



6TH ANNUAL  
CAPE COASTAL CONFERENCE  
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# Massachusetts Municipal Vulnerability Preparedness Program: Empowering Communities to Address Climate Resilience from Planning to Implementation



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Environmental Affairs



Orleans



Wellfleet



Sandwich

Winter 2018  
Nor'easters

# EXECUTIVE ORDER 569

## 9.16.16



- Reducing greenhouse gas emissions to combat climate change
- Preparing for the impacts of climate change
  - State Adaptation Plan
  - Climate Coordinators
  - Agency Vulnerability Assessments
  - Municipal Support

# ENVIRONMENTAL BOND BILL

## 8.21.18



- \$2.4 billion bond bill with focus on climate change resiliency
- Over \$500 million authorized for climate change adaptation
- **Codifies EO 569, including the MVP Program**

# Two MVP Grant Opportunities



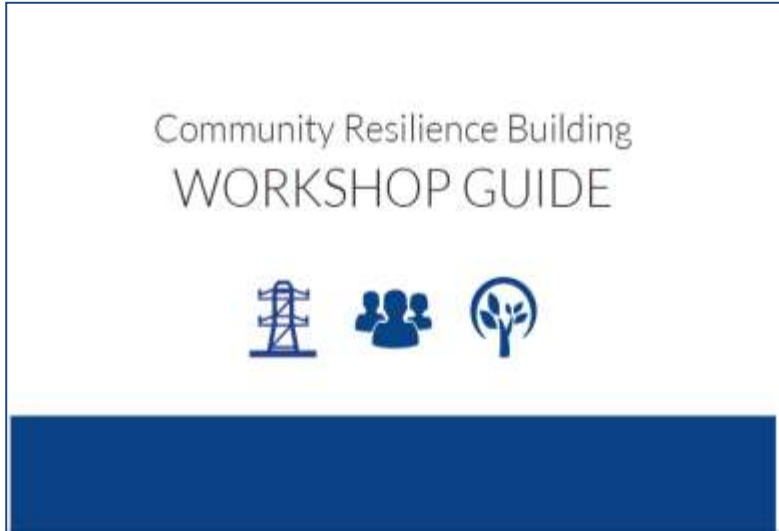
MVP Planning Grant



MVP Action Grant

<https://www.mass.gov/municipal-vulnerability-preparedness-mvp-program>

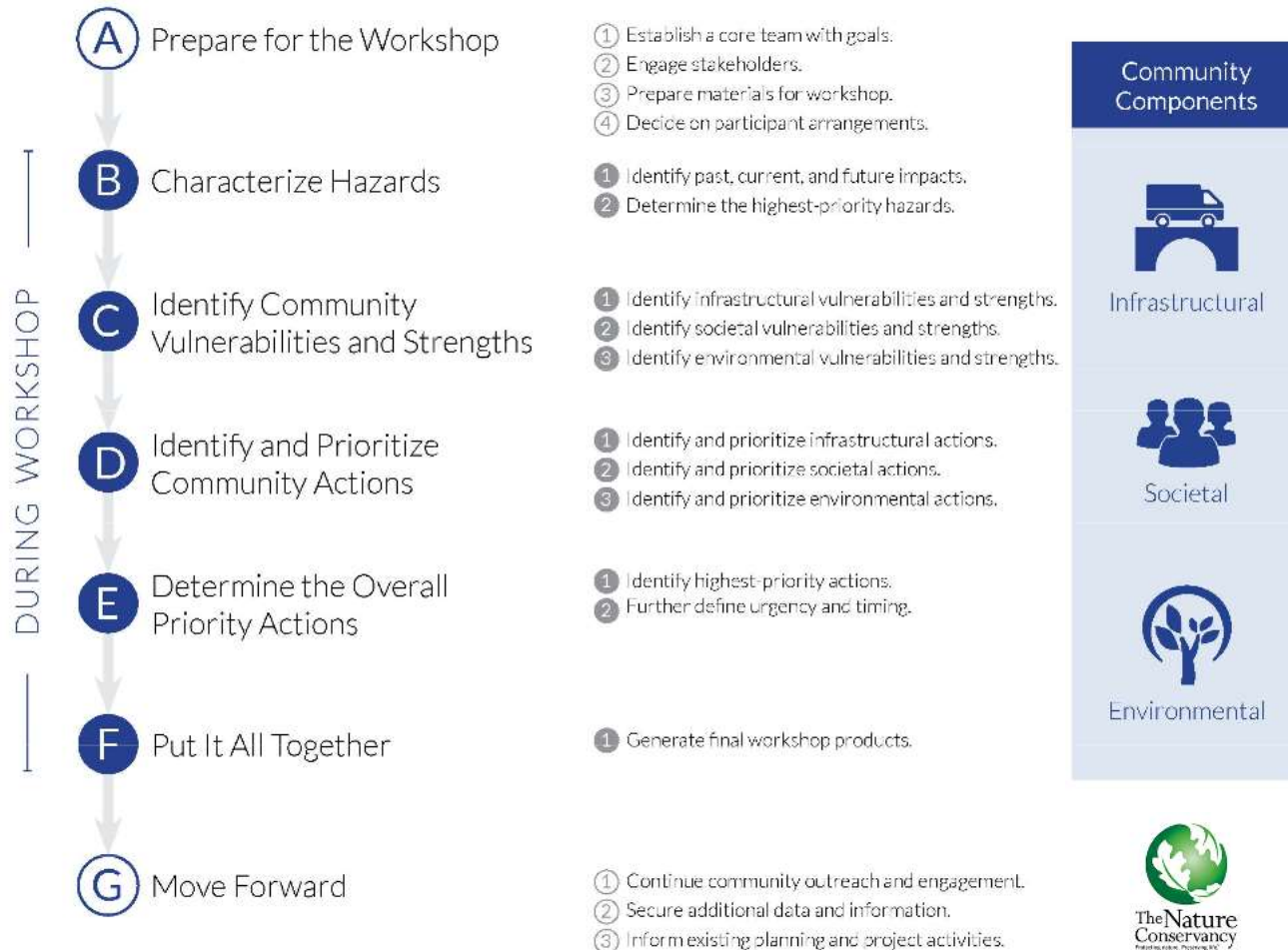
# MVP Planning Grant



- ❖ **Community-led process** that employs local knowledge and requires local buy-in and support
- ❖ **Accessible** for any community at any scale
- ❖ **Utilizes partnerships** and provides access to over 320 state-certified MVP providers trained by EEA and TNC
- ❖ **Mainstreams** climate change into existing planning, budgeting and policy frameworks
- ❖ **Informs and guides** coordinated statewide efforts including statewide hazard mitigation and climate adaptation plan
- ❖ **Utilizes** a statewide website: [www.resilientma.org](http://www.resilientma.org)

[www.communityresiliencebuilding.com](http://www.communityresiliencebuilding.com)

# Overview of the Process (Steps & Tasks)



- Must complete 1-2 workshops to cover this process
- Focus on vulnerabilities and strengths
- Follow-on public forum for wider community participation
- Produce final report with clearly prioritized actions

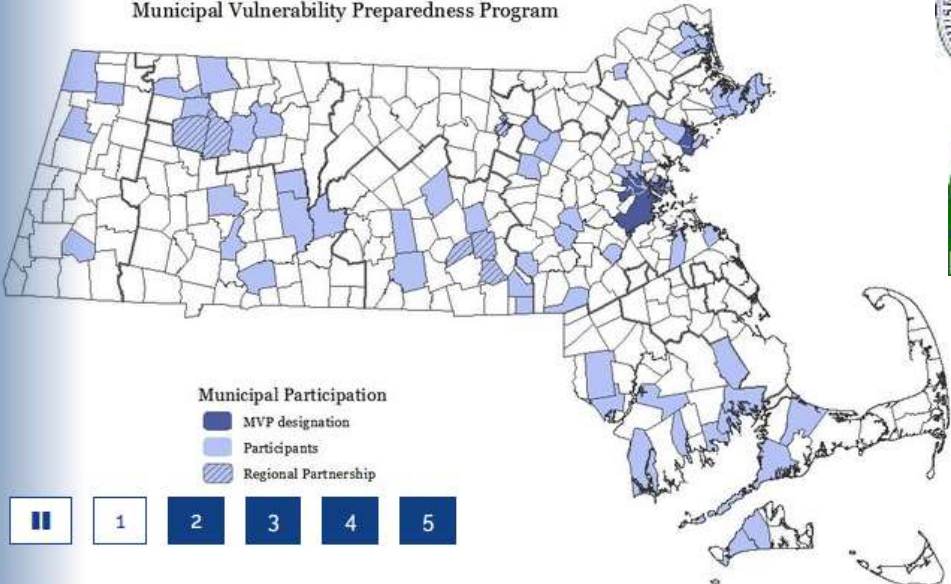
Providing the most up-to-date climate change science and decision-support tools for the Commonwealth. [More »](#)

# Municipal Vulnerability Preparedness

Our cities and towns are on the front lines of climate change. The new MVP program from the Executive Office of Energy and Environmental Affairs works with communities across the state to decrease risk, build resiliency, and identify strengths and opportunities through targeted planning and action.

[More »](#)

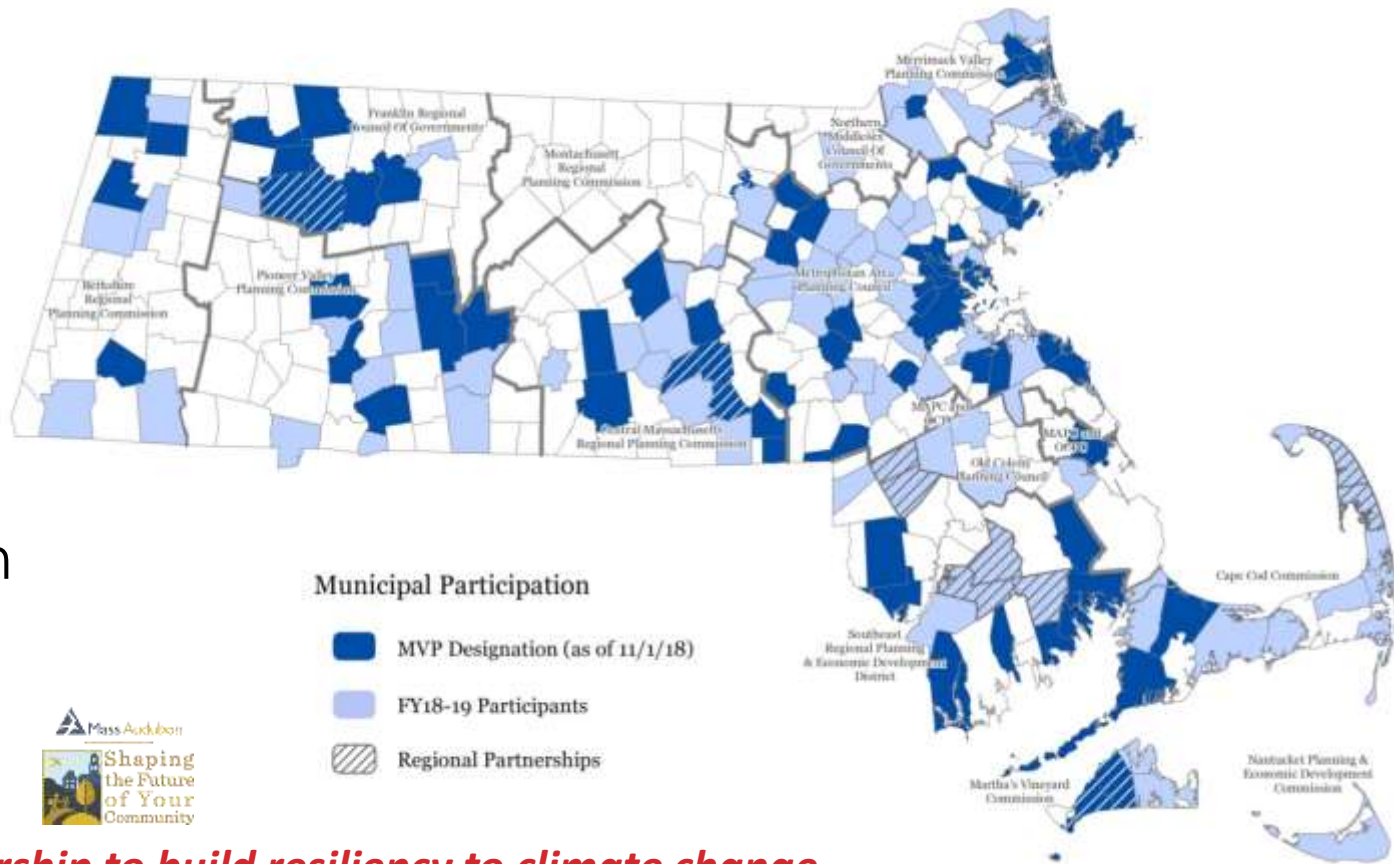
Municipal Vulnerability Preparedness Program



# Municipal Vulnerability Preparedness (MVP)

2017-2018

43% of Commonwealth participating



**State and local partnership to build resiliency to climate change**

1. Engage Community

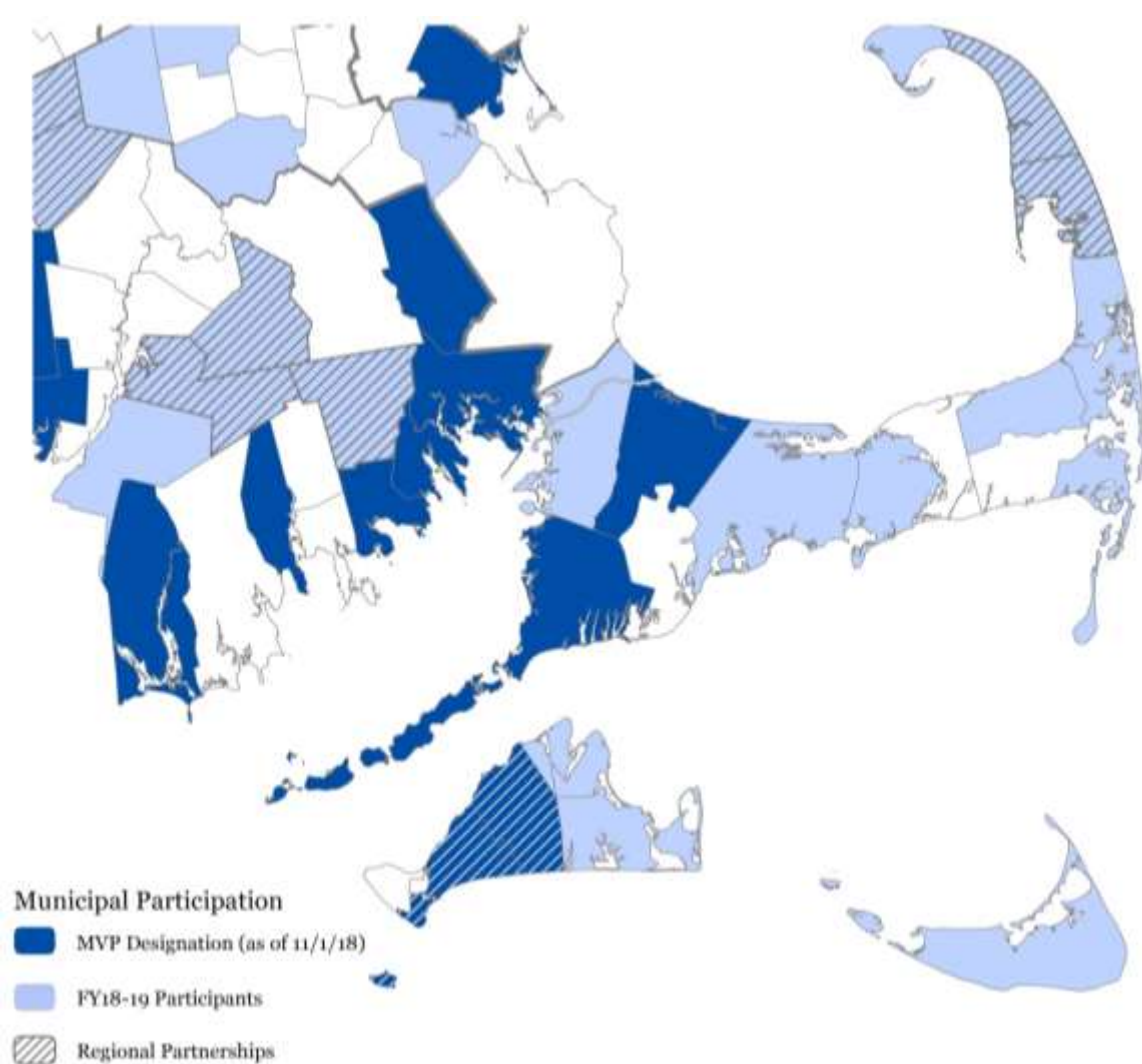
2. Identify CC impacts and hazards

3. Complete assessment of vulnerabilities & strengths

4. Develop and prioritize actions

5. Take Action





## **MVP CAPE COMMUNITIES IN PROGRESS:**

Barnstable  
Bourne  
Brewster  
Chatham  
Eastham  
Orleans  
Provincetown  
Truro & Wellfleet  
Yarmouth

## **DESIGNATED MVP CAPE COMMUNITIES:**

Falmouth  
Sandwich

# Maintaining MVP Designation

Each municipality must provide the Commonwealth with a yearly progress report outlining the steps they have taken towards implementing their priority actions. Steps may include (but are not limited to):

Applying for grant funding, such as MVP Action Grant

Right-sizing culverts

Updating existing local plans using the outcomes of the workshop, etc.

Reconvening Core Team to update or revise MVP plan or priority actions

# MVP Action Grant



To implement priority climate adaptation actions identified by MVP Communities



Preference for projects to build resilience, are proactive and clearly demonstrate efforts to redesign, re-evaluate, or reconsider and incorporate new climate change data



Projects are encouraged to utilize nature-based strategies to address climate change impacts.



# MVP Action Grants: Project Categories

- ❖ Detailed Vulnerability and Risk Assessment
  - e.g., Climate Change Vulnerability Assessment/Adaptation Planning (**Town of Sandwich**)
- ❖ Public Education and Communication
  - e.g., Comprehensive Climate Adaptation and Resilience Action Plan & Interactive Community Dashboard (City of New Bedford)
- ❖ Local Bylaws, Ordinances, Plans, and Other Management Measures
  - e.g., Climate Resilience Policy Audit/Amendments, LID & Design Guidelines (Town of Brookline)
- ❖ Redesigns and Retrofits
  - e.g., North River Canal Resilient Wall, Riverwalk & Park (City of Peabody)
- ❖ Ecological Restoration and Habitat Management to Increase Resiliency
  - e.g., Sawmill Brook Central Pond Restoration Design (Town of Manchester)

# MVP Action Grants: Project Categories

- ❖ Nature-Based Storm-Damage Protection, Drought Prevention, Water Quality, and Water Infiltration Techniques
  - Feasibility Study for an Essex Bay Living Shoreline (Town of Essex)
- ❖ Nature-Based, Infrastructure and Technology Solutions to Reduce Vulnerability to Extreme Heat and Poor Air Quality
  - Tree Planting Plan to Mitigate Heat Islands and Reduce Runoff (Town of Natick)
- ❖ Nature-Based Solutions to Reduce Vulnerability to other Climate Change Impacts
  - Water/Sewer Infrastructure Green Emergency Power Study (Town of Holden)



# MVP Action Grants: Nature-Based Solutions

## To Mitigate Flooding/Storm water, Water Quality, or Heat

- ❖ Drainage Model & Conceptual Strategies to Reduce Future Flooding (City of Medford)
- ❖ Designs with Nature to Reduce Storm Damage (City of Northampton)
- ❖ Retrofit Parking Lot to Reduce Urban Heat Island (City of Cambridge)

## Opportunities to Include NBS in Follow-on Project Phases

- ❖ Town-wide Road Stream Crossing Assessment (Town of Belchertown)
- ❖ Assessing Storm-energy Reduction by the Vegetated Salt Marsh Plat form (Town of Newbury)
- ❖ Lawrence Brook Watershed Flood Mitigation & Water Quality Improvement (City of Peabody)

# MVP 2018



- ❖ 43% of the Commonwealth participating in MVP Program
- ❖ 37 current Action Grant projects: marsh resiliency, wastewater and drinking water infrastructure, living shoreline feasibility study
- ❖ \$7.2 million dollars committed so far



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<https://www.mass.gov/municipal-vulnerability-preparedness-program>

**2017-2018 MVP planning reports –**

<https://www.mass.gov/service-details/2017-2018-mvp-planning-reports>

