

# Municipal Vulnerability Preparedness (MVP)





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



GOVERNOR

#### OFFICE OF THE GOVERNOR

#### COMMONWEALTH OF MASSACHUSETTS STATE HOUSE . BOSTON, MA 02133 (617) 725-4000

PH 12: 44

KARYN E. POLITO DESITEMANT GOVERNO

#### By His Excellency CHARLES D. BAKER GOVERNOR

EXECUTIVE ORDER NO. 569

#### ESTABLISHING AN INTEGRATED CLIMATE CHANGE STRATEGY FOR THE COMMONWEALTH

WHEREAS, climate change presents a serious threat to the environment and the Commonwealth's residents, communities, and economy;

WHEREAS, extreme weather events associated with climate change present a serious threat to public safety, and the lives and property of our residents;

WHEREAS, the Global Warming Solutions Act (the "GWSA") directs the Secretary of Energy and Environmental Affairs and the Department of Environmental Protection to take certain steps to reduce greenhouse gas emissions and prepare for the impacts of climate change, including setting statewide greenhouse gas emissions limits for 2020, 2030, 2040 and 2050;

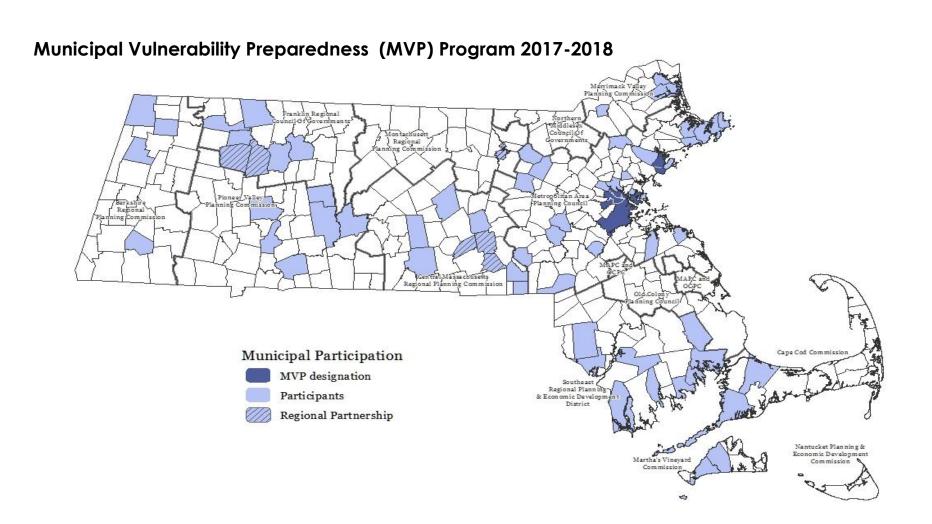
WHEREAS, the statewide greenhouse gas emissions limit for 2020 is 25% below the 1990 level of emissions and the corresponding limit for 2050 is 80% below the 1990 level of emissions, but no interim limits have yet been set for 2030 or 2040;

WHEREAS, the Commonwealth can provide leadership by reducing its own emissions from state operations, planning and preparing for impending climate change, and enhancing the resilience of government investments;

WHEREAS, the transportation sector continues to be a significant contributor to greenhouse gas emissions in the Commonwealth, and is the only sector identified through the GWSA with a volumetric increase in greenhouse gas emissions;

WHEREAS, the generation and consumption of energy continues to be a significant contributor to greenhouse gas emissions in the Commonwealth, and there is significant potential







# MVP Program Ensuring Success Webinars



- Working with MVP Service Providers
  - EEA and TNC
- Advancing Social Equity in Climate Adaptation Planning
  - MAPC
- Alternatives for engaging your community
  - December 18, 2017
  - RTWN
  - Other than acting as service provider, how can you help the CRB process?
- The Importance of Listening
  - January 8, 2018
  - MMC
  - Why honest engagement with constituents and stakeholders is critical to project success

- Bylaw Review
  - January 22, 2018
  - Mass Audubon
  - The impact of local bylaws and regulation on nature based solutions
- Nature Based Solutions
  - February 5, 2018
  - TNC
  - Cost effective, long term solutions that leverage natural assets of your municipality
- Characterizing coastal flood hazards and increasing resilience
  - February 26, 2018
  - CZM
  - How to characterize future potential coastal flood risk, identify vulnerabilities and advance community action



#### MVP Program Learn more





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

Katie Theoharides - kathleen.theoharides@state.ma.us

Jenny Norwood - jennifer.norwood@state.ma.us

# Alternatives for engaging your community

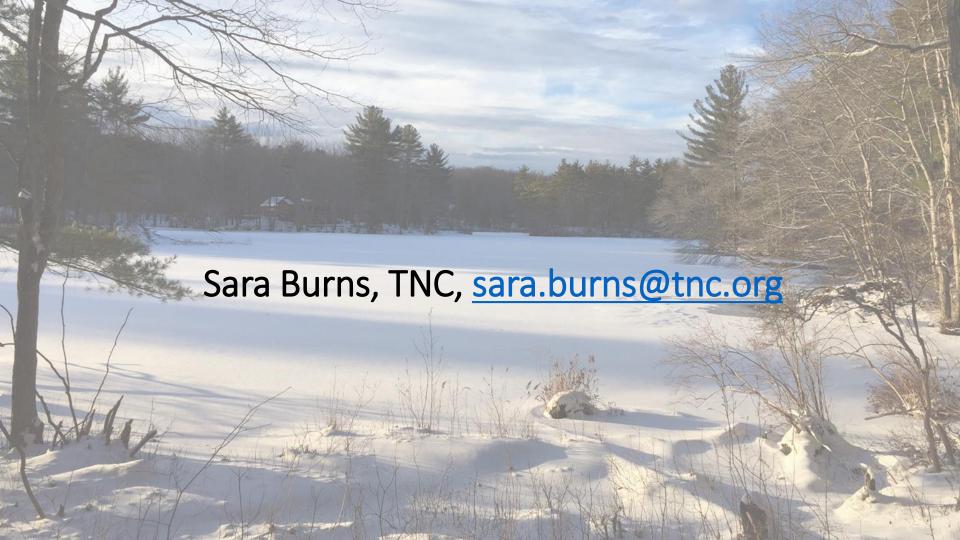
#### Meet our speakers

Sara Burns, Water Resource Specialist, The Nature Conservancy, <a href="mailto:sara.burns@tnc.org">sara.burns@tnc.org</a>

Bill Napolitano, Environmental Planner, Southeast Regional Planning and Economic Development District (SRPEDD), <a href="mailto:bnap@srpedd.org">bnap@srpedd.org</a>

Stefanie Covino, Cooridinator, Shaping the Future of Your Community Program, Mass Audubon, <a href="mailto:scovino@massaudubon.org">scovino@massaudubon.org</a>

Eric Walberg, Climate Services Director, Manomet, ewalberg@manomet.org



#### **Resilient Taunton Watershed Network (RTWN)**

- Formed in 2014
- Collaboration of local, non-profit, regional organizations, and state and federal government representatives who care about the future health and resilience of the Taunton River Watershed
- Believe that ecological and economic resilience go hand in hand.
- Provide education and resources to local officials and residents



#### Municipal Vulnerability Prepardedness Process



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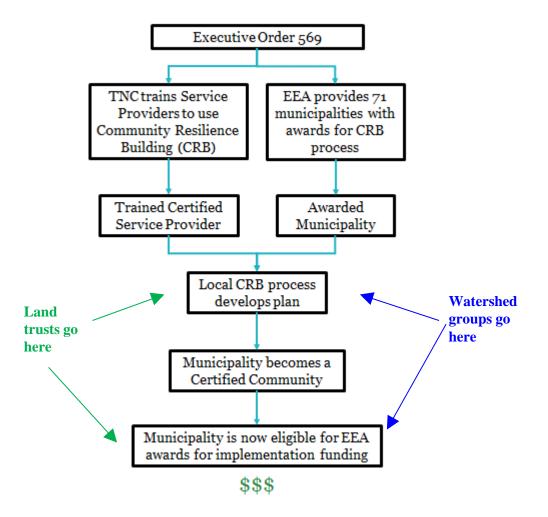
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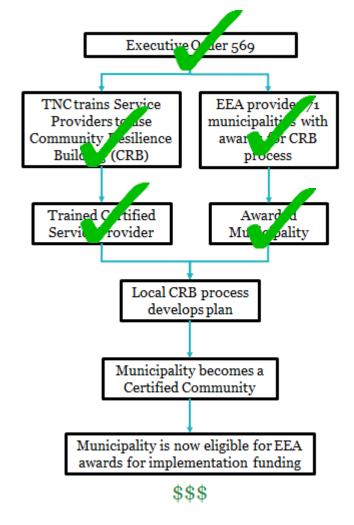
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#### Where is MVP Now?

- Communities are choosing their provider
- Providers are planning their CRB process

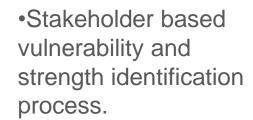


# Community Resilience Building WORKSHOP GUIDE





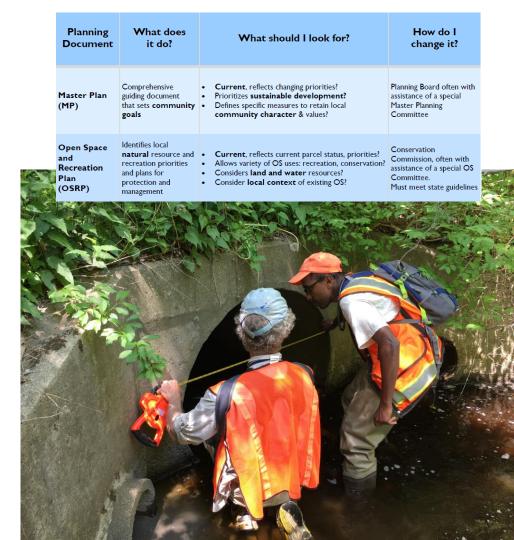




- •Participants identify opportunities to increase resilience, develop solutions, and prioritize actions.
- Prioritized action plans are developed including time horizon information

## Why You Should Care

- MVP certified plans will be crossed walked into Open Space Plans, and Hazard Mitigation Plans.
- Incorporate into comprehensive planning process to ensure resilience is community priority
- MVP certified communities will be priority status for some state grant opportunities





#### Nature-Based Solutions



Nature-Based Solutions use natural systems, mimic natural processes, or work in tandem with traditional approaches to address natural hazards like flooding, erosion, drought, and heat islands.

Incorporating nature-based solutions in local planning, zoning, regulations, and built projects can help communities reduce their exposure to these impacts, resulting in reduced costs, economic enhancement, and safer, more resilient communities.

## How environmental non-profits benefit MVP

- Understand multi-town watershed perspective think regionally about hazards and strengths
- Share best practices with non-MVP towns and share benefits to apply
- Protection of natural features already improves resilience
- Assist with implementation of action-items focused on NBS



# How other non-profits benefit MVP

- Offer additional, diverse perspectives that may not otherwise be represented
- Share community understanding and support of resilience actions after the workshop







#### Overview of the Process (Steps & Tasks)

- A Prepare for the Workshop
- B Characterize Hazards
- Identify Community Vulnerabilities and Strengths
- D Identify and Prioritize Community Actions

DURING WORKSHOP

- Determine the Overall Priority Actions
- Put It All Together
- (G) Move Forward

- Establish a core team with goals.
- (2) Engage stakeholders.
- (3) Prepare materials for workshop.
- (4) Decide on participant arrangements.
- Identify past, current, and future impacts.
- ② Determine the highest-priority hazards.
- Identify infrastructural vulnerabilities and strengths.
- Identify societal vulnerabilities and strengths.
- Identify environmental vulnerabilities and strengths.
- Identify and prioritize infrastructural actions.
- Identify and prioritize societal actions.
- (3) Identify and prioritize environmental actions.
- Identify highest-priority actions.
- Further define urgency and timing.
- Generate final workshop products.





Infrastructural



Societal



Environi

- Continue community outreach and engagement.
- Secure additional data and information.
- ③ Inform existing planning and project activities.



#### Core Team and Stakeholders

Think about different sectors, be inclusive in the same way you would to do planning and updates

- Environmental
- Public Health
- Transportation
- Parks and Recreation
- Business and Financial Communities
- RPAs
  - Crunch census data
  - Health service
  - Transit needs



#### Alternatives for involvement

- Certified MVP Providers can be coproviders
- Assisting with facilitation
- Offering presentations on topic expertise
- Being a link to local stakeholders
- Improve cost-effectiveness for municipality by dividing work based on expertise and existing work
  - Existing relationships
  - Existing plans
  - Existing presentations, mapping, etc.
  - What's been done? What was successful? Lessons learned





#### Alternatives for involvement

Interested non-profits can assist with process

- Represent constituents, mission, etc. as stakeholder
- Act as scribe to take notes in small groups and contribute to creation of top tasks and final report
- Disseminate information to general public on importance of resilience building
- Participate in public forum at end of CRB process to improve public understanding and support of actions



#### Piloting & Sharing

- Norton, MA
- Resilience Roundtable offered resources and next steps
- Completed most tasks
- Kicked off other communities participating





#### **Key Observed Climate Changes in MA**



**Temperature:** 

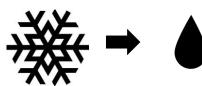


2.8°F

**Growing Season:** 



**10 Days** Since 1950





**Sea Level Rise:** 



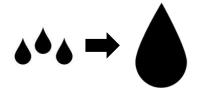
10 inches

**Since 1922** 

**Strong Storms:** 

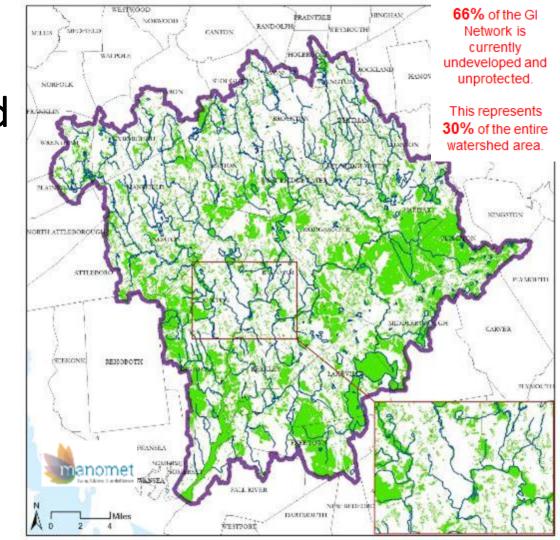


**71%** Since 1958



# An example of linking regional and local concerns

Taunton Watershed
Undeveloped
&
Unprotected
(non
surface/wetland)
Green Infrastructure
Network



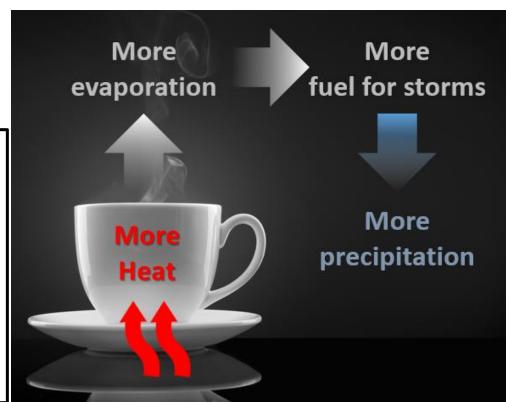
## Resources & Communicating Climate Change

There are a lot of simple resources out there already; don't get overwhelmed

#### **How Does Climate Change Work?**

The heat-trapping blanket metaphor.

- The atmosphere is like a blanket that surrounds the earth.
  - When we burn fossil fuels like coal and oil for energy, we add too much carbon dioxide to the atmosphere, which is like making the blanket thicker.
  - The blanket has become too thick. It's trapping in too much heat, and the planet is warming up too fast.



#### How to frame climate change for any audience

#### **Use Common Values:**

- Protect our natural resources for future generations and public health.
- **Responsibly manage** our natural and fiscal resources.
- Sense of place encourages people to invest locally and overcome challenges.

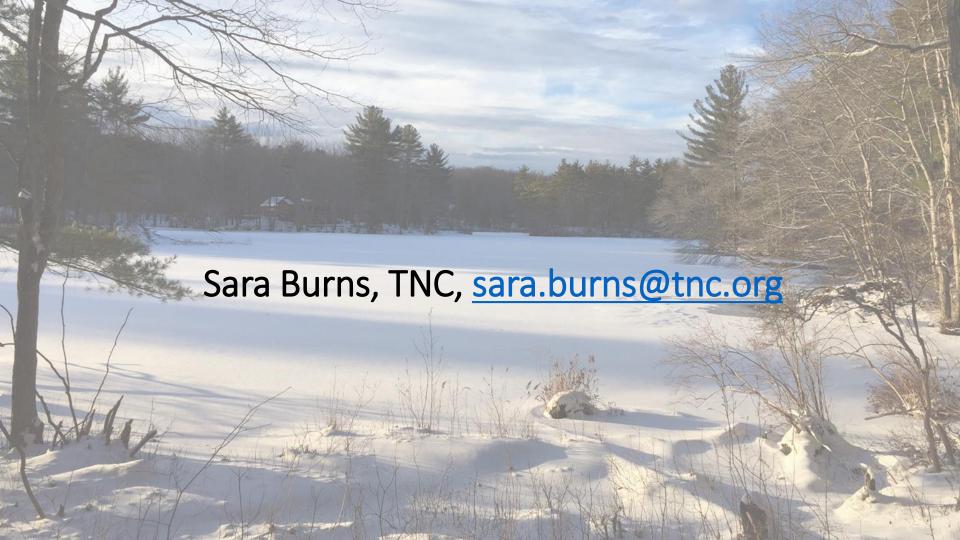
Preparing for climate change through nature-based solutions satisfies each of those values.



### Resources available: <a href="https://www.srpedd.org/rtwn">www.srpedd.org/rtwn</a>

- Climate Resources 101
  - Science
  - Communication
  - Planning/LID
  - Mapping
- Mass Audubon's LID Fact Sheets
- 5 Things you can do to increase resilience
- Case studies of LID planning, implementation, financing, etc.
- GI Mapping of Taunton watershed
- Existing presentations





#### **Next steps: Communities**

- See list of service providers for other nonprofits you may not have considered to include as providers, stakeholders, or co-providers
- We can share a list of which non-profits EEA and TNC have already reached out to
- Look to your neighbors and figure out if it makes sense to work together
  - Cost savings
  - Shared natural resources



#### **Next steps: Non-profits**

- We can share list of direct contacts of who applied within the municipality to reach out to
- Pick up the phone! This process is happening now. Find out where your municipality is and
- If your community is not currently involved, advocate for you community to apply in the second round of MVP communities



#### Local contacts for each community

#### https://drive.google.com/file/d/1mXmM0XG7yLKZ4TdHXXG8kB7EqemqzwP6/view?usp=sharing

MVP Community	Contract manager	Position	Street	Town	ZIP	Phone	email
Acton	Corey York	DPW Director/Town Engineer	472 Main Street	Acton	01720	978-929-7740	highway@acton-ma.gov
Adams	Donna E. Cesan	Community Development Director	8 Park Street	Adams	01220	413-743-8300 x131	dcesan@town.adams.ma.us
Arlington	Nat Strosberg	Senior Planner-Department of Planning & Community Development	730 Massachusetts Avenue	Arlington	02476	781-316-3093	nstrosberg@town.arlington.ma.us
Freetown	Lauren Moreau	Planning Technician	3 North Main Street	Assonet	02702	508-644-2270 x1402	Imoreau@freetownma.gov
Belchertown	Douglas Albertson	Town Planner	1 South Main Street	Belchertown	01007	413-323-0407	dalbertson@belchertown.org
Blackstone	Amy Sutherland	DPW, Administrative Assistant	15 St. Paul Street	Blackstone	01504	508-883-9331	asutherland@townofblackstone.org
Buckland	Andrea Llamas	Town Administrator	17 State Street	Buckland	01370	413-625-6330 x5	twnadmin@town.buckland.ma.us
Newbury	Geoffrey H. Walker	Chair, Board of Selectmen	12 Kent Way	Byfield	01922	978-767-1050	hankwalkerdecoyfurniture@comcast.net
Cambridge	John Richard Bolduc	Environmental Planner	344 Broadway	Cambridge	02139	617-349-4628	jbolduc@cambridgema.gov
Carver	Jack Hunter	Director of Planning and Community Development (interim)	108 Main Street	Carver	02330	508-866-3450	jack.hunter@carverma.org
Charlemont	Peg Dean	Town Administrator	157 Main Street	Charlemont	01339	413-339-4335 x87	administrator@townofcharlemont.org
Charlton	Robin Craver	Town Administrator	37 Main Street	Charlton	01507	508-248-2206	robin.craver@townofcharlton.net
Chelsea	Alexander Train	Senior Urban Planner/Project Manager	500 Broadway	Chelsea	02105	617-466-4192	atrain@chelseama.gov
Chilmark	Tim Carooll	Director Emergency Management	401 Middle Road	Chilmark	02535	508-645-2101	emd@chilmarkma.gov
Cohasset	Brian Joyce	Director of Project Management and Planning	41 Highland Avenue	Cohasset	02025	781-383-3094	bjoyce@cohassetma.org
Colrain	Kevin Fox	Town Coordiantor	55 Main Road	Colrain	01340	413-624-6306	bos@colrain-ma.gov
Gosnold	Seth Garfield	Emergency Coordinator	28 Tower Hill Road	Cuttyhunk	02713	508-971-1120	oceanrancher@yahoo.com
Devens	Peter Lowitt	Director/Land Use Administrator for the Devens Enterprise Commission	33 Andrews parkway	Devens	01434	978-772-8831	peterlowitt@devensec.com
Essex	Brendhan Zubricki	Town Administrator	30 Martin Street	Essex	01929	978-768-6531	bzubricki@essexma.org
Falmouth	Julian M. Suso	Town Manager	59 Town Hall Square	Falmouth	02540	508-495-7320	jsuso@falmouthmass.us
Gloucester	Gregg Cademartori	Planning Director	3 Pond Road	Gloucester	01930	978-325-5242	gcademartori@gloucester-ma.gov

# Thank you!

Sara Burns, Water Resource Specialist, The Nature Conservancy, <a href="mailto:sara.burns@tnc.org">sara.burns@tnc.org</a>

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