



Town of Tolland Municipal Vulnerability Preparedness Planning and Hazard Mitigation Plan Update

Core Team Kickoff Meeting
December 17, 2021



Welcome & Introductions



Photo by Douglas Hook, MassLive, August 3, 2020

Agenda

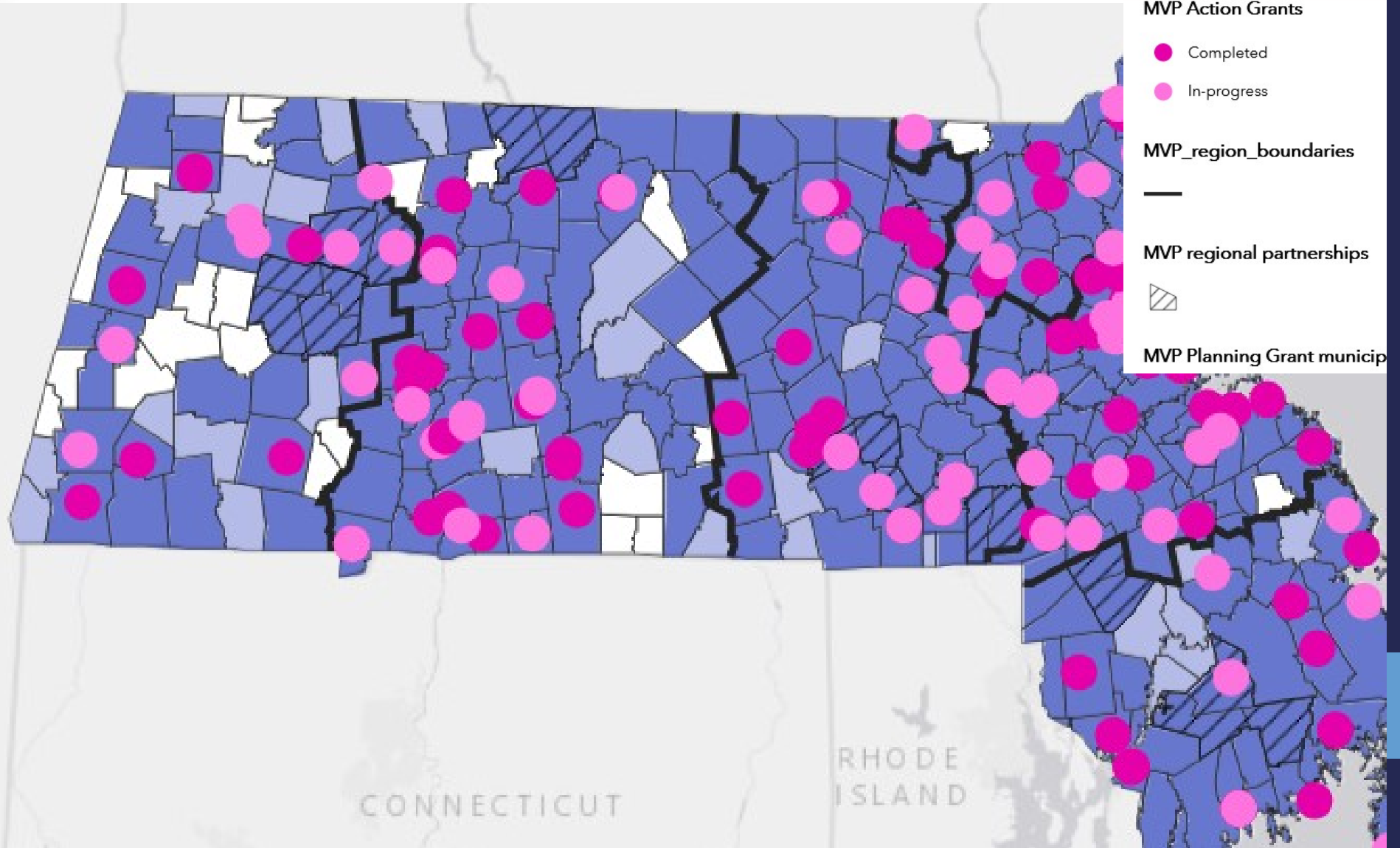
- Project scope and planning process
- Climate change impacts and vulnerabilities
- Goals of MVP process in Tolland
- Workshop logistics and attendance
- Data needs
- Next steps

MVP Program

The map displays the state of Maryland, divided into counties and municipalities. A legend in the top right corner identifies the following elements:

- MVP Action Grants:**
 - Completed (represented by dark blue dots)
 - In-progress (represented by light blue dots)
- MVP_region_boundaries:** (represented by thick black lines)
- MVP regional partnerships:** (represented by hatched areas)
- MVP Planning Grant municipality:** (represented by light gray areas)

The map shows a high density of completed and in-progress action grants across the state, particularly in the central and eastern regions. Region boundaries are clearly marked, and several municipalities are highlighted as planning grant areas. The map also shows the borders of neighboring states, Connecticut and Rhode Island.



MVP Process

MVP Planning Grant

COMMUNITY RESILIENCE
BUILDING WORKSHOP(S)

Define and characterize hazards using latest science and data

Identify existing and future community vulnerabilities and strengths

Develop and prioritize community adaptation actions

Identify opportunities to take action

Conduct community engagement

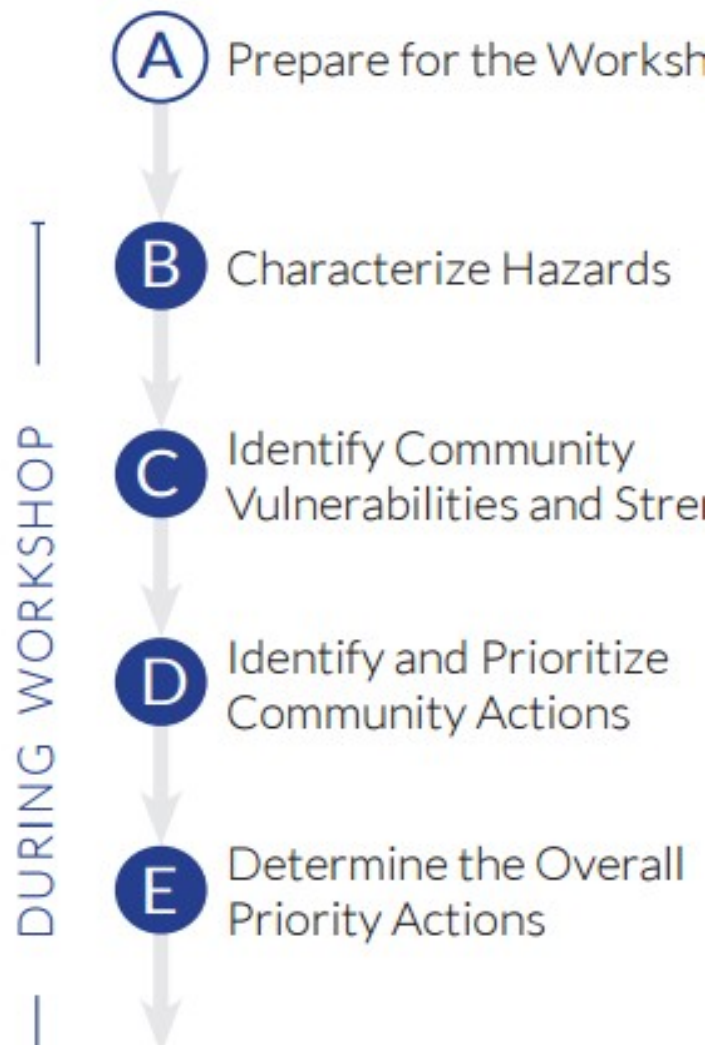
MVP A

Imple
adapt

Town of Tolland MVP/HMP Planning Grant

Task Name	December	January	February	March	April	May	June	Next SFY
Core Team Meetings	x	x	x			x		
Quarterly Reporting	x			x			x	
Set up community email	x							
Community survey?	x	x						
Information sharing events	x	x	x	x				
Data gathering and stakeholder interviews	x	x	x					
MVP CRB Workshop/s				x	x			
Draft Summary of Findings Report								
Community Listening Session/s						x	x	
Finalize Summary of Findings Report							x	
Submit Final Materials to EEA							x	
Hazard Mitigation Plan Update								
Meetings to review draft updates	x	x		x	x		x	
Submit to MEMA for submission to FEMA							x	
FEMA Approval								x
Local Adoption								x

Community Resilience Building (CRB) Process



HMP Update Process

MVP



HMP




Include
neighboring

Vulnerability Assessment
All natural hazards

From MVP Program Municipal Staff Training for Planning Grants, <https://www.mass.gov/doc/mvp-planning-grant-municipal-training-slides-january-2020/download>

Climate Change Impacts on Natural Hazards

Climate Change Projections for Massachusetts

CLIMATE CHANGES	RELATED NATURAL HAZARDS	PROJECTIONS BY THE END OF THIS CENTURY
Changes in precipitation 	<ul style="list-style-type: none">- Inland flooding- Drought- Landslide	<ul style="list-style-type: none">- Annual precipitation: Increase up to 16% (+7.3 inches)- Days with rainfall accumulation 1+ inch: Increase up to 57% (+4 days)- Consecutive dry days: Increase 18% (+3 days)- Summer precipitation: Decrease
Rising temperatures 	<ul style="list-style-type: none">- Average/extreme temperatures- Wildfires- Invasive species	<ul style="list-style-type: none">- Average annual temperature: Increase up to 23% (+10.8 degrees Fahrenheit)- Days/year with daily minimum temperatures below freezing: Decrease up to 42% (-62 days)- Winter temperatures: Increase at a greater rate than spring, summer, or fall- Long-term average minimum winter temperature: Increase up to 66% (+11.4 degrees Fahrenheit)- Days/year with daily maximum temperatures over 90 degrees Fahrenheit: Increase by up to 1,280% (+64 days)- Growing degree days: Increase by 23% to 52%
Extreme weather 	<ul style="list-style-type: none">- Hurricanes/tropical storms- Severe winter storms/nor'easters- Tornadoes- Other severe weather	<ul style="list-style-type: none">- Frequency and magnitude: Increase

Note: This plan also assesses earthquakes, but there is no established correlation between climate change and earthquakes.

Source of Climate Change Projections: Northeast Climate Adaptation Science Center at the University of Massachusetts, Amherst.

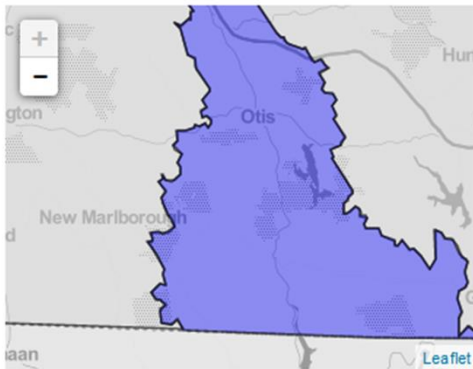
Climate Change Impacts – Farmington River Basin

Basin

Calculated Variable:

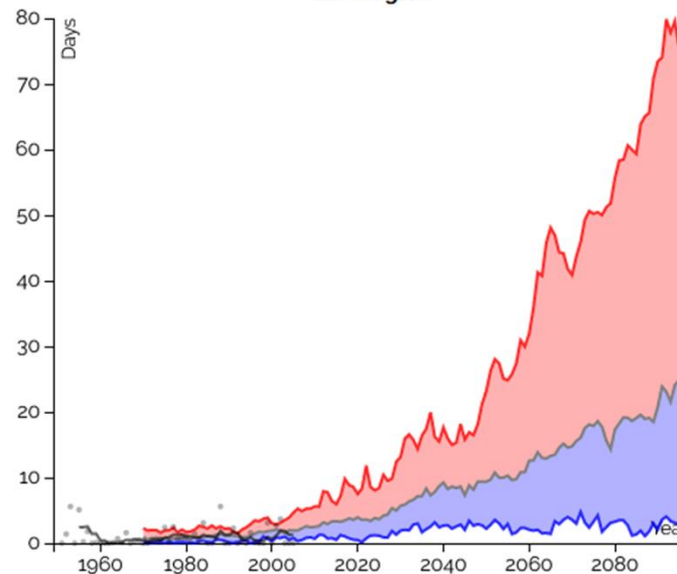
Days with Maximum Temperature Above 90°F

Season:



Add Chart

Annual Days with Maximum Temperature Above 90°F
Farmington



Download Data

Observed

days

5-yr Mean

Modeled days

Max

Median

Min

Changes from
1971-2000 for:

2020 -	6.59
2049	days
2040 -	9.40
2069	days
2060 -	16.10
2089	days
2080 -	18.78
2097	days

About the Source
Data

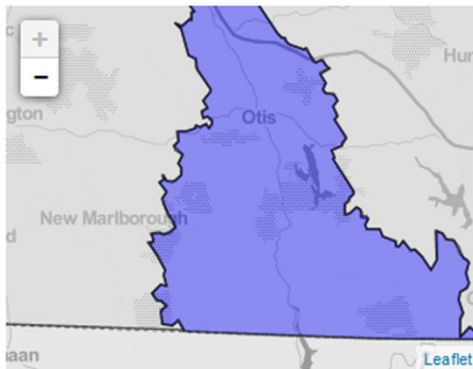
Climate Change Impacts – Farmington River Basin

Basin ▼ Farmington ▼

Calculated Variable:

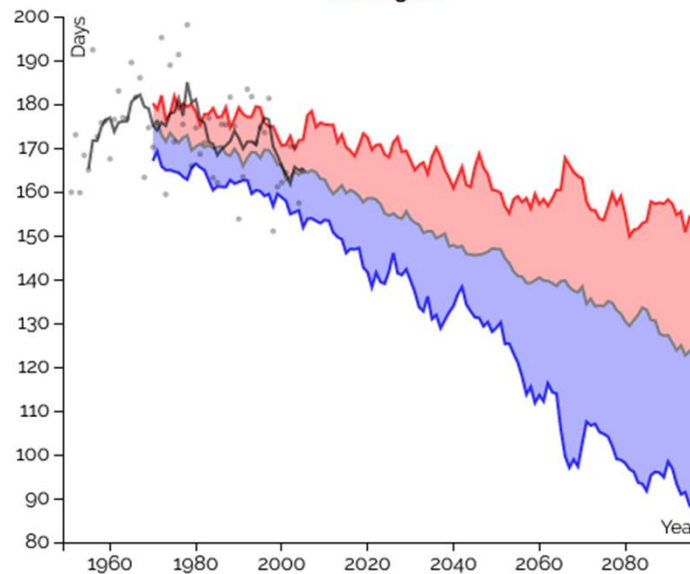
Days with Minimum Temperature Below 32°F ▼

Season: Annual ▼



Add Chart

Annual Days with Minimum Temperature Below 32°F
Farmington



Download Data

Observed

days

5-yr Mean

Modeled days

Max

Median

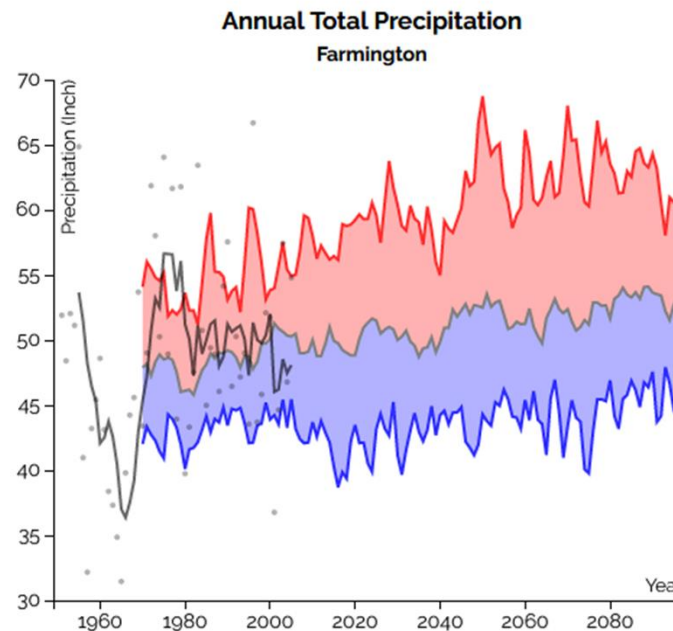
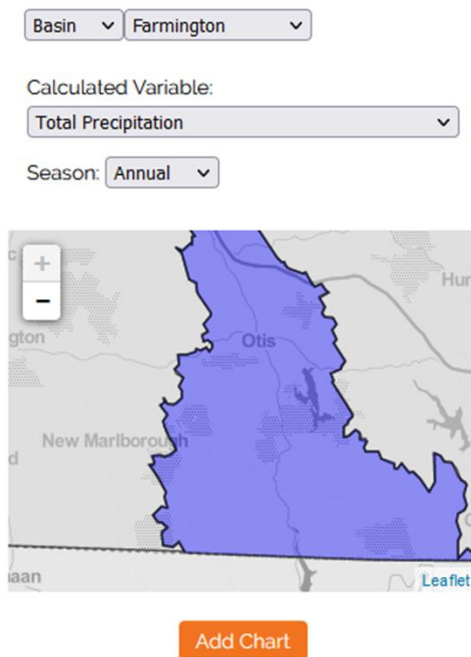
Min

Changes from
1971-2000 for:

2020 -	
2049	-23.80days
2040 -	
2069	-33.32days
2060 -	
2089	-40.37days
2080 -	
2097	-47.17days

About the Source
Data

Climate Change Impacts – Farmington River Basin



Download Data

Observed

Inches

5-yr Mean

Modeled Inches

Max

Median

Min

Changes from
1971-2000 for:

2020 - 2049	1.60*
2040 - 2069	2.82*
2060 - 2089	3.19*
2080 - 2097	4.16*

About the Source
Data

Goals

- Why does Tolland need to discuss current and future impacts of hazards?
- How will Tolland use the information and decisions developed during the process?

What Does Tolland Get Out of This Process?

- Understanding of local strengths and vulnerabilities
- Eligibility to apply for funding to implement priority projects
 - MVP Action Grants
 - FEMA Hazard Mitigation Assistance Grants

Applicant	Project Title	Recommended Funding
Concord	Reforestation and Tree Resilience	\$150,000
Deerfield	Reducing Flooding Vulnerability in Deerfield	\$278,023
Northampton	Protecting Downtown: Northampton's Flood Control Levees	\$315,000
Walpole	Culvert Assessment and Green Infrastructure Survey	\$166,496
Wrentham	Eagle Dam Removal	\$46,000

Core Team Roles and Responsibilities

- Provide local information and expertise
- Identify and engage stakeholders
- Attend and participate in meetings, workshop(s), and public listening session(s)
- Review and provide input on draft plan chapters, hazard maps, and priority actions

Workshop Schedule and Logistics

- In person or virtual
- One day (6-8 hours) or two half-days (4 hours each)
- If in person, suitable location
- Date(s) and time(s) – March/April timeframe

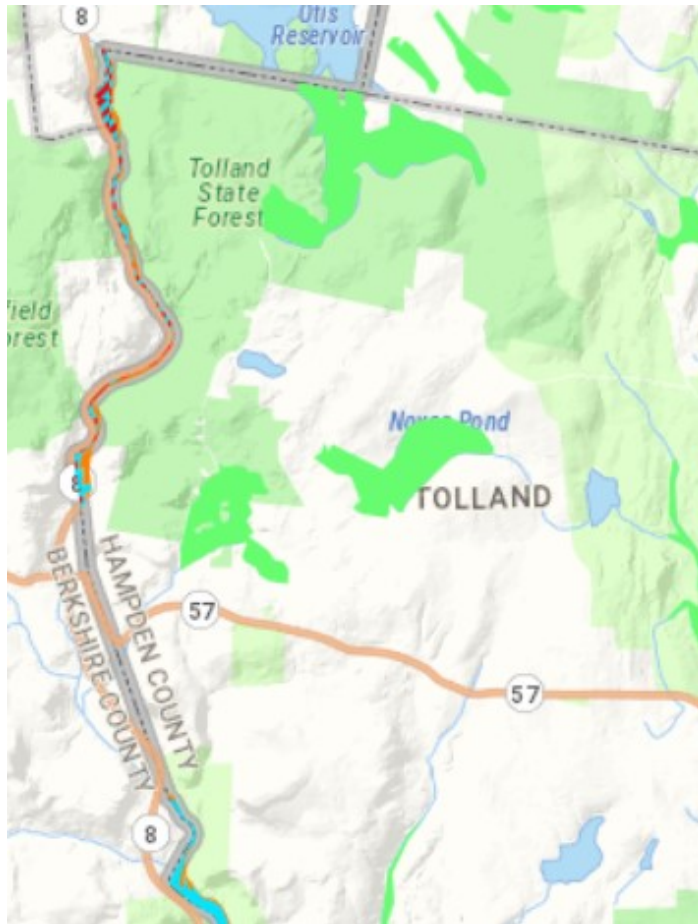


Stakeholder Identification

- Who are the key decision makers in your community?
- Who is directly responsible for implementing decisions?
- Who has influence on decisions in your community?
- Which entities will be impacted by decisions?

Data Needs

- Past plans, studies, or reports
- Any specific hazard mapping needed?



Next Steps

- Send community photos to etully@pvpc.org
- Schedule next meeting
- Finalize list of participants
- Finalize workshop dates
- Finalize outreach and publicity plan
- Schedule stakeholder interviews