

# LEGAL & POLICY TOOLS

for Climate Resilience at the State  
and Local Level

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## Project description



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State and local governments seek to help their constituents mitigate and become resilient to the impacts of climate change. Because the nature of the need, response, and capacity varies, existing legal frameworks providing authority for decision making, finance, and project ownership may be inadequate to meet the projected needs of communities as responses to climate change are contemplated. By comparing the response of different states and communities to similar climate challenges, we seek to identify gaps in current law and identify potential legal tools to help develop a robust legal response to the impacts of climate change in Connecticut.



Prof. Joseph MacDougald  
CIRCA Director of Applied Research

# Climate Change Resilience

“to establish resilient coastal communities where structures and critical infrastructure in the flood zone are adapted to withstand occasional flooding and protected by healthy buffering ecosystems, where critical services, infrastructure and transport hubs are located on safer, higher ground, and where strong connections exist between the two.”

## **Intersects with:**

adaptation, hazard mitigation, justice, equity, land use decisions

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# Research Areas

- ❖ Surveyed adjacent and other coastal states
- ❖ History, structure, and organization of state response
- ❖ State level legislation and executive orders
- ❖ Climate change and resilience financing
- ❖ Specific enabling legislation for municipal actions



# Initial Broad Research Findings

- Importance of access to standardized baseline data, tools to support planning, and flexible financing options
- State support for local and regional resilient infrastructure is crucial
  - Make bond money available to municipalities for resilience projects
- Resilience is an intersectional solution to a complex problem
  - Municipal resilience can encompass infrastructure, hazard mitigation, land use planning, social /behavioral community building, etc. Effective and efficient forward planning must be based on science and evidence-based information.
- Center efforts in climate justice
- Mitigation of the root causes of climate change simultaneous with adaptation/ resilience



# Specific findings useful to Connecticut

- Variety of mechanisms to fund municipal resilience/adaptation initiatives: direct appropriations, state/municipal level bonding, allocating funds from specific revenue streams (RGGI), enabling municipalities to offer tax abatement, competitive grants
- Funding usually not intended to fully cover project costs, but requires municipal match, federal or other funds
- Some states require or mandate municipal resilience plans. Funding from state sources dependent on plan completion
- States have enabled localities to create or expand mandate for authorities to provide flexibility for specific local needs

# Comparison of Selected States' Approach to Climate Adaptation and Resilience

- Statewide Resilience Planning
- Finance
- Local legal authorities

# Adjacent states comparison

| State         | Planning | State resilience office | Resilience tool kit | Municipalities mandated to include resilience planning | Statutory sea level rise standards | Finance                                   | State resilience grants to municipalities | Investment lending for Resilience projects | Stormwater authorities | Flood/Erosion/Resilience authorities |
|---------------|----------|-------------------------|---------------------|--|------------------------------------|---|---|--|------------------------|--------------------------------------|
| Connecticut   | ✓        | ✓                       | ✓                   | ✗  | ✓ 2019                             | 2021 \$25 M for microgrids and resilience | ✓   | CT Greenbank                               | ✓ 2021                 | ✓ 2021                               |
| Massachusetts | ✓        | ✓                       | ✓                   | ✓ MVP  | ✗ *                                | ✓ \$2 B                                   | ✓ Required to complete MVP                | proposed since 2017, not enacted           | ✓                      |                                      |
| New York      | ✓        |                         | ✓                   |  | ✓                                  | ✓ \$3 B                                   | ✓ 3.5 M 2021                              | ✓ green energy                             | ✓                      |                                      |
| New Jersey    | ✓        | ✓                       | ✓                   | ✓ (2021)   | ✗                                  | ✗   | ✗   | ✓ green energy                             | ✓                      |                                      |
| Rhode Island  | ✓        |                         | PREP RI             | Proposed 2021  |                                    | ✓ \$74 M 2021                             | ✓ required to complete MRP \$14 M in 2021 | RI Infrastructure Bank                     | ✓                      |                                      |



# Adjacent states comparison

| State         | Mitigation |                  | Emissions Reduction targets  |
|---------------|------------|------------------|--|
|               | RGGI       | TCI Enacted      |  |
| Connecticut   | ✓          | ✗                | 45% below 2001 levels by 2030                                      |
| Massachusetts | ✓          |                  | 50% below 1990 level by 2030, 75% 2040; Net zero by 2050           |
| New York      | ✓          |                  | 40% of 1990 levels by 2030, 85% by 2050                            |
| New Jersey    | ✓          |                  | reduce to 1990 level by 2020; 85% below 2006 level by 2050         |
| Rhode Island  | ✓          | passed in Senate | 10% below 1990 level by 2021, 45% 2030, 80% 2040, Net zero by 2050 |

# Massachusetts



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# Massachusetts

## Current policy:

*2021: An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy.* Mitigation, Equity, Resilience

Binding emissions targets; codifies environmental justice provisions; increased REP; RMAAT (interagency steering committee); Resilient MA Clearinghouse

## Municipal resilience programs:

MPV, Green Communities Grants, Coastal Resilience Grant Program, Conservation Services Grants

Stormwater Utilities allowed

## MA takeaways:

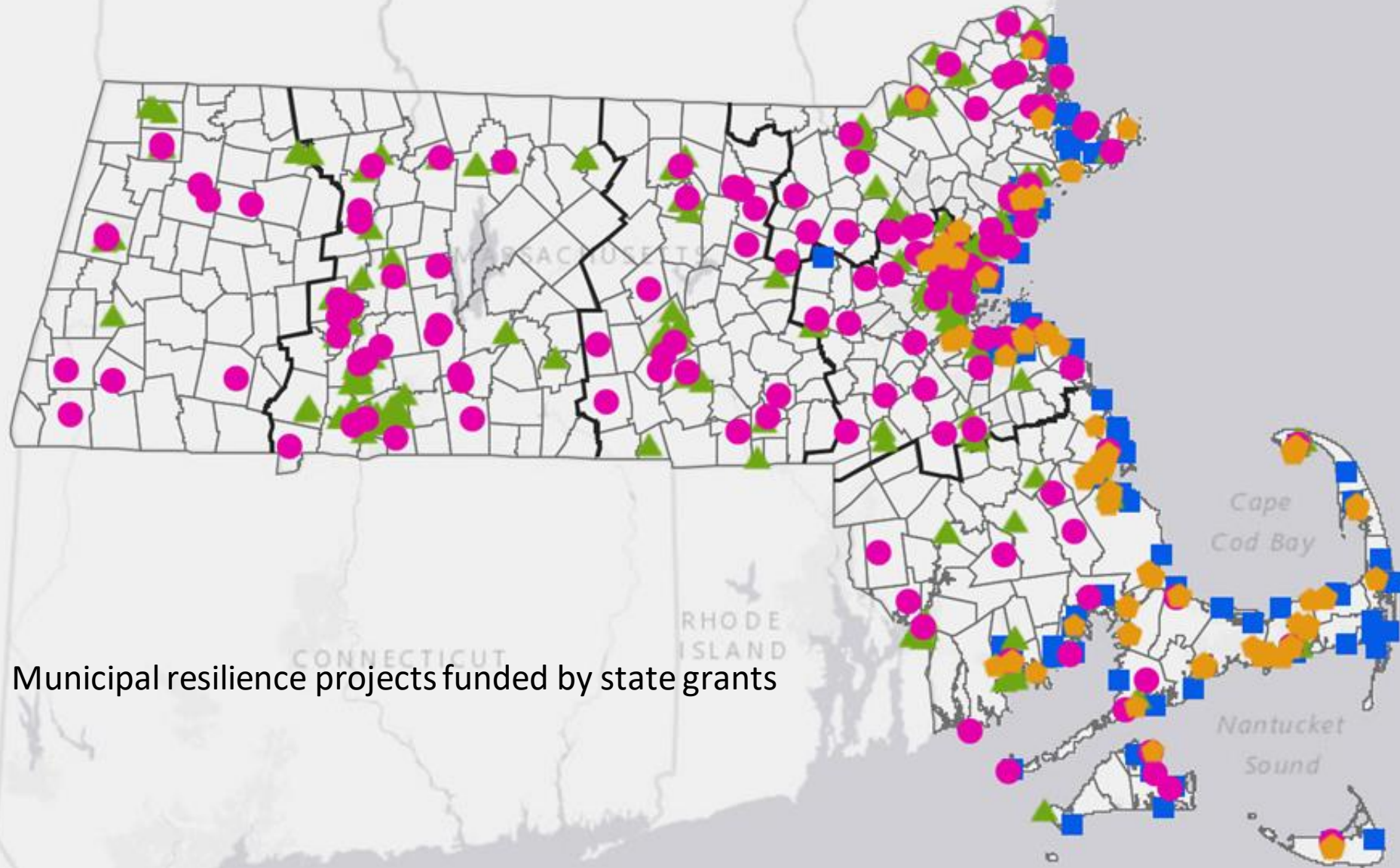
\$2 Billion bonding in 2018 led to big boost in municipal resilience projects

Mandating municipal planning to include hazard mitigation and climate vulnerabilities is an effective way to identify resilience gaps

Two step process: Planning → Action with financial and technical support

MVP program is flexible, allows communities to determine needs





Municipal resilience projects funded by state grants



# Examples of Municipal funding strategies from other states

## **NH- Coastal Resilience Incentive Zones-** NH Rev State Sec. 79-E:4-a (2018)

Creates capital reserve fund or town created trust fund to support municipal costs incurred by sea level rise, storm surge, and flooding. Allows municipalities to grant qualifying resilience projects tax relief.

## **South Carolina- Resiliency Revolving Fund**

Low interest loans for flooded voluntary home buyouts and floodplain restoration

## **Virginia- Community Flood Preparedness Fund**

Grants for capacity building and Planning or flood prevention and protection projects and studies

# More Examples of Municipal funding strategies

## Texas- Flood infrastructure Fund

Loans and grants for planning, construction or rehabilitation activities including nature-based solutions to reduce or mitigate flooding, for cities, counties districts or authorities

## Maryland- Resilience Authorities

Charles Co, Annapolis, Anne Arundel Co. allows locality to undertake and support resilience infrastructure projects through financing structures, leveraging public and private investment



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# What CT has accomplished:

## Previously passed resilience legislation

PA 19-77 An Act Authorizing Municipal Climate Change and Coastal Resiliency Reserve Funds

PA-18-82 An Act Concerning Climate Change Planning and Resiliency (Sea Level Rise standard)

## In legislature 2021:

### PASSED

**HB 6441** Authorization for stormwater authority; Flood, Erosion, & Resiliency board;

Expansion of Greenbank authority to finance resilience projects, ~~Conveyance fee~~

**HB 6689** Appropriations for resilient capacity studies, development of tools through CIRCA

**HB 6690** \$25 M for microgrid and resilient grant and loan pilot program

### Not passed

**HB 6647** GIS

**SB 882** more ambitious GHG emissions reduction goals

**SB 884** TCI

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## Stormwater Authorities

Piloted in New London, used in 42 other states Stormwater Authorities or Utilities  
2000+ authorities in many sized communities, several models for revenue generation  
involving assessment of fees based on impervious cover.

## Coastal Resiliency Reserve Funds

Branford CT, other municipalities in process of creating (Stonington)  
Similar to NH statute focused on cultural/historic preservation

## Flood and Erosion Control and Resiliency Boards

Many municipalities already have these boards. Expansion of authority to include climate  
resilience, use of funds to build, operate and maintain projects.

## Green Bank

Expansion of authority for bonding, enlarges types of projects for investment

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# Recommendations:

- Create model ordinances to establish town level authorities enabled in P.A. 21-115 (stormwater, Flood/Erosion control, Resiliency authorities)
- Increase town planning requirements to include climate change projected impacts
- Require towns to add a section to Plan of Conservation and Development addressing Climate Change vulnerability
- Establish/expand and fund a state-wide competitive grant process to fund town resiliency projects like MA, RI, NY
- Create model regulations for planning and zoning to facilitate resilience and climate adaptation (Like NY)
- Mandate state agencies to include projected climate vulnerability data into infrastructure project development

# Thank you!



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