

Municipal Vulnerability Preparedness Program





Michelle Rowden
Northeast Regional Coordinator
MA Executive Office of Energy and Environmental Affairs

Municipal Vulnerability Preparedness (MVP) Grant Program

MVP Planning Grant Process 99% participation 349 communities

MVP Action Grant

Projects

FY 18: 37

FY 19: 36

FY 20: 53

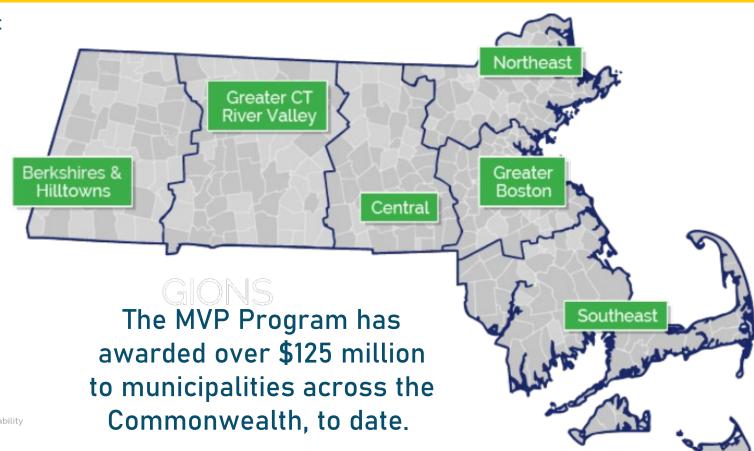
FY 21: 41

FY 22: 66

FY 23: 73

FY 24: 80 (\$27m)





Building Climate Resilience



Climate resilience is the ability of a community to address the needs of its built, social, and natural environment to anticipate, cope with, and rebound stronger from events and trends related to climate change hazards.

This photo is a concept design for a sustainable community in Edmonton, Alberta, Canada called an "agrihood" - agricultural neighborhood. https://www.watershedhealth.org/single-post/2018/06/22/summersciencefriday-what-do-climate-resilient-neighborhoods-look-like



Building Climate Resilience

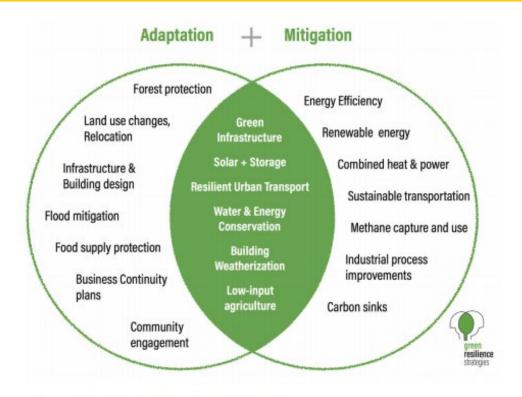
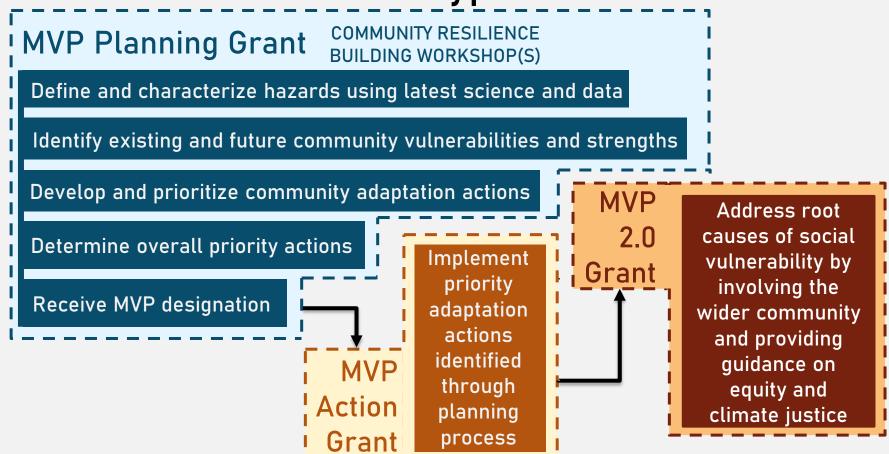


Figure 1: Climate Adaptation and Mitigation Synergies

Green Resilience Strategies (2017)

Graphic concept modified with acknowledgement of David MacLeod, City of Toronto

MVP Process & Grant Types





Reflecting on MVP Planning Process

With 99% of the Commonwealth participating in the original MVP Planning Grant, we asked, "What's next?"

The MVP Team conducted an extensive review process that included municipalities, consultants and CBO leaders to gather feedback on the MVP Planning Program, and heard:

Planning fatigue!

Limited community engagement and participation during planning process Need more support to better understand social vulnerability & environmental justice

MVP certified, but haven't been successful in receiving action grants

Desire for stronger relationships between municipalities and CBOs

Would like more flexibility in planning process Desire for more training on MVP core principles like community engagement

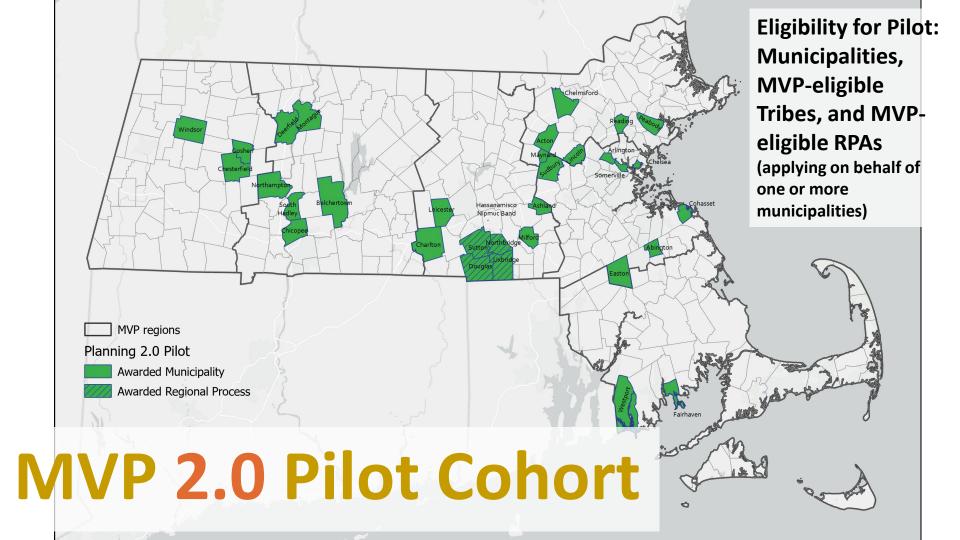
Municipal Vulnerability Preparedness (MVP) 2.0 Pilot



MVP 2.0 focuses on revisiting local climate resilience priorities through an equitable & inclusive process and building out & implementing these priorities.



(9) Reflecting and Adjusting







Furthers a community identified priority action to address climate change impacts.



Employs Nature-based solutions (NBS).



Increasing equitable outcomes for Environmental Justice (EJ) and other priority populations and addressing the root causes of social vulnerability.



Achieves broad and multiple community



Builds community capacity for climate resilience.



Commits to monitoring project success and maintaining the project into the future.



Conducts robust community engagement and supports strong partnerships with EJ and other priority populations.



Utilizes regional solutions for regional benefit.



Utilizes climate change data for a proactive solution.



ursues innovative, transferable approaches.

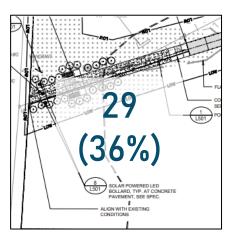


MVP Action Grant Projects Awarded in FY24-25 by Project Type:

Planning, Assessments, Capacity Building, and Regulatory Updates



Design and Permitting



Construction and Implementation





Collins Cove to Willows Resilience Study



Salem FY23



Learn More:

Project website: Collins Cove to Willows Resilience

<u>Study – PublicInput; Project StoryMap:</u> https://arcg.is/0Xrian

AWARD

\$234,565

\$78,257 MATCH

PROJECT TYPE

Planning, Assessments, Capacity Building, and **Regulatory Updates**

CORE PRINCIPLES DEMONSTRATED

Utilizing climate change data for a proactive solution; Pursuing innovative, transferable approaches

DESCRIPTION

- Engaged public with several community presentations, walk and talks, and a StoryMap.
- Developed a climate resiliency toolkit.
- Assessed vulnerabilities
- Modeled stormwater scenarios for both present day and future conditions.





Ipswich River Sewer Interceptor and Siphon Risk Mitigation and Resiliency Improvements Project – Bank Biostabilization Construction



IPSWICH FY22



Learn More:

• https://www.ipswichma.gov/930/lpswich-River-Sewer-Interceptor-Biostabi

AWARD

\$117.8k

MATCH \$54.7k

PROJECT TYPE

Construction and On-the-Ground Implementation

CORE PRINCIPLES DEMONSTRATED

Employing Nature-Based Solutions; Achieving Broad and Multiple Community Benefits

DESCRIPTION

- Biostabilization plan implemented nature-based solutions to improve natural systems for community and ecosystem adaptation sources to make a broad impact in the community and protect sewer.
- Native plantings and toe stone create new habitat
- Community feedback and participation helped shape project: design coordination, plantings selection, Council on Aging Site Walk, Multi-lingual Project handouts, project poster designed by H.S. Environmental club.





Sawmill Brook Central Pond Restoration Project Phase 2: Permitting and Design



Manchester By The Sea FY20-21



https://www.manchester.ma.us/354/Sawmill-Brook-Watershed-Project

AWARD

\$72.385

PROJECT TYPE

Design and Permitting

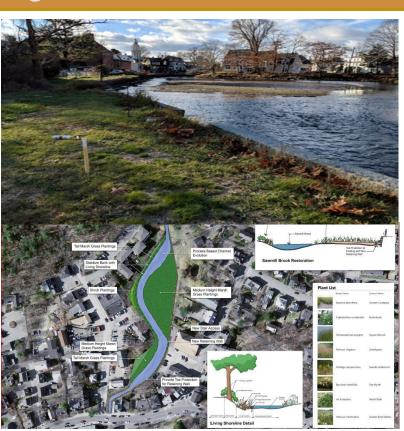
CORE PRINCIPLES DEMONSTRATED

Utilizing climate change data for a proactive solution, Employing Nature Based Solutions

DESCRIPTION

The Central Pond Restoration design entails replacing or restoring walls along the sides of the Pond (both hard and soft solutions), restoring the pond interior to a tidal salt marsh, and drainage improvement

The goal for the second phase of the Central Pond Restoration is to obtain the necessary permits and develop the final design and specifications for the Pond Restoration elements in preparation for the third and final phase; construction.



Greening Lord Pond Plaza, Phase 2



Town of Athol, MA FY22-23



Greening Lord Pond Plaza Project Website

AWARD

\$189,030

PROJECT TYPE

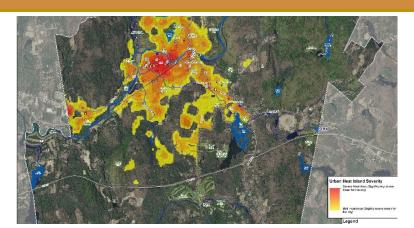
Design and Permitting

CORE PRINCIPLES DEMONSTRATED

Employing Nature-Based Solutions; Achieving broad and multiple community benefits; and Furthering a community identified priority action to address climate change impacts.

DESCRIPTION

Applies nature-based solutions to daylight a culverted brook, create wetlands, add greenspace, and increase flood storage in downtown Athol. Additional co-benefits: significant reduction of impervious surface at the plaza, increased tree canopy cover, improved vehicular and pedestrian safety, and additional opportunities for public gathering spaces as well as new fish and wildlife habitat and improved stream connectivity.





Pine Island Pond Watershed Lands Project: Mattapoisett FY19 Action Grant



Partners: Mattapoisett Land Trust & Buzzards Bay Coalition



Learn More:

Case Study

Project Slides

REGION

Southeast

AWARD

\$960,000

MATCH

\$460,000

PROJECT TYPE

Construction and On-the-Ground Implementation

CORE PRINCIPLES DEMONSTRATED

Employing Nature-Based Solutions

PRIORITIES

Protect 120 acres that are highly vulnerable to sea level rise and storm surge allowing for natural flood protection & migration of salt marsh habitat







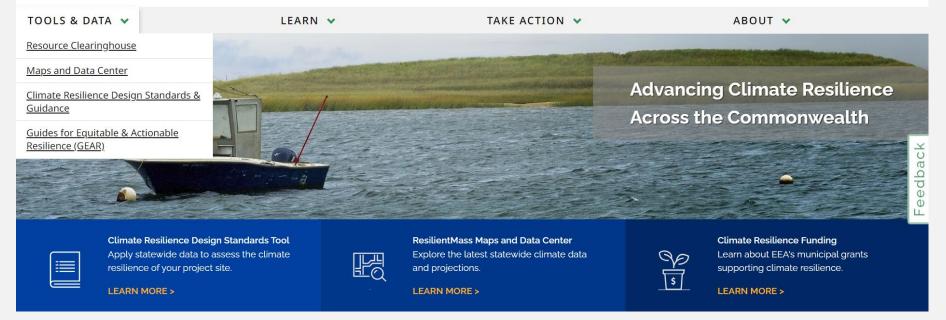
Projects that are NOT MVP-competitive:

- Diesel generators
- Tree removal
- •FEMA Hazard Mitigation
 Plans
- Academic studies that are not directly linked to implementation
- Feasibility or design of solar or solar + battery systems (installation ok)

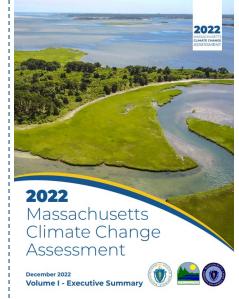
- Emergency preparedness projects that don't incorporate climate projections/planning
- Projects that repair to previous conditions without consideration of climate projections
- Projects that include building construction where the building will rely on nonrenewable sources of energy



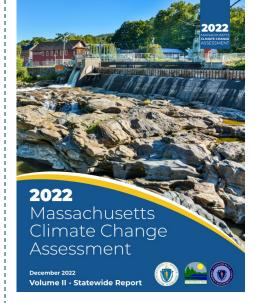
MVP Resources



ResilientMass is the Commonwealth's initiative for building statewide capacity for climate change adaptation and resilience. ResilientMass provides funding, localized climate change science and data, and decision support tools for the Commonwealth to facilitate action that enhances climate resilience for local planners, practitioners, policymakers, and the public.



The Executive Summary is available in seven languages:
English, Spanish,
Portuguese, Cape Verdean Creole, Haitian Creole,
Chinese, and Vietnamese.



The Statewide Report includes three appendices:

- Appendix A: Full Statewide Impact Rankings and Scores by Sector
- Appendix B: Additional Information on Climate Inputs and Assessment Methods
- Appendix C: Stakeholder Engagement



The Regional Reports include two-page summaries per region that are also available in seven languages.

ResilientMass Plan: 2023 Massachusetts State Hazard Mitigation and Climate Plan October 2023



Constitutes the federally mandated 5-year update to the 2018 Massachusetts State Hazard Mitigation and Climate Adaptation Plan (SHMCAP) to maintain federal preand post-disaster funding eligibility.



Identifies collaborative strategies and specific actions to increase resilience to climate change across the Commonwealth in accordance with Executive Order 569—Establishing an Integrated Climate Change Strategy for the Commonwealth.



Prioritizes projects that reduce risks from priority impacts and high-consequence vulnerabilities across Massachusetts.





Michelle.Rowden@Mass.Gov https://resilient.mass.gov/mvp/

