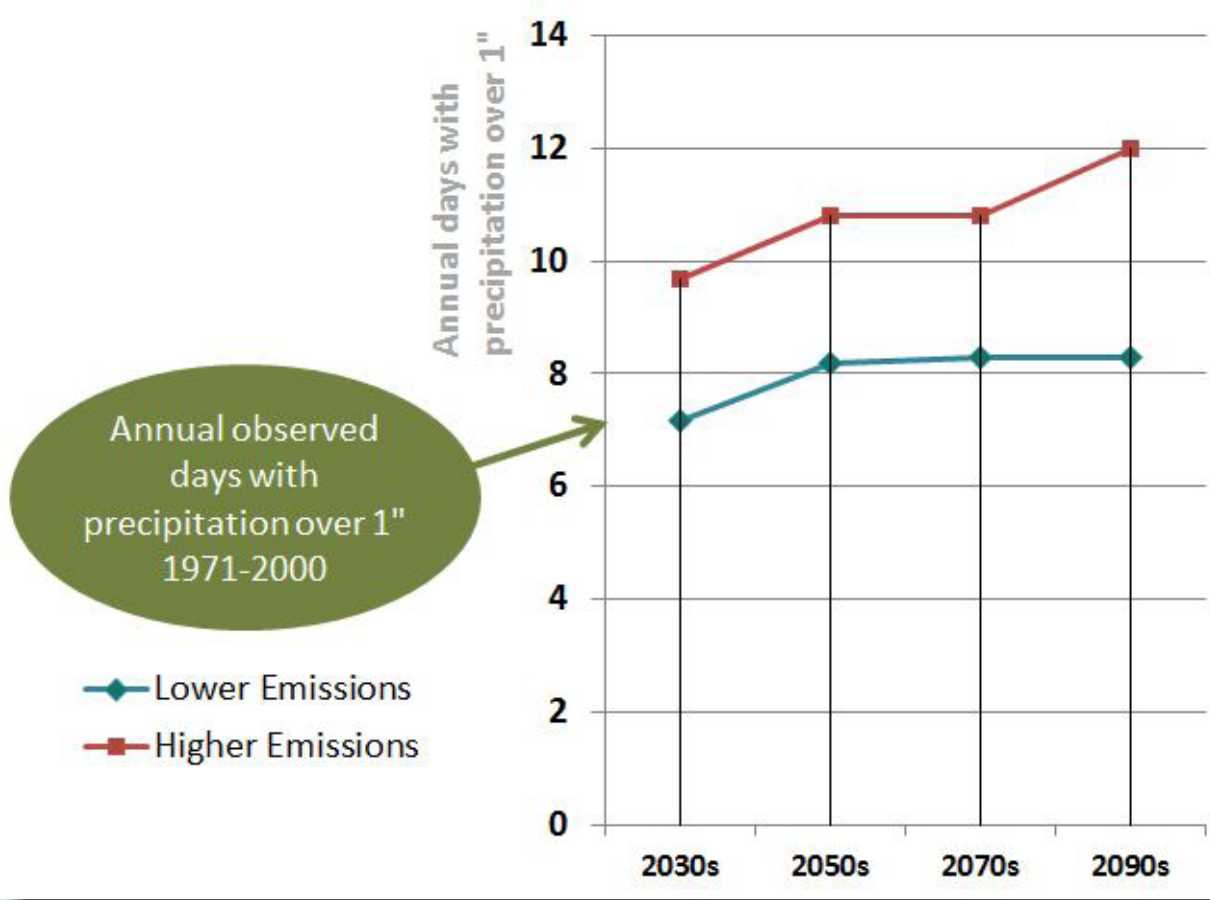
Average Annual Temperature Projections:



Decade	Lower Emissions	Higher Emissions
2030s	47.0	49.0
2050s	47.5	51.0
2070s	48.0	53.0
2090s	48.5	55.0

Observed Annual Temperature (°F) 1971-2000: 44

Projected Annual Days Over 1" Precipitation:



Decade	Lower Emissions	Higher Emissions
2030s	8.0	9.5
2050s	8.5	10.5
2070s	8.5	10.5
2090s	8.5	12.0

Annual observed days with precipitation over 1" 1971-2000: 8



Data source: Northeast Climate Science Center

2) Identify


Workshop participants discussed a number of hazards that impact Montague, deliberating on how frequent, how intense and how widespread each hazard has been and could potentially be in the future. The top hazards identified for Montague:

Montague's Top Hazards

Severe WeatherDroughtHigh Heat & FreezingDam Failure / Hazardous Materials




Breakdown of Montague's Top Vulnerabilities:




Infrastructure

The vacant blighted mill buildings and 150-year old canal system in Turners Falls pose a public safety and health risk in their current state. Many bridges throughout Town are in need of repair or replacement and there is a lack of resources to maintain a steady replacement schedule.



Societal

Low-income, homeless, elderly, and non-English speaking residents may have more limited ability to travel to a shelter during a hazardous event. Improved communication between Town officials and vulnerable populations is needed.



Environmental

With warming temperatures, Montague Plains, a rare pitch-pine scrub-oak barren forest, is vulnerable to forest fires and invasion from the southern pine beetle and other pests and pathogens. Erosion is an issue along the Sawmill, Connecticut, and Millers Rivers. The public drinking water supply is vulnerable to hazardous material spill.

1) Engage

Facilitated by FRCOG in Spring 2018, the Community Resilience Building Workshop and Public Listening Session helped the town to:

- Define top local natural and climate related hazards;
- Identify existing and future strengths and vulnerabilities;
- Develop prioritized actions for the community; and
- Identify opportunities to advance actions to increase resilience.

Participants:

Select Board

Police Department

Montague Center and Turners Falls Fire Departments

Town Planner

Town Administrator

Public Health

Energy Committee

Franklin County Regional Housing Authority

Residents

Water Pollution Control

EMD

Council on Aging

Mass DCR

FirstLight Power

Gill/Montague School District

FRCOG (Facilitator)

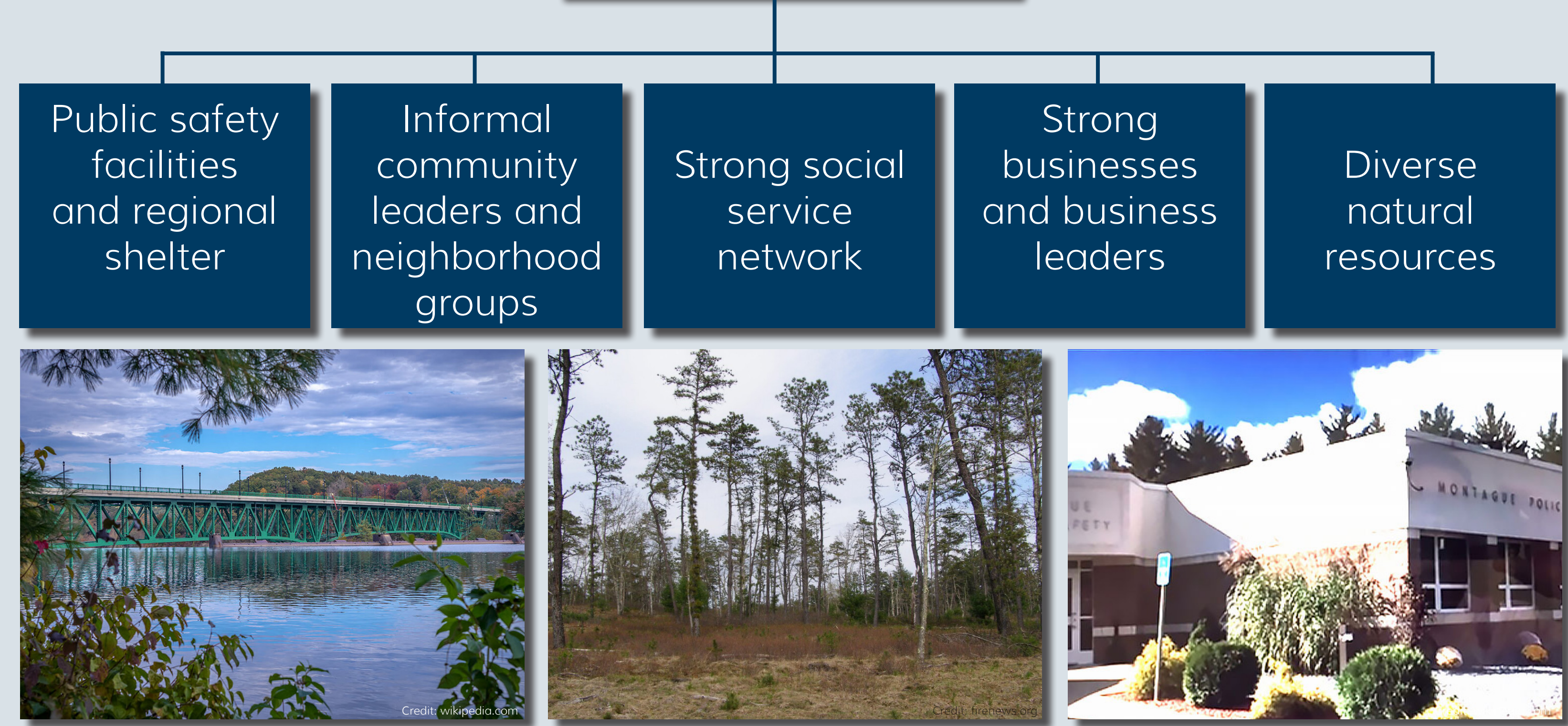
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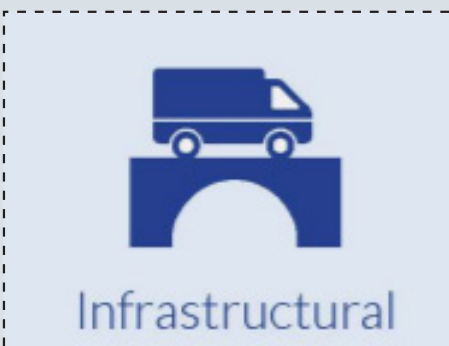
3) Assess

Montague has a number of strengths and assets, as identified by workshop participants. These include strong social, physical, and environmental infrastructure that increases the resilience of the community in the face of climate change.

Montague's Top Strengths




Breakdown of Montague's Top Strengths:



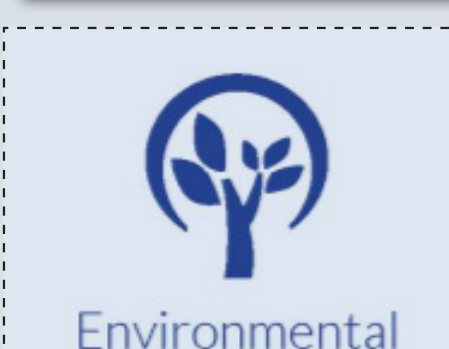
Infrastructure

Critical facilities, such as the Public Safety Complex and the Turners Falls High School are located out of the floodplain and have back-up power generators. A solar-powered micro grid is being studied for increased resilience. Communication with the railroad has improved. There are back-up public water supplies in Montague and a connection to Greenfield's public water supply is being pursued.



Societal

Montague's informal community leaders and neighborhood networks form a strong social network. There is a strong sense of identity and community for each of Montague's 5 villages which contributes to neighborhood resiliency. Institutions such as businesses, social service organizations, and churches increase societal strength.



Environmental

Montague's diverse natural resources and zoning bylaws that help protect them are strengths and assets. The Montague Plains, a unique ecosystem and a State wildlife refuge, is managed for habitat restoration and fire suppression. Restoration along the Sawmill River to reduce erosion and regain access to the floodplains has been completed.

4) Develop

Communication, infrastructure and facilities were common themes in many of the recommendations to emerge from the workshop, all aimed at increasing resilience and reducing vulnerability to the impacts of climate change. The top five highest priorities are shown below.

Montague's Highest Priority Recommendations



5) ACTION!

- ☐ Integrate MVP findings into Hazard Mitigation Plan and Open Space and Recreation Plan updates.
- ☒ Endorse MVP Plan to become an MVP Community
- ☐ Apply for MVP Action Grants

Eligible Projects include:

- Vulnerability and Risk Assessment
- Education and Communication
- Local Bylaws and Ordinances
- Redesigns and Retrofits
- Nature-Based Solutions
- Ecological Restoration and Habitat Management



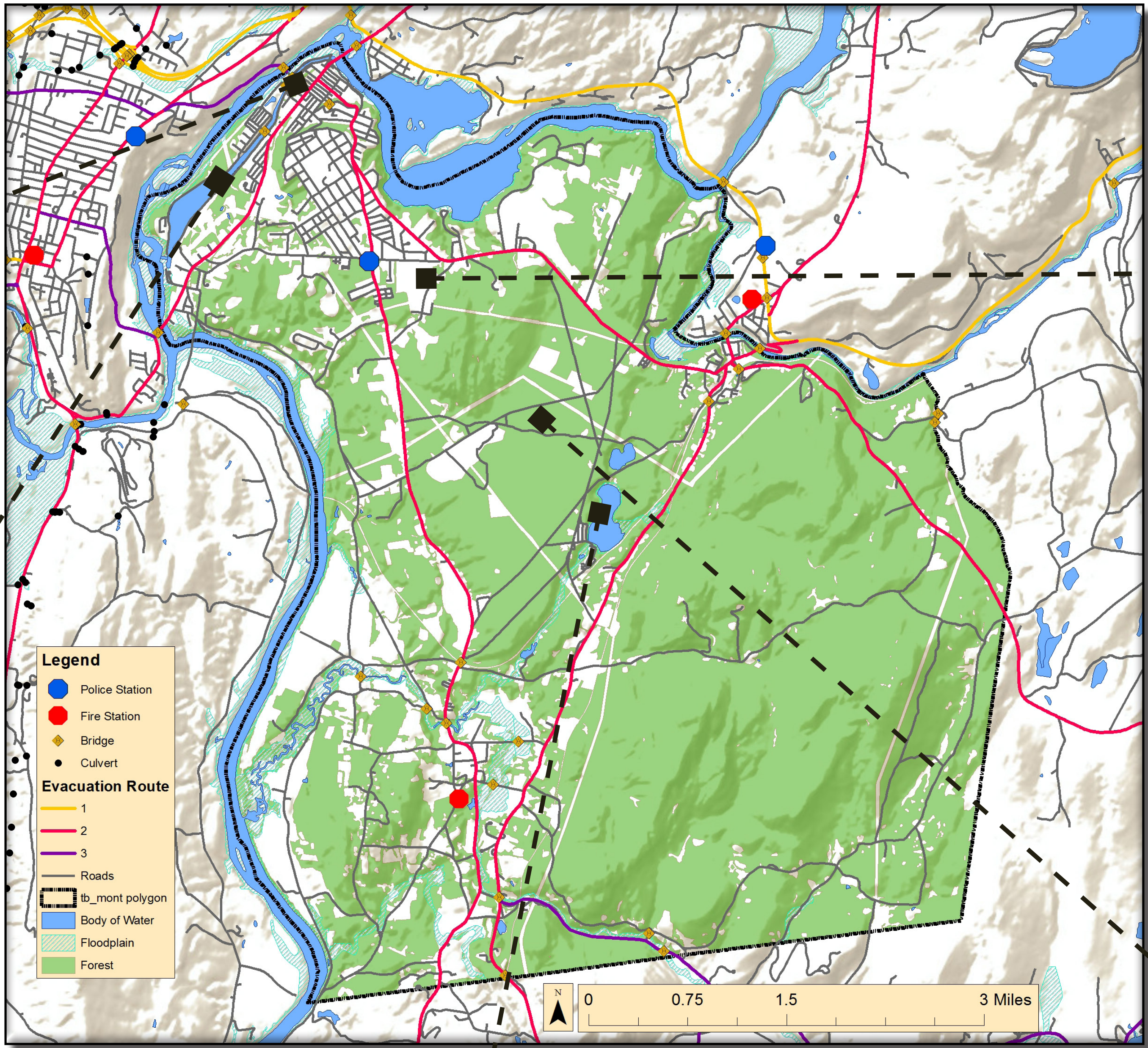
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2018 Town of Montague Report Map

Facilitated by the
Franklin Regional Council of Governments
A State-Certified MVP Provider



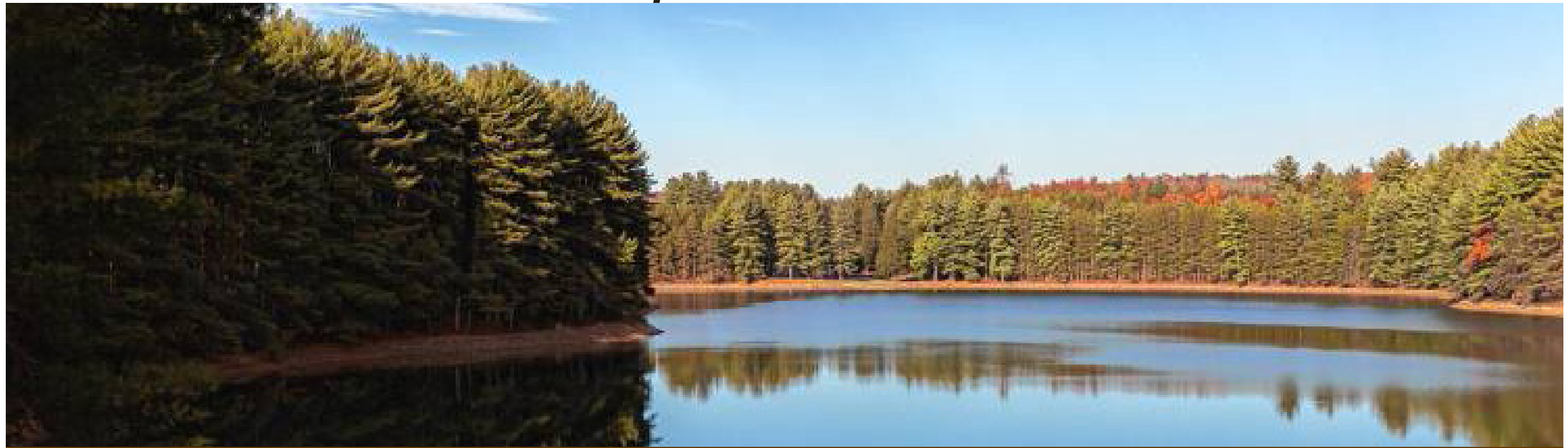
Informal community leaders, tight-knit neighborhood networks, and social service agencies increase resilience of Montague's residents. Strengthening communication between Town officials, vulnerable populations and the agencies that serve them is a priority.



Turners Falls High School serves as a regional shelter and is located outside of the floodplain and has a backup electric generator. However, the building is still in need of a backup water supply, radio communications, and air conditioning.



The vacant blighted mill buildings and 150-year old canal system in Turners Falls pose a public safety and health risk in their current state.



Lake Pleasant and nearby underground aquifers serve as part of the town's water supply and the area is home to a residential community. The area is vulnerable to disasters, such as wildfires and hazardous materials spills, which would damage homes and threaten the water supply.



Montague Plains is a unique ecosystem that is managed for habitat restoration and fire suppression but may be vulnerable to pests and pathogens brought on by warming temperatures.