

Climate Resilient Land Use Strategies

*Leveraging Land Use Bylaws and Regulations to Advance
Sustainable Development and Climate Resilience*

North Shore Task Force Meeting

October 9, 2025

Presentation Objectives

- Understand the importance of using land use bylaws and regulations as tools to protect environmental resources, advance sustainable development, and strengthen a community's climate resilience.
- Learn about how MAPC has previously worked with municipalities to support the review and updates of land use bylaw and regulations
- Be informed of potential partnering opportunities and next steps (who to reach out to, funding opportunities) for this work

Why local bylaws/ordinances and regulations?

- Strong local authority and control over land use and development
- Key partners in administering and enforcing state environmental laws at the local level
- Tools for more ambitious standards and goals

Opportunities and Limitations of Addressing Climate Change Impacts Through Land Use and Zoning

Opportunities:

- *Align with Master Plan:* helps ensure that climate impacts are considered in the context of community planning, economic development, and other local priorities.
- *Building for the full life cycle of the property:* Residential and commercial buildings built today will last for decades to come.
- *Coordinate with Municipal Interventions:* As municipalities invest in climate resilience on public property and right of way, coordinating with private property will be key.
- *Neighborhood scale solutions:* zoning allows for targeted approach to localized climate impacts including flooding and heat islands.
- *Remove barriers* in the zoning code that currently prevent or make it difficult for property owners to make their property more resilient.
- *Incentives to act:* Ways to incentivize or require private property owners and developers to act on climate change and prepare their property.
- *Protects financial investment and value:* It is likely that the real estate market will “catch up” with climate in the coming decades.

Limitations:

- *Does not address existing buildings:* Primarily addresses new construction and deep retrofits.
- *Lack of local control over building code:* Municipalities have limited control over the building code because it is adopted at the State level.
- *May be difficult to regionalize policies:* Since every municipality is responsible for own planning and zoning, it may be difficult to address regional concerns or streamline/coordinate across municipalities.

Content from MAPC's 2020 Climate Resilience Land Use Workshop Series.⁶

Determining Which Bylaws or Regulations to Consider Updating

What challenge are you hoping to address in your community? Note that many strategies can address multiple climate concerns.

Goal: Protect community members and infrastructure from flooding (inland or coastal)

Stormwater Bylaw and Regulations

Wetlands Bylaw

Floodplain Overlay

General Zoning

Local Historic District Bylaws and Guidelines

Transfer of Development Rights Bylaw

Smart Growth Overlay

Goal: Protect community members and infrastructure from extreme heat

Tree Preservation Bylaw

General Zoning

Complete Streets Bylaw

Extreme Heat Overlay

Goal: Protect Key Resources and Habitats with Environmental and Climate Resilience Benefits

Cluster and Open Space District

Subdivision Regulations

General Zoning

Overlays (e.g. River Corridor Overlay)

Goal: Reduce Drought Risk

Native Planting Bylaw

Outdoor Water Use Restriction Bylaw

Water and Wastewater Regulations

Overlays (e.g. Water Resources Overlay, Aquifer Protection Overlay)

General Zoning

General Bylaw

Zoning Bylaw



Implementation Blueprint:
Incorporate climate change
considerations into local
bylaws/ordinances and
regulations



MAPC Resources: Climate Resilience Land Use Strategies



Additional Resources

Resilience Checklists

Trainings/Videos

Glossary of Terms

- Prepare a municipality for long-term impacts of climate change
- Share guidance and best practices for updating land use policies and tools through the lens of climate resilience, in order to protect public health, safety, and welfare.
- Provide regulatory language and policy examples drafted and/or adopted by MAPC communities



Visit the Toolkit here!

mapc.org/resource-library/climate-resilient-land-use-strategies

MAPC's Technical Assistance Projects

Overview

Municipality	Project Year	Type of Land Use Regs	Climate hazard	Funding
Cohasset	2024	Zoning By-Law (Floodplain Overlay District)	Coastal Flooding	EEA Planning Grant + TAP
Gloucester	2019	Zoning Ordinance (Floodplain Overlay District)	Coastal Flooding	TAP
Hull	2010	Zoning By-Law (Mixed Use Overlay District)	Coastal Flooding	TAP
Norwood	2024	Zoning Regulations [Subdivision Rules and Regulations, Site Plan Review Regulations]	Inland and Stormwater Flooding, Extreme Heat	TAP

Cohasset: Zoning for floodplain management



MAPC's Technical Assistance

- Review of the current Floodplain Zoning Overlay District Language
- Update the zoning language based on the State Model Floodplain Bylaw
- Coordinate with the State Contact (DCR) to make sure the language is compliant
- Develop a best practices memo that gives the Town more guidance on zoning amendments that will help implement more stringent floodplain management



Deliverables

- A draft zoning language for the Floodplain Overlay District
- A best practice memo that outlines how the Town can go beyond what's legally required

Norwood Writing Resilient Regulation



MAPC's Technical Assistance

- Reviewed key findings and recommendations from the previous planning efforts, such as HMP and MVP
- Reviewed tools (e.g., ByLaw Review Tool from MassAudubon, Model Stormwater Bylaw from the Watershed Association) and municipal best practices in the region
- Conducted a comprehensive review of the existing bylaws and regulations
- Engage with the Town Departments (Public Works, Engineering, Fire, and Building)



Deliverables

- A memo that outlines key suggestions with sample language to be edited and/or added to the existing zoning regulations
- Tracked changed Bylaw document that integrates our recommendation

Examples of Suggestions

Zoning By-Law

- Provide exemptions to maximum height regulations, when buildings are elevated (Winthrop)
- Restrict new development in the floodplain (Gloucester, Rockport, Scituate)
- Incorporate Sea Level Rise (Swampscott, Hull, Winthrop, Gloucester)

Subdivision Regulations

- Stronger stormwater management
- Better Tree Protection
- Street Design Standards to require narrower and slower travel lanes, wider ADA accessible sidewalks, and more space for planting street trees.

Site Plan Review Regs

- Incorporating climate resilience checklist
- Establishing clearer threshold for when the site plan review is triggered
- Prioritizing the use of permeable pavement in parking areas

What you may want to consider

- Why do you want to do this?
- What is your end goal? (-> scope of work)
- What is your timeline for getting this done? Do you want to consider a phased approach? (Bare minimum vs. going beyond)
- How much funding do you have? Or How does your timeline match with the funding cycle?

Small Group Discussion

- What local bylaws/regs in your community that you are most interested in updating to integrate climate considerations, and why?
- What more information do you need to embark on this endeavor?

DLTA/TAP Opportunity: Technical Assistance for Updating Bylaws/Regs

- Proposed Idea:
 - MAPC would convene a cohort of municipal partners who want to incorporate climate considerations into their local bylaws, regulations, and/or guidelines
 - MAPC would host a series of workshops to provide hands-on training to municipal partners and allow for information-sharing across communities
 - Workshop sessions would focus on a specific topic, such as a particular climate hazard, type of bylaw, or point of intervention
- Interested?
 - Email NSTF subregional coordinator Sarah Scott before mid-November to learn more and share what you'd hope to get out of participating

Resources

- From MAPC:

- [Climate Resilience Playbook](#), including the [Blueprint: Incorporate climate change considerations into local bylaws/ordinances and rules and regulations](#)
- [Climate Resilient Land Use Strategies webpage](#)
- [Climate-Smart Zoning and Permitting chapter](#) from Net Zero Playbook
- [MAPC Planning 101 blog article: Writing Resilient Regulations in Norwood: A Path Toward Climate-Ready Growth](#)
- [MAPC Planning 101 blog article: Zoning for Flood Resilience: How Local Regulations Can Help Communities Weather the Storm](#)
- [Technical Assistance Program](#) funding/partnership opportunity

- From partners:

- [MassAudubon bylaw review tool](#)
- [ECO One Stop grant from EEA](#)
- [Cape Ann MARCH](#)

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