



ADVANCING Climate Adaptation THROUGH Watershed-Scale Collaboration

Climate change is an urgent crisis that requires swift coordinated action. With no time to reinvent the wheel for each specific location and situation, it is important to collaboratively plan for climate adaptation at a broader, yet still manageable, scale. Here in Massachusetts, we are seeing the effects of climate change on all systems, with impacts related to water, such as floods and droughts, particularly visible. To address these impacts at an appropriate scale, Watershed-Scale Climate Collaboratives have been growing in regions across the state. These Collaboratives are groups of municipalities, organizations and individuals who come together across municipal boundaries to tackle climate adaptation and resilience at the watershed level. This collaborative regional approach helps human and natural communities prepare for and respond to climate change impacts (adaptation).

Why a watershed-scale approach?

- **Meaningful boundaries**

A watershed is an area of land where all the water drains to the same place. For example, the rain that falls on the streets, woods and buildings in Natick, Waltham and Newton ends up in the Charles River, so that area is called the Charles River Watershed. Watersheds provide both ecologically and environmentally meaningful boundaries that allow for the consideration of the whole system during climate adaptation planning. Water flows in ways that do not fit neatly into political demarcations. The impacts of climate change can be felt across municipal boundaries, with water from one community potentially impacting the next community downstream, and so approaching the issue using natural watershed boundaries makes intuitive sense.

COLLABORATIVES AT WORK

Fortunately, there are already several watershed-scale climate collaboratives pioneering this work.

The **Resilient Mystic Collaborative** is a partnership of 20 communities in Greater Boston's Mystic River Watershed working to protect people and places from climate-intensified risks and vulnerabilities that can not be managed within individual municipal boundaries. The RMC is working to manage stormwater and coastal flooding as a watershed and close gaps in disparities in climate change impacts on environmental justice communities. They have raised almost \$5 million in regional grants in their first 3 years to support their work and continue to build momentum.

The **Resilient Taunton Watershed Network** is a partnership of 20 local, non-profit, state, regional, and federal groups working in the Taunton Watershed in southeast Massachusetts. RTWN promotes resiliency in the face of climate change and development, considering ecological outcomes as well as economic, social, and environmental justice issues. RTWN uses an integrated watershed approach for measurable results to protect natural resources, promote ecological restoration, and incorporate climate adaptation action to improve community well-being.

- **Manageable size**

Addressing climate change on a watershed scale also allows a vast problem to be brought down to a manageable size, maintaining a scale large enough to be actionable. When creating governance, a watershed is a size that people can wrap their heads around – it is large enough to capture the imagination, but small enough to see themselves in it.

- **Impactful scale**

Climate change is dynamic and its impacts are complicated. For these reasons, effective adaptation requires action at a scale that is large enough to consider system-wide impacts and allow cross-boundary collaboration, but small enough for focused efforts. Individual one-off efforts may not be sufficient alone, but can be scaled up across a watershed for greater cumulative impacts.

Why is collaboration important for climate adaptation?

- Collaboration is key to successful climate adaptation. Climate change is a complicated problem with countless impacts on all systems. Addressing these impacts holistically requires cross-sectoral thinking with partners from different communities and disciplines working together to determine the most effective solutions. For example, healthy forests and wetlands can protect drinking water, reduce flooding risk, and create habitat. This collaboration and coordination is the only way to ensure co-benefits for people and nature, and to avoid unintended negative consequences.
- Collaboratives can also build community and camaraderie in the face of an overwhelming challenge. As collaboratives foster trusted relationships and connections, groups can be more nimble in figuring out the best adaptation actions to take and responding iteratively as they learn.
- Collaborative planning and resource sharing can help to systematically prioritize and implement projects with broader regional impacts. These collaborations can also make a better case for coordinated funding for projects.
- It is essential to come together through collaborations to share lessons learned and build on each other's work. These collaborative efforts are what allow us to respond and transform quickly to pressing climate impacts.



RTWN

WEIR VILLAGE PARK, TAUNTON

Resilient Taunton Watershed Network (RTWN) partners and the City of Taunton constructed these rain gardens. The impervious surfaces in the park, like roads and paths, are designed to drain into these rain gardens to help slow and filter storm water reaching the river.

Getting engaged

- If you are a municipal decision-maker, please consider getting involved in your local watershed-scale collaborative and, if one doesn't exist, in connecting with your local watershed associations and other non-profits leading regional climate change action.
- If you are already engaged in watershed-scale climate collaboration, we hope these resources help you to make the case for your work and learn from others. Please engage with us in peer to peer knowledge exchange and sharing of best practices with partners across the state!

Contact us.



Leo March

RESILIENT MYSTIC COLLABORATIVE

The RMC values robust stakeholder engagement, for example at this Upper Watershed Stormwater Working Group 2020 workshop on prioritizing stormwater wetlands across the region.

This product is the first piece of a broader toolkit to inspire and inform watershed-scale climate collaborations. [Learn more here.](#)
For more resources and reading on Regional, Watershed-Scale Climate Adaptation, [Learn more here.](#)

This resource was developed in collaboration with the Mass ECAN-affiliated Climate Communications and Slow the Flow Work groups, written by K. Haas, M. Ocana and Z. Murphy and reviewed by L. Hayden, A. Field-Juma, D. Belknap, C. Boynton, A. Chaffee. ©September 2021.

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