

MEMORANDUM

TO: John Burt, Town Manager

FROM: Megan Granato, Sustainability and Resilience Manager
Jonathan J. Reiner, Director of Planning and Development Services

DATE: September 20, 2024

SUBJECT: Mystic State Workgroup – Resilience Recommendations

In response to Mystic’s climate change vulnerability, the Town of Groton, supported by GZA GeoEnvironmental, began the *Downtown Mystic Resiliency and Sustainability Plan* development process in 2022 and completed it in January 2024. The study area was located on the Town of Groton side of Downtown Mystic to the west of the Mystic River. The plan’s goal was to protect natural and manmade resources; sustain the local economy; and provide possible risk mitigation strategies for property owners, the Town, and regional stakeholders. This goal was accomplished by first conducting a vulnerability analysis focused on three main climate change impacts: coastal flooding (rising sea levels and increasing storm surge), flooding caused by increasing rainfall volumes and intensity, and extreme heat. Once the vulnerability analysis was completed adaptation strategies designed to reduce the area’s risk to these hazards, using 2050 projections as a guiding benchmark, were developed. Public outreach was conducted throughout the entire plan development process and included a variety of public meetings, conversations with local property owners, a survey, and a meeting to address the needs of local business owners. The full plan is available online at <https://www.greatergroton.com/downtown-mystic-resiliency-sustainability-plan>.

Once the plan was finalized town staff began to work on implementing its recommendations. A summary of the full list of high priority recommendations has been provided as an attachment. Building Mystic’s resilience to climate hazards is going to take significant resources (capacity and funding) as well as regional coordination and collaboration. Key outcomes of interest for this workgroup are listed as follows:

- Tidal backflow preventers: There are 20 stormwater system outfalls in Downtown Mystic and several of them may be contributing to roadway and property flooding by allowing water from the Mystic River to move “backwards” into the system. Funding is needed to design, permit, and install backflow preventers.
- Stormwater infrastructure upgrades – permitting, design, and implementation: The Town has a capital improvement project (CIP) to further evaluate the Pearl Street drainage system and identify opportunities to improve and expand its capacity. Additional funding will be required for the evaluation’s recommendations to be implemented. A green infrastructure pilot program in the upper watershed would allow the town to install best management practices (BMPs) in rights-of-ways and other town-owned land as well as incentivize private property owners to install BMPs, reducing the amount of water draining into the Pearl Street system.
- Resilience hub: Resilience hubs are community spaces that provide information, services, and support to local residents before, during, and after catastrophic events. A resilience hub could incorporate the equipment stockpiling recommendation from the Mystic plan.

- Small business resilience grants: Funding support could help small business owners purchase temporary or permanent floodproofing systems, install shade canopies, and conduct disaster preparedness planning.
- Pump station floodproofing: Funding is needed to implement the floodproofing recommendations made for the Gravel Street pump station by Wright Pierce in its 2022 report.
- Coordination with the CT Department of Transportation: West Main Street is a state road and contributes to the area's stormwater issues. Residents have expressed water quality concerns about the road's drainage as well. Coordination between the town and state could help identify solutions to stormwater management issues across Downtown Mystic.

There are a number of resiliency actions that could potentially be strengthened through the use of a regional approach. Several topics for regional collaboration discussions are listed below; it would be helpful to gain feedback from the workgroup as to whether any of these are of interest:

- Stormwater authority: Creating a stormwater authority would help secure the funding needed for resilience action. A watershed-based approach could be used but would require the cooperation of Groton, Stonington, Ledyard, and North Stonington.
- Post-disaster response and recovery planning: If a major disaster strikes Downtown Mystic, both Groton and Stonington are likely to face similar challenges and be relying on the same resources. Deliberate planning ahead of time could help smoothen post-disaster work by creating joint plans and partnership agreements.
- The state legislation that authorized municipalities to enact flood prevention, climate resilience, and erosion control boards also allowed multiple municipalities to enter into joint boards. Stonington has a flood prevention, climate resilience, and erosion control board but Groton currently does not. As flooding worsens the importance of having this type of board will likely increase, and having a joint board would facilitate projects that have regional benefits.
- The portions of Downtown Mystic in Groton and Stonington have similar flood risks and may consider similar approaches to keep up with sea level rise, including low-lying sea walls and roadway elevation. A partnership between Groton and Stonington could evaluate next steps for employing these types of interventions and the benefits of implementing them in a coordinated way.