



MUNICIPAL VULNERABILITY PREPAREDNESS (MVP) PLANNING

CORE TEAM MEETING

October 8, 2019









Health & Safety Moment

Introductions & Overview of MVP Program

Planning Grant Tasks & Core Team Responsibilities

Extended Scope Items

Maintaining MVP Designation

Next Steps

Health & Safety Moment Flu Prevention







Flu season occurs in fall through winter, peak flu sickness occurring in November

Get your flu shot NOW!

Common symptoms include fever, headache, dry cough, nausea

If you don't feel well, STAY HOME!

Contagious 1 day before symptoms and up to 1 week after





How to Stay Healthy:

- Get an annual flu vaccine.
- Wash your hands frequently with soap and water AND use hand sanitizer.
- Disinfect workspaces and surfaces around you that may be contaminated.
- Ensure that your
 workplace has an
 adequate supply of
 tissues, soap, paper
 towels, alcohol-based
 hand rubs, and
 disposable wipes.

From CDC.gov, NSC.org



Core Team Introductions

Who are you and what is your role in the Community?







Steps to Resilience







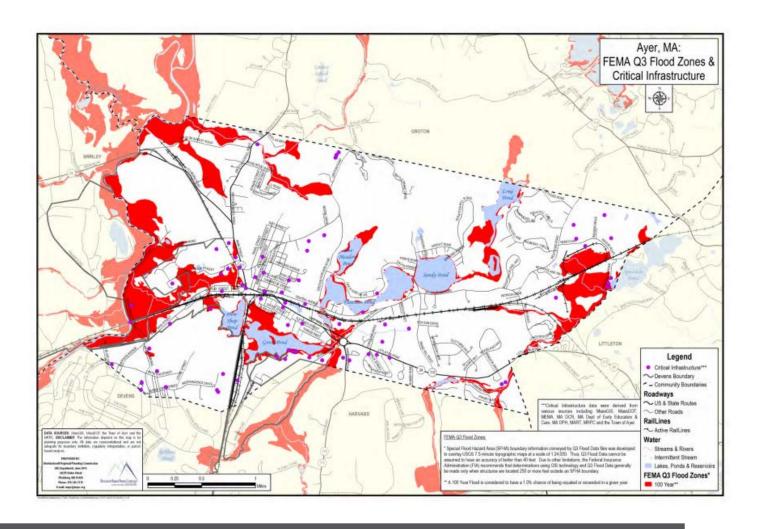
Current Town Planning Efforts

Hazard Mitigation Plan Comprehensive Emergency Management Plan

Water Supply

Joint Emergency
Preparedness
Committee

Emergency Planning Tools for Residents



Now: MA Municipal Vulnerability Preparedness (MVP) Program





MA Municipal Vulnerability Preparedness Program

MA Executive Order 569 (September 2016)

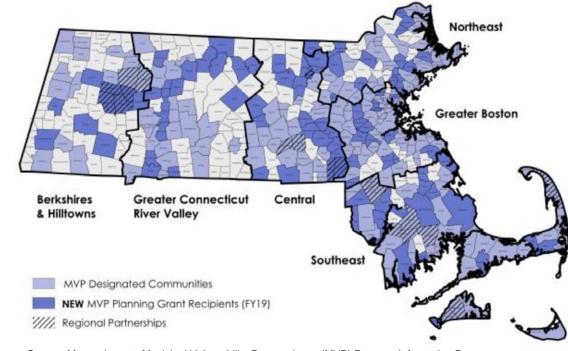
Technical Support & funding for MA municipalities

- Vulnerability Assessment
- Community Engagement
- Actionable Resiliency Plans

Grant Opportunities

- MVP Planning Grant: complete vulnerability assessment, community involvement requirements, final report receive MVP designation
- MVP Action Grant: Must have MVP designation.
 For communities to implement priority climate adaptation actions identified through MVP process.

Municipal Vulnerability Preparedness (MVP) Program



Source: Massachusetts Municipal Vulnerability Preparedness (MVP) Program Information Page: https://www.mass.gov/service-details/mvp-program-information

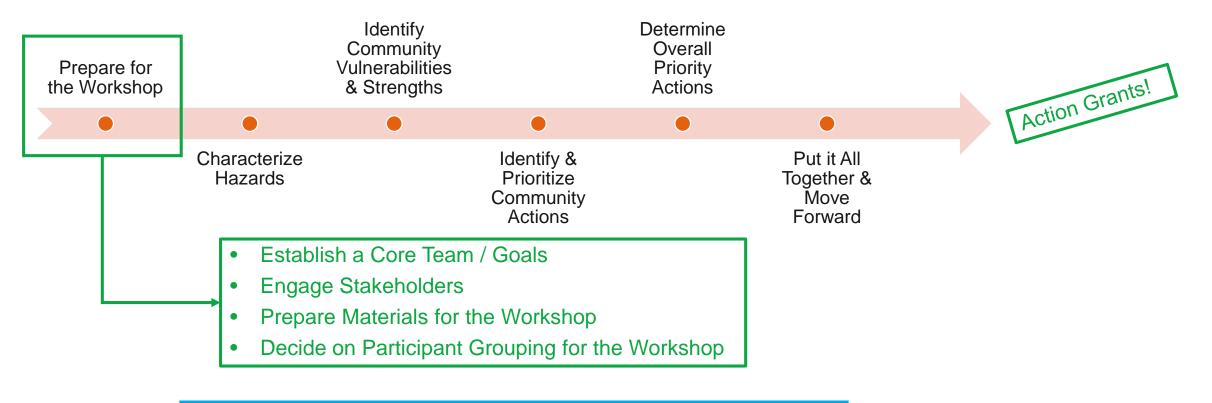
Updated 09-23-2019

State & Local Partnership to build resilience to climate change





MVP Planning Process



MVP Principles

- Community-led process that employs local knowledge & requires local support
- Accessible
- Utilizes partnerships and leverages existing efforts
- Mainstreams climate change
- See communities as local innovators
- Frames coordinated state efforts





Town Staff / Core Team Role

Selecting and contracting Vendor

Establish a Core Team

Identify and complete Outreach to Critical Stakeholders, Partners, and Town Officials for workshops

Workshop Coordination: Schedule, coordinate, send invitations, conduct significant outreach in the community, attend meetings and workshops

Help coordinate Staff Interviews with key experts

Help the MVP provider find Relevant Data and other Relevant Info

With MVP Provider, complete and send 3 Progress Reports with info on spending and a Final Report

With consultant support as budget allows, complete 1 Public Listening Session

Continue **Municipal Outreach and Engagement**, using the completed plan to inform existing planning and project activities

Ayer has been awarded an expanded Scope of Work which the Core Team will also support.





MVP Provider Role

Meet with Municipal Project Manager to set out project scope, timeline, and compile a list of data needs; help with stakeholder mapping; set schedule for workshops, etc.

Meet with Community Core Team to help plan for workshop and collect information

Conduct Interviews with key municipal staff

Prepare Materials for Workshop including: basemaps of towns with critical layers, town climate change data and potential impacts, planning documents, town information about hazards, and risk matrix

Serve as Lead Facilitator during workshop and bring facilitators to assist as table facilitator. Adequate facilitation is key!

Designate Town leads to be scribes at each table

Document all workshop outcomes and prepare a final risk matrix and summary reports

Work with town to submit all materials to the Commonwealth

Ayer has been awarded an extended Scope of Work – the Provider will also support.



Goal Setting

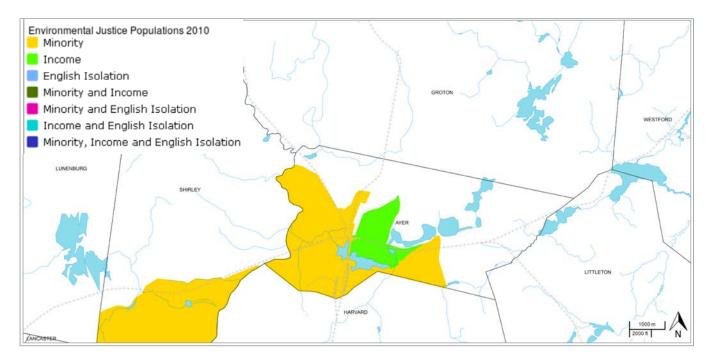
- 1. New / Existing Plans?
- Will the Workshop start a new conversation and identify next steps?
- Will the workshop help to augment other specific planning needs?
- 2. Focus?
- Community-wide?
- Specific areas?
- 3. Your goals?







Vulnerable Populations



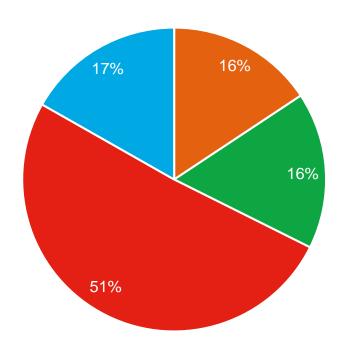
In Massachusetts a community is identified as an Environmental Justice community if any of the following are true:

- Median household income at or below 65 percent of the statewide median income
- 25% or more of the residents identify as a race other than white; or
- 25% or more of households have no one over the age of 14 who speaks English only or very well - English Isolation

Source: https://www.mass.gov/info-details/environmental-justice-communities-in-massachusetts

Ayer Population by Age





Source: U.S. Census, American Community Survey, 5- year estimates, 2013-2017





Critical Facilities





Who are the Stakeholders?

People impacted by hazards in the past & likely to be impacted in the future?

People who influence, guide, and/or have the authority to make decisions?

Key Community / Business Community Members?







Public Safety, Transportation & Utilities

- Emergency Planning
- State / Local floodplain manager or NFIP Coordinator
- Hazard Mitigation Planners
- Highway planning/maintenance
- Local transit authorities
- Public & Private Utilities

Community & Economic Development

- Chamber of Commerce
- Local community development and economic development officials
- Developers/Builders & Realtors Associations
- Engineering/Architect Associations
- Nonprofit community development organizations
- Major business interests
- Nonprofit education and education advocacy groups
- Land conservation organizations



- Town Manager's Office
- Community & Economic Development
- Building Department
- Council on Aging
- Public Works
- Emergency Management
- Parks & Recreation
- Schools
- Public Housing Authority

- Finance
- Conservation Commission
- Board of Health
- · Historical Commission
- Pond & Dam Management
- Zoning
- Master Plan & Capital Planning
- Green Community

Stakeholders







Workshop Materials

Existing Maps and Hazard Mitigation Plans

Photos and Historical Information

Damage Assessments and Claims

People's Stories







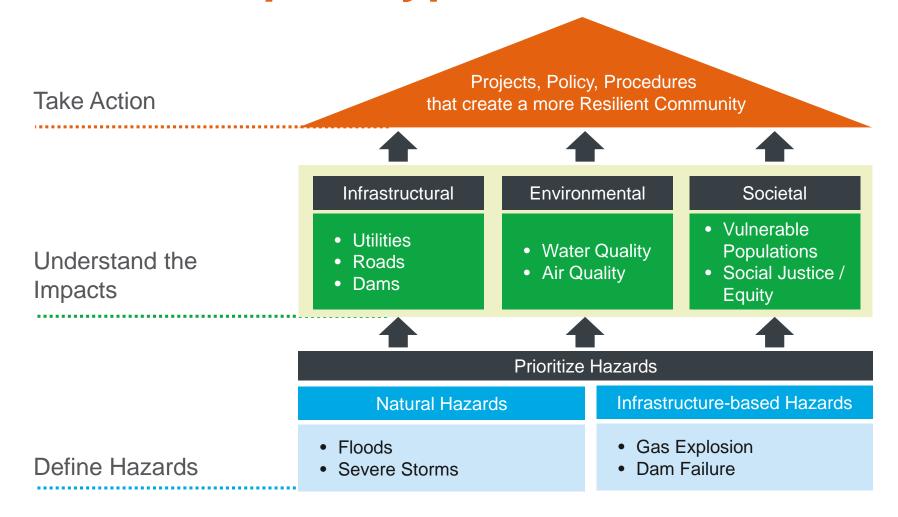
MA Municipal Vulnerability Preparedness Program

CRB Workshops / Matrix

Community Resilience Building I	x 📑	22 (γ	www.CommunityResilienceBuilding.org						
$\underline{\mathbf{H}}$ - $\underline{\mathbf{M}}$ - $\underline{\mathbf{L}}$ -priority for action over the $\underline{\mathbf{S}}$ -hort or $\underline{\mathbf{L}}$ -ong term (and $\underline{\mathbf{O}}$ -ngoing) $\underline{\mathbf{V}}$ = Vulnerability $\underline{\mathbf{S}}$ = Strength			Top Priority Hazards	(tornado, floods, wildfire	e, hurricanes, earthqua	ke, drought, sea level i	rise, heat wall Priority <u>H</u> - <u>M</u> - <u>L</u>	Time	
Features	Location	Ownership	V or S					<u> </u>	O ngoing
Infrastructural									
Societal									
Environmental									



Hazard and Impact Types



Natural Hazards

Flooding

Hurricanes/Tropical Storms

Nor'easters

Severe Winter Storms

Tornadoes

Wildfires

Drought

Extreme Temperatures

Earthquakes

Landslide

Ayer Natural Hazard Matrix										
Natural Hazard	Likelihood of Occurrence	Location	Impacts	Hazard Index						
Natural Hazard Separated by Flood,	3 = Highly Likely	3 = Regional/State	4 = Catastrophic	Ranking Determined by						
Atmospheric Related and Winter	2 = Possible	2 = Multi	3 = Critical	Combining the Likelihood,						
Related, Other Natural Hazards, and	1 = Unlikely	Community/Regional	2 = Limited	Location and Impacts of a						
Geologic Hazards		1 = Local/Town	1 = Negligible	Natural Hazard						
Flood-Related Hazards										
Heavy Rain	2	1	2	5						
Snow Melt	1	1	1	3						
Dam Failure	2	2	3	7						
Ice Jams	1	2	3	6						
Beavers	3	1	2	6						
Atmospheric Related and Winter Related Hazards										
High Winds	2	2	3	7						
Hurricanes	1	3	3	7						
 Tornados 	1	2	3	6						
 Nor'easters 	2	3	2	7						
 Severe Thunderstorms 	2	1	2	5						
Heavy Snow	3	2	3	8						
Ice Storms	2	2	3	7						
Blizzard	1	2	3	6						
Other Natural Hazards										
 Major Urban Fires 	1	1	3	5						
Wildland Fire	3	1	2	6						
Drought	1	3	2	6						
 Extreme Temperatures 	1	3	2	6						
Geologic Hazards										
Earthquakes	1	2	2	5						
 Landslides 	1	1	1	3						
Tsunami	NA	NA	NA	NA						

Aver Natural Hazard Matrix

Highly likely: 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

Possible : 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10

vears.

Unlikely: Less than 10 percent probability of occurrence in the next year or a recurrence interval of greater than 11 years.

Catastrophic: Immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions.

Critical: Fast speed of onset or long duration of event resulting in devastating damage and loss of services for weeks or

months

Limited: Moderate speed of onset or moderate duration of event, resulting in some damage.

Negligible: Slow speed of onset or short duration of event resulting in little to no damage.





Infrastructure Concerns

Dam Failure

Fire

Loss of Power

Gas Explosion

Water Contamination

Water Main Break







Expanded Scope

Implementation Outline

Review of Local Bylaws & Regulations

Ongoing Outreach and Engagement Plan





Maintaining MVP Designation

Annual Progress Report to Commonwealth detailing steps taken toward implementing the plan. Steps may include:

Applying for grant funding, such as MVP Action Grants

Right-sizing culverts

Updating existing plans using the outcomes of the workshop



Next Steps

Workshop Planning/Logistics

- 2 Workshops (4 hours each) or 1 Workshop (8 hours)?
- Date, Time of Day, Place
- Materials

Stakeholder Outreach

- "Save the Date" approximately 6 weeks ahead of meeting
- Secure participants
- Outreach Materials





THANK YOU

Kathryn B. Edwards, PE Senior Engineer Kate.Edwards@arcadis.com

Trevor Johnson, AICP
Resiliency Planner
Trevor.Johnson@arcadis.com

Seth MacDonald, EIT Water Engineer Seth.MacDonald@arcadis.com

Arcadis U.S., Inc. 500 Edgewater Drive, Suite 511 Wakefield, MA 01880