

FLOODING IN MASSACHUSETTS

Authority, Programs,
Coordination & Planning
Part II

Presentation to the Water Resources Commission

July 10, 2025

Legislative Beginnings

The Problem in Massachusetts:

Water out of control....Disastrous floods...polluted streams...acute shortage in summer...wildlife dying...industry suffering...people confused and at a loss what to do.

Legislators met from January to May 1956 to discuss the above and find a pathway to cooperative and coordinated action.

On August 8, 1956 a bill was signed into law by Governor Herter establishing the Water Resources Commission and its responsibilities.

Living Waters, 1956

*The story of the creation of the Massachusetts Water Resources Commission
which will direct the Water Resources Division*

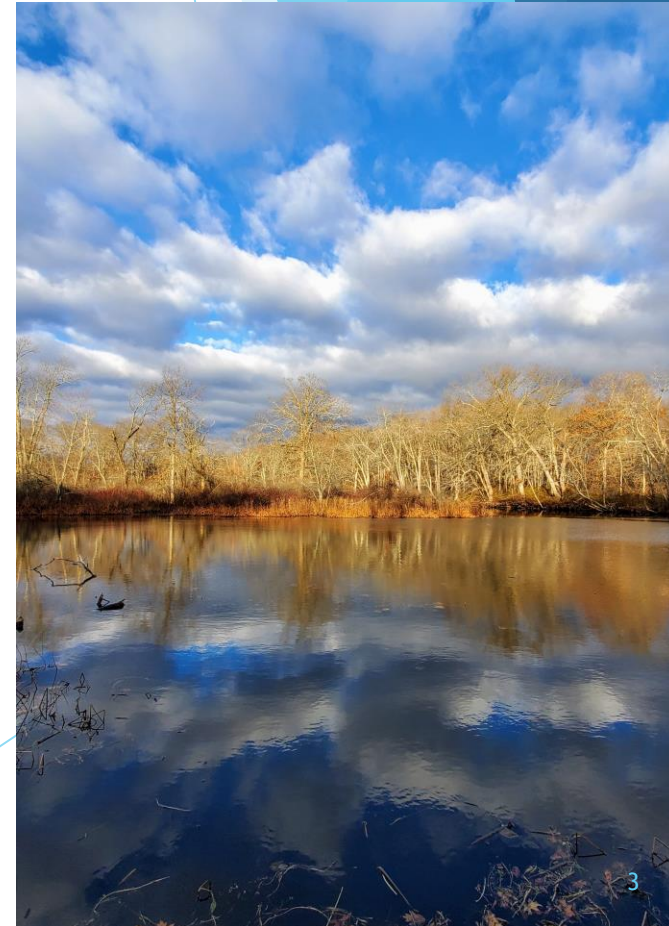
Role of the MA Water Resources Commission (WRC)

Established in 1956 (Chap. 620) by the Massachusetts Legislature

“WRC shall be the agent of the commonwealth in coordinating all activities of federal, state and other agencies in the conservation, development, utilization and disposal of water for the purpose of preventing loss of life and damage to property by erosion, floodwater and sediment in the watersheds of the commonwealth, and to obtain necessary financial assistance from the federal government, necessary for the immediate preservation of the public safety and convenience.”

“WRC shall meet and consult on matters concerning watersheds, water systems, storage basins, underground and surface supplies and shall study needs, supplies and resources with respect to water conservation and flood prevention...and shall make recommendations for legislation designed to provide the Commonwealth with a water policy based upon the common and interdependent interests of agriculture, industry, recreation, wildlife, conservation, domestic consumption and flood prevention. It shall act as a coordinating agency between all departments of the Commonwealth and shall cooperate with the agencies of the federal governments and all other states in carrying out water conservation and flood prevention programs.”

“The commission may establish rules and regulation as may be necessary for proper administration of (above).....’



Additional WRC Authority

Section 18 of Chapter 589 of the Acts of 1983

- Develop **water resources management policy** framework within which the water resource policies, plans and management programs of the several agencies and departments under the secretary shall function
- **Coordinate** water resources planning and management functions among the environmental agencies
- **Review** and comment on all **policies** brought before the WRC
- Annual **review** and comment on water resources management **programs** of environmental agencies
- Establish criteria and priorities for **cooperative programs** with federal or state govt, executive office, department, or division
- Develop and periodically update comprehensive **water resources management plans** for river basins
- Develop **water allocation criteria**
- Develop a **management information system** and data processing capability for water resources information
- Develop an **education program** with emphasis on long term water resources and wastewater planning and management

Responsibilities in various state statutes/regulations

- Update the Massachusetts **water policy statement** at least once every five years
- Submit annual **budget** estimates of funds needed to fulfill the above duties
- File an **annual report** (see MGL, c. 30, ss. 32 and 33)
- Responsible for reviewing and approving or denying all increases in **interbasin transfer** (see Chapter 658, Acts of 1983 codified as MGL, c. 21, s8b-8d).
- Approve **water needs forecasts** for communities and water districts
- Approve state **Water Conservation Standards**

The commission may establish rules and regulations as may be necessary for the proper administration of the above.

WRC Authority on Floods: Flood Management - Public Law 566

(Watershed Protection and Flood Prevention Act)

Purpose: This program was established to prevent loss of lives and to reduce damage caused by floods

- Legislation in the 1950s and 60s authorized the WRC to cooperate with federal government to plan, take lands and implement flood control improvement projects in certain watersheds; only local organizations can request
- 32 facilities were constructed by USDA to provide for flood storage and control - 7 municipal lands, 25 WRC on state lands now managed as State Park lands (5020 acres total)
- These projects are multi-purpose; also provide for passive recreation, wildlife habitat, open space preservation and reservoirs for public water supply
- On WRC properties, parcels were taken in fee and in easement. All the deeds with easements call out the easement purpose which is the right to flood the land at any time. Easements are carried forward into each property conveyance into perpetuity as written in the original easement taking instruments
- Through the 1960s, 70s and 80s, the Commission cooperated with the federal government, other agencies and local sponsors to plan, review feasibility, approve projects, deny projects, approve acquisition of lands, secure financial assistance from the federal government, approve and review design and construction of multipurpose flood prevention facilities and to ensure ongoing operations and maintenance
- Today: Administration of Program by DCR Engineering, i.e. Operation, Maintenance and Repair of WRC projects on state lands, and oversight of WRC projects on municipal properties
- Any new facilities will need WRC process and approval



WRC Authority on Floods: Flood Hazard Management Program (FHMP)



Executive Order 149 (1978) - Designates the Commission as the state coordinating agency to implement the National Flood Insurance Program (NFIP) and implement flood plain management criteria for state-owned properties in special hazard areas.

Responsibilities

- Acting as liaison between FEMA and Mass communities
- Offering technical support to NFIP communities
- Monitoring floodplain development in general
- Coordinating with FEMA on map updates and CRS activities
- Reviewing critical state agency floodplain projects through MEPA
- Coordinating with MEMA on hazard mitigation grants and planning efforts
- Coordinating with other state and federal agencies re: floodplain development issues, e.g., BCAB testimonies & FFRMS technical assistance
- Offering training on NFIP regulations, FEMA flood maps, and general good principles of floodplain management
- Assisting general callers with NFIP questions and concerns
- Coordinating with MEMA and FEMA during flood events

Programs & Projects

- Statewide Floodplain Management Framework – inter- agency coordination
- Environmental Justice Populations & Flooding in MA – discovering where these populations are being impacted
- Higher Standards in State Building Code and Local Bylaws – recommendations to BBRS for 11th edition & guide for local governments
- Strong coordination with MEMA for planning (RMAT, ResilientMass) and grants
- First FHMP Strategic Plan completed– 3-year goals and strategies
- FY25 Training & Communications Plans–improved outreach

FHMP - Community Assistance



Answered homeowner questions about elevation certificates and their increasing flood insurance rate.



Met resident with questions about flooding and new flood maps at FEMA Open House



Reviewed how to ID LiMWA and Coastal A zone with consultant



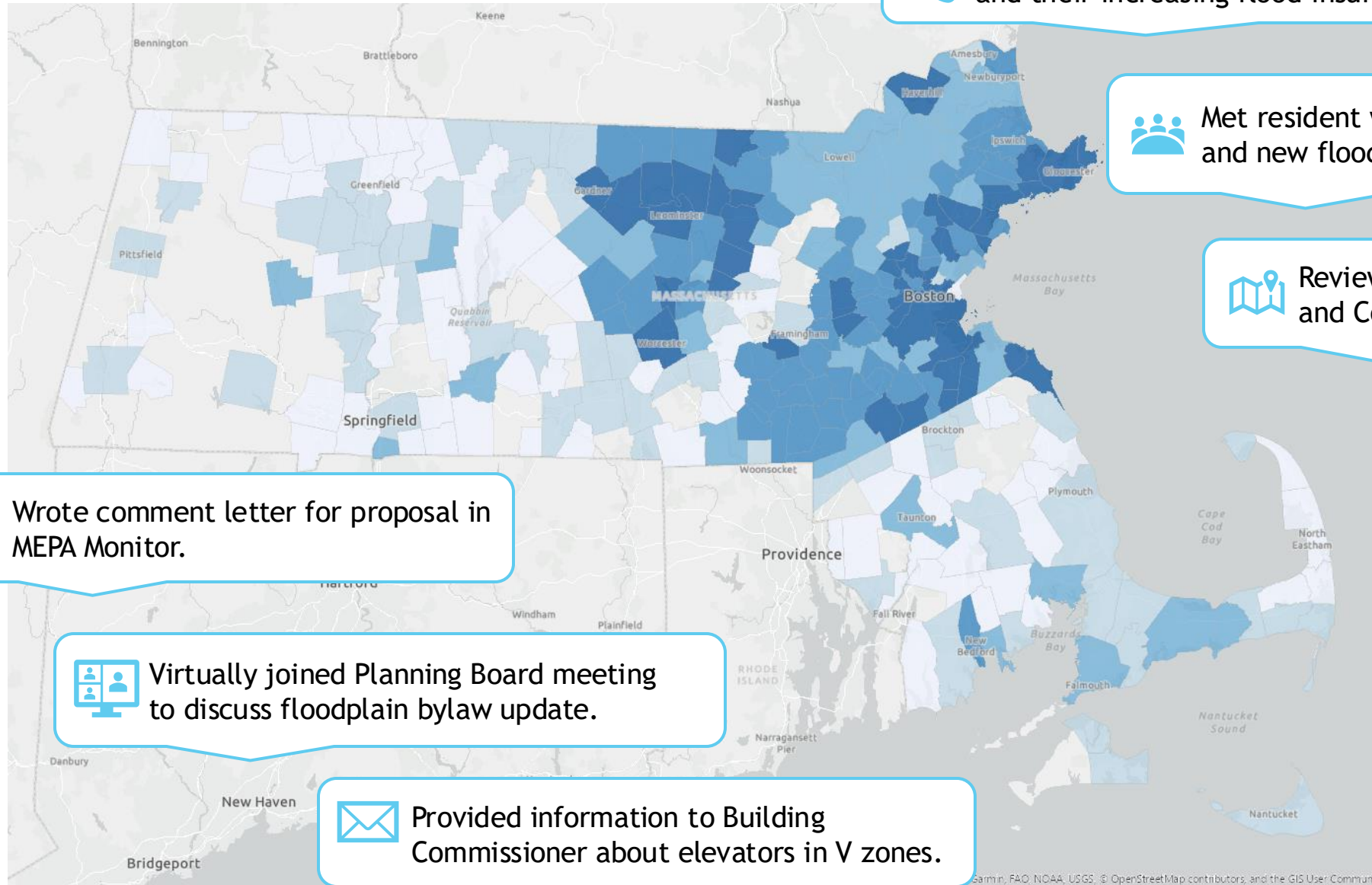
Wrote comment letter for proposal in MEPA Monitor.



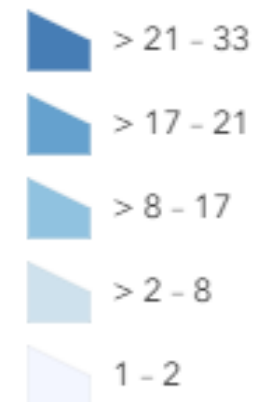
Virtually joined Planning Board meeting to discuss floodplain bylaw update.



Provided information to Building Commissioner about elevators in V zones.



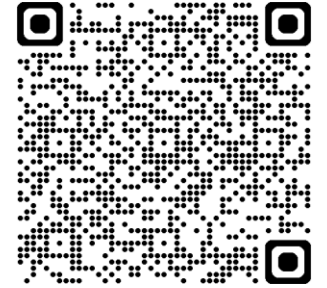
Technical Assistance (#)



FHMP - Training Plan

Join our FEMA flood map
training!

Weds 8/20 12-1:30pm



► Support Beginners

► Promote Learning

► Recognize Excellence



Local
Floodplain
Manager
of the Year

FHMP - Outreach and Communication

Email Campaigns

Myth: Flooding only happens in coastal areas.

Fact: Flooding can happen anywhere it can rain. Inland flooding can occur from heavy rainfall, ice jams, or a burst water main. Every home has some flood risk.

What can I do? Learn more about the flood risk for your home

<https://www.floodsmart.gov/flood-risk>.



Courtesy of your
Flood Hazard Management Program
MA Dept. of Conservation & Recreation

Social Media



Public Transit Ads



Interagency Coordination

- ▶ FEMA request, 2019: Assessment of Floodplain Management Regulations for State-Owned Properties
 - ▶ Flood-related work is siloed and not always coordinated
 - ▶ limited flow of information
- ▶ Statewide Floodplain Regulatory and Coordination Framework - a ResilientMass Action
- ▶ Climate Chief Hoffer's recommendation on inland flooding:

“As identified in the 2023 ResilientMass Plan, EEA should develop both a Floodplain Management Coordination Framework and a Floodplain Management Plan...”

“A flood management plan should outline priority actions that can be taken statewide in the near term to address and mitigate floods and their impacts...”

Acts of 1956 (Ch.620) and EO 149 - WRC designated as the state coordinating agency

Are we doing enough?

How can we be more effective?

Interagency Coordination

State Floodplain Framework, Phase 1

- ▶ Lead agencies: DCR (WRC staff), MEMA, CZM
- ▶ 12 agencies, approx. 45 individuals meeting since October 2023

“The floodplain includes all areas in Massachusetts that currently flood or are projected to flood.”



The Massachusetts Statewide Floodplain Management Framework is a **collaborative network** of entities concerned with **coordinated flood loss reduction** through strategies including flood hazard mitigation actions, restoration and protection of our floodplains, and examination of practices for improved stormwater management. These actions will consider current and future floodplains and the people who are impacted by flooding, especially those populations who are socially vulnerable.

Interagency Coordination

State Floodplain Framework, Phase 2

► Consensus report

- Summary of how the statewide floodplain framework emerged
- Key terminology and working definitions used
- Activities, findings, and consensus achieved
- Core needs for alignment, coordination, action gaps, regulatory/policy updates & data management
- Examination of best approach

► ResilientFloodplains strategy

- Timeline, process, governance, external partners
- Structure, content, strategies, actions
- Required analyses
- Tools



Planning and Flood Impact Minimization

MA Integrated Floodplain Management Audit

“IFM is an approach that seeks to overcome competing demands and find solutions that provide multiple benefits for people and nature by fostering collaboration and breaking down the silos between the many floodplain stakeholders.”

- ▶ Massachusetts barriers include:
 - ▶ Lack of regional or watershed natural resource management
 - ▶ Permitting cost and complexity
 - ▶ Competition with other important issues for resources and policy action
 - ▶ Gaps in mapping, modeling, and data tools
- ▶ 8 recommendations
- ▶ Conclusion (as the state moves toward IFM):
 - ▶ *“Early capacity-building, fostering collaboration, and raising awareness of the state floodplain management framework across different levels of governments will be key to achieving these larger goals in the long term.”*

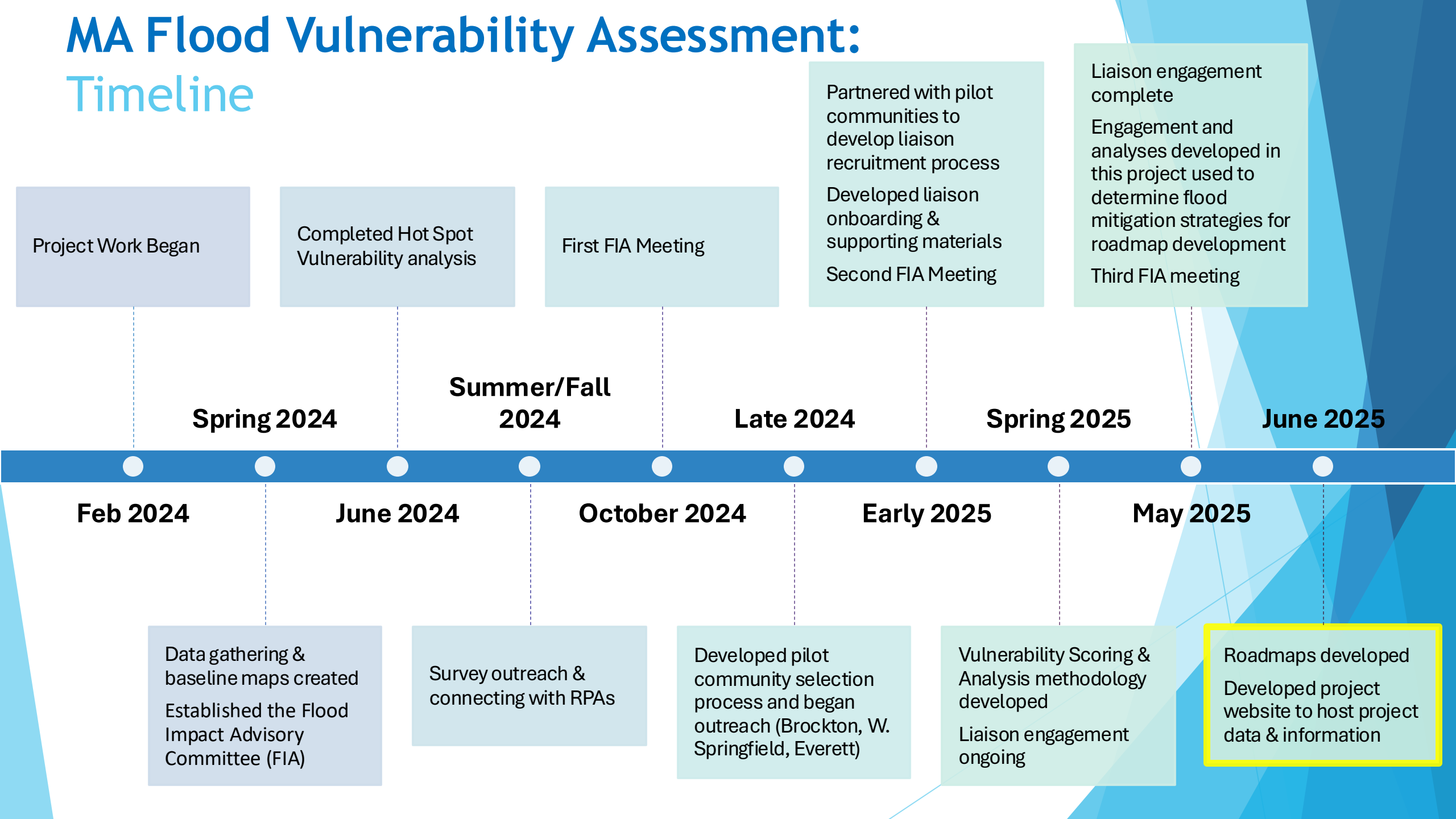
Massachusetts Flood Vulnerability Assessment: Identifying Impacts to EJ Communities



Check out our (draft) project website!



MA Flood Vulnerability Assessment: Timeline



Project Work Began

Completed Hot Spot
Vulnerability analysis

First FIA Meeting

Partnered with pilot
communities to
develop liaison
recruitment process
Developed liaison
onboarding &
supporting materials
Second FIA Meeting

Liaison engagement
complete
Engagement and
analyses developed in
this project used to
determine flood
mitigation strategies for
roadmap development
Third FIA meeting

Spring 2024

Summer/Fall
2024

Late 2024

Spring 2025

June 2025

Feb 2024

June 2024

October 2024

Early 2025

May 2025

Data gathering &
baseline maps created
Established the Flood
Impact Advisory
Committee (FIA)

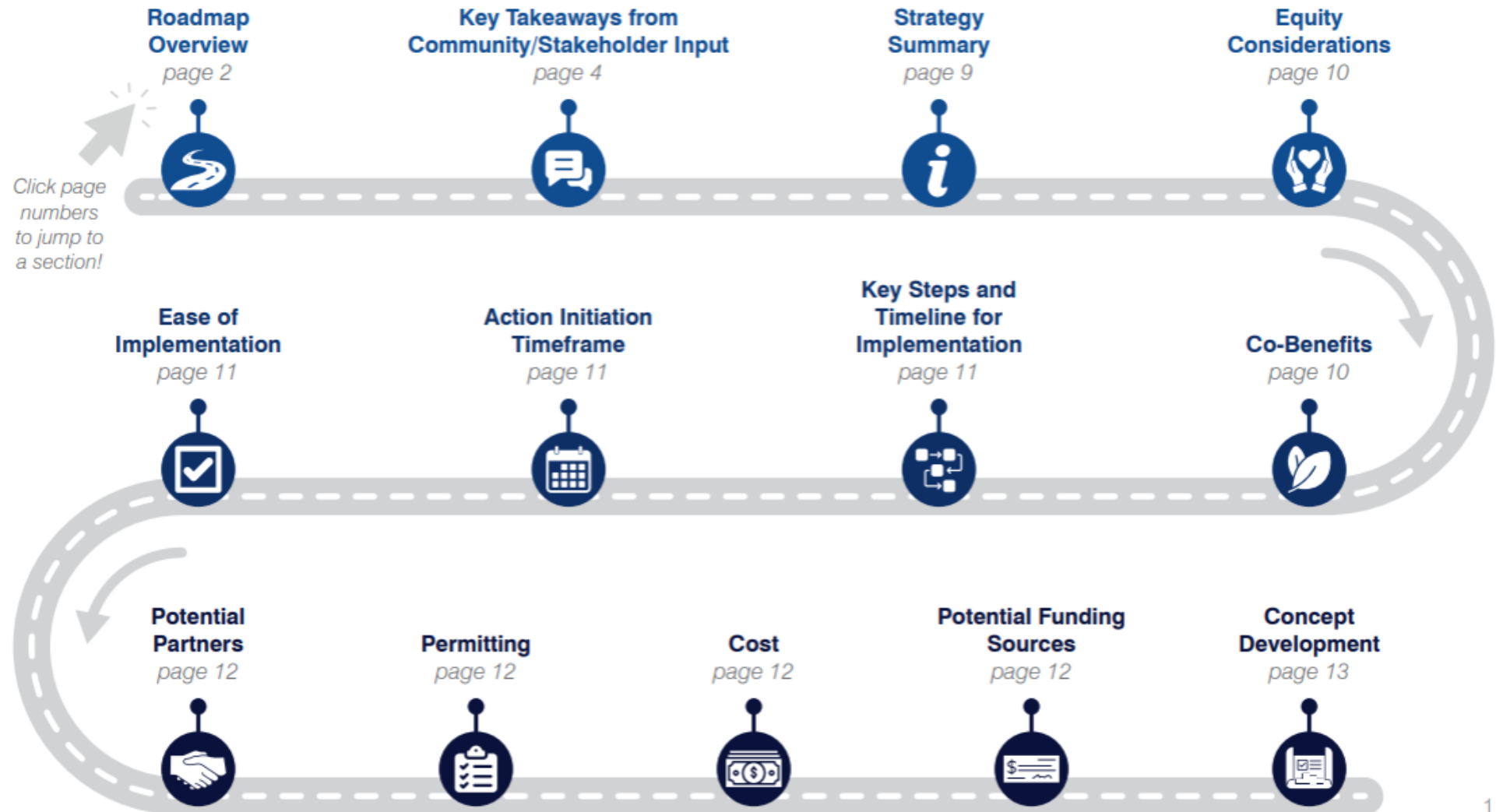
Survey outreach &
connecting with RPAs

Developed pilot
community selection
process and began
outreach (Brockton, W.
Springfield, Everett)

Vulnerability Scoring &
Analysis methodology
developed
Liaison engagement
ongoing

Roadmaps developed
Developed project
website to host project
data & information

MA Flood Vulnerability Assessment: Local Roadmaps



Data & Resources: Storymaps



Flooding in Everett, MA

Understanding Impacts and Flood Mitigation Projects

January 27, 2025

[Introduction](#) [Flooding in Everett](#) [Flood Vulnerability Factors](#) [Existing Flood mitigation work](#) →

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Flooding in Brockton, MA

Understanding Impacts and Flood Mitigation Projects

March 13, 2025

[Introduction](#) [Flooding in Brockton](#) [Flood Vulnerability Factors](#) [Existing Flood mitigation work](#) →

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Flooding in West Springfield, MA

Understanding Impacts and Flood Mitigation Projects

[Introduction](#) [Flooding in West Springfield](#) [Flood Vulnerability Factors](#) [Existing Flood mitigation](#) →

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