



welcome



Weston & Sampson<sup>SM</sup>



# FEMA Hazard Mitigation Assistance (HMA) & Home Elevation Program

## Introductory Workshop for Hull

Massachusetts Emergency Management Agency  
May 2, 2024



Weston & Sampson<sup>SM</sup>



# Agenda


- Why Elevate in Hull?
- Overview of Federal Grant Programs
- Determining Eligibility and How Much to Elevate
- How to Apply
- Timeline and Next Steps






**WHY ELEVATE YOUR HOME IN HULL?**



# Town of Hull Climate Adaptation & Conservation



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- Nantasket Avenue Seawall and Roadway Reconfiguration
- 2024 Proposed WPA After The Fact Bylaw
- 2024 Town of Hull Floodplain Overlay District Bylaw
- Atlantic Ave Reconstruction Project
- Climate Change and Adaption
- Conservation Reports & Presentations
- FEMA Technical Bulletins
- Flood Hazard Information
- Hull Climate Adaptation Roadmap: Hampton Circle Area
- Hull Hazard Mitigation Plan (HMP) 2023
- Hull Home Elevation Funding Application
- Hull Sea Level Rise Analysis Update May 2023

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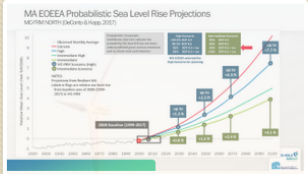
## Climate Adaptation & Conservation

Floodplains Management, Stormwater Management, Wetlands Protection Act Administration



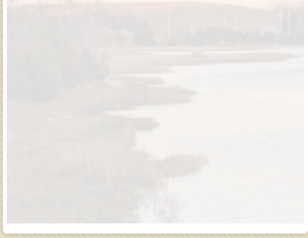
Hull's Floodplain 2024

Welcome! The Climate Adaptation & Conservation Department coordinates the Town's efforts in climate adaptation and conservation planning. The



MA EDEEA Probabilistic Sea Level Rise Projections  
NORTH/NORTH EAST/2023

Relative Mean Sea Level Rise projections used by MA EDEEA



### News & Announcements

[11/28/2023 Hull Hazard Mitigation Meeting](#)

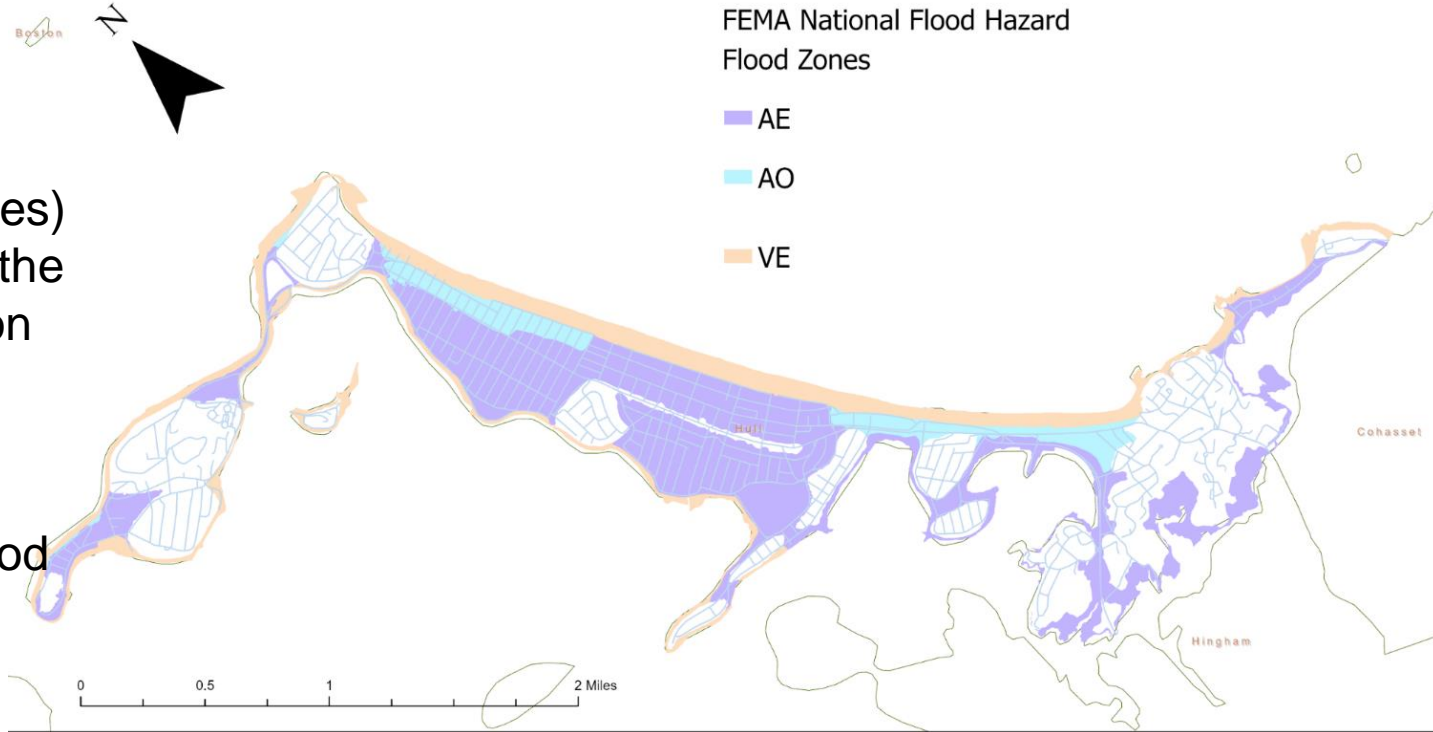


# Hull's FEMA Flood Zones

## Flood Zone –

The SFHA contains different areas (zones) that are defined by the type and/or elevation of the 100 yr (1%) flood

## SFHA - Special Flood Hazard Area



March 2024. Prepared by C. Krahforst, Climate Adaptation & Conservation, Town of Hull. Data obtained from Mass GIS: FEMA NFHL 2023 Layer



# Flooding is Becoming More Frequent



The Hampton Circle Area has been impassable (at least) 5 times in 2024



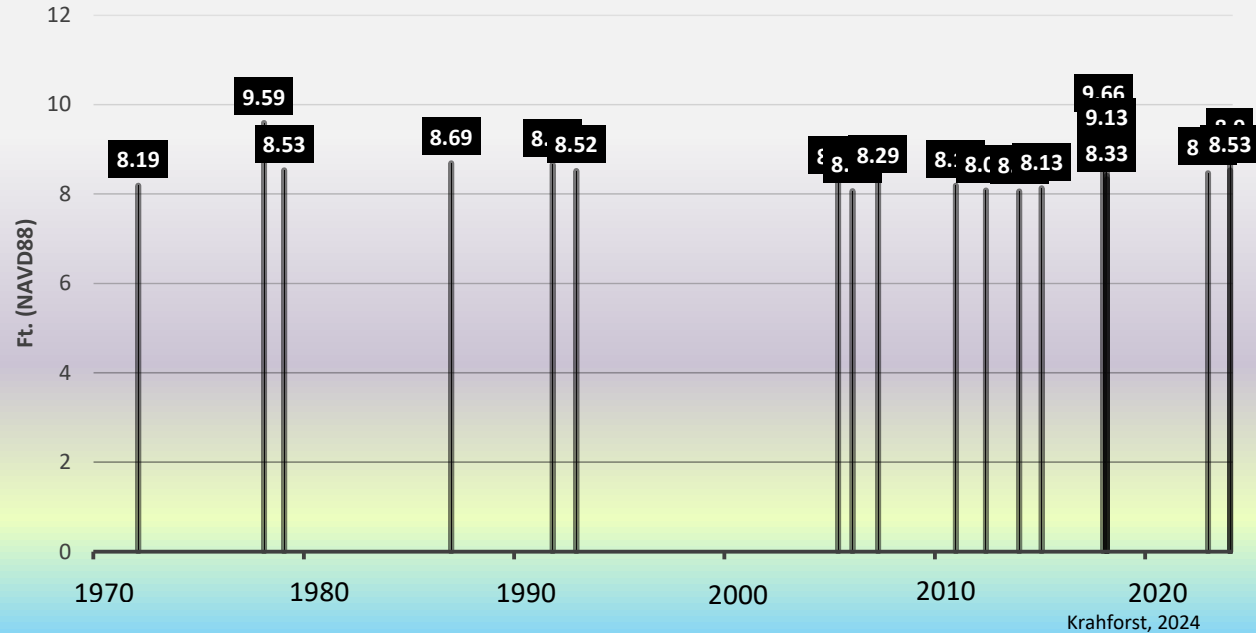
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# High Water more often?

Rank	Date	NAVD88 (Ft)
1	1/4/2018	9.66
2	2/7/1978	9.59
3	3/2/2018	9.13
4	1/13/2024	8.90
5	1/2/1987	8.69
6	10/30/1991	8.66
7	1/10/2024	8.53
8	1/25/1979	8.53
9	12/12/1992	8.52
10	12/23/2022	8.47

## 19 (of the 20) Highest Water Levels Observed in Boston Harbor





# Elevated Home in AE Zone



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# The Town is Developing a Climate Adaptation Roadmap

## LEGEND

- EXIST SURFACE
- - - - PROPOSED SURFACE
- EXISTING BARRIER WALL
- LIMIT OF WORK



The Roadmap for Hampton Circle Area includes potential home elevation as an option



# INTRODUCTION TO HAZARD MITIGATION ASSISTANCE FUNDING

“FEMA Hazard Mitigation Assistance grant programs provide funding for **eligible activities that reduce or eliminate long-term risk to people and property** from future disasters... Eligible applicants of these grants include **states, local, tribal and territorial governments**”



# What You Should Know about Hazard Mitigation Grants



**MEMA is the conduit for applications and funding to and from FEMA. MEMA manages the State Contracts and grant awards with the communities. The communities are the conduit for applications and funding to the homeowners.**



The process from grant application to grant award can take several months to a year (or longer) - please be prepared.



Eligible expenses must have been incurred after MEMA issues Notice to Proceed. All FEMA HMA grants are managed on a reimbursement basis.



# How the Programs are Organized

## HMA Program

•Flood Mitigation Assistance (FMA)

•Annual Program

Hazard Mitigation Grant Program (HMGP)

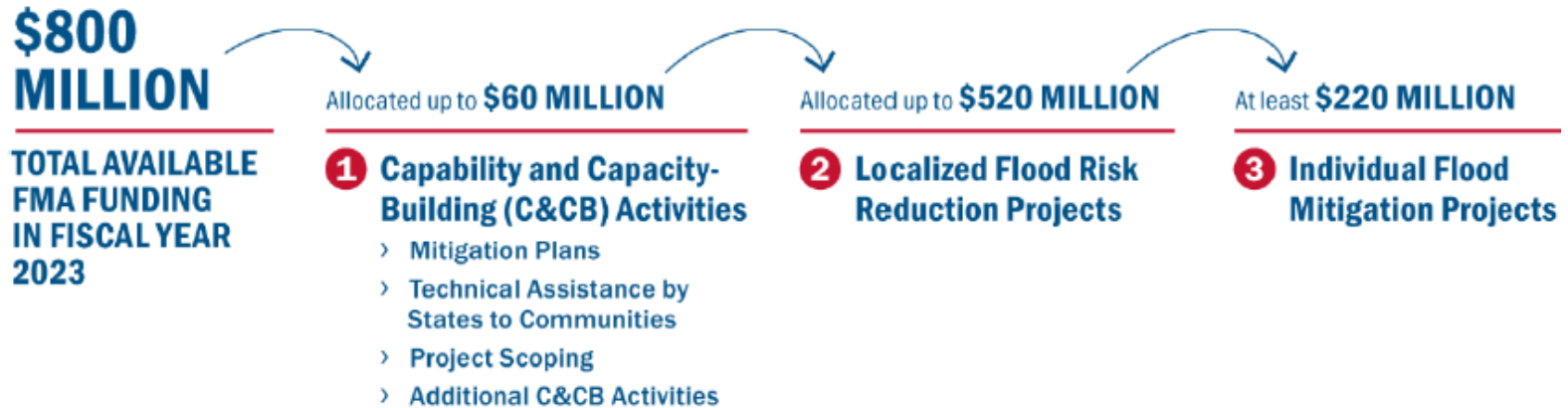
Post-Disaster Only

Other FEMA Mitigation Grants (e.g. BRIC, etc.)



# What is Flood Mitigation Assistance?

The FMA program makes federal funds available to reduce or eliminate the risk of repetitive flood damage to buildings and structures insured under the [National Flood Insurance Program](#) (NFIP).



Note: Allocated funding amounts may be reduced by up to 10 percent due to the funding of state, tribal, and local management costs.

**Figure 1: Fiscal Year 2023 Flood Mitigation Assistance Available Funding**



# Flood Mitigation Projects

- At least \$220 million of Individual Flood Mitigation Projects that mitigate the risk of flooding to individual NFIP-insured structures and buildings.
  - No activity cap per subapplication.



Eligible projects include, but are not limited to:

- Acquisition and Structure Demolition/Relocation
- Structure Elevation
- Mitigation Reconstruction (up to \$220,000 federal share)
- Wet Floodproofing of Non-Residential Structures
- Dry Floodproofing of Non-Residential Structures
- Dry Floodproofing of Historic Residential Structures





# What is NOT eligible for HMA grant funding?

1. Projects that do not reduce the risk to people, structures, or infrastructure, including structures covered by the NFIP.
2. Projects where actual physical work has already started.
  - *Some exceptions for acquisition projects*
3. New construction, new additions, new decks, new porches.
  - *New stairs and landings are eligible, as are new utility rooms in certain circumstances*
4. Projects that are dependent on another action to be effective.
5. Projects which are considered repair, deferred maintenance, or replacement of existing infrastructure.
6. Projects located in Coastal Barrier Resources System (CBRS) Units or in otherwise protected areas (OPAs), **other than property acquisition.**

***Full list can be found in the 2023 HMA Program & Policy Guide***



# DETERMINING HOME ELIGIBILITY AND ELEVATION REQUIREMENTS



# How to Determine if You're a Candidate

**Talk to the Town's Climate Adaptation & Conservation Dept. Town then will set up time to hold initial TA call with interested homeowner and MEMA.**

***Prior to initial TA call, look at general grant/elevation requirements (in 2023 HMA guide, Part 12, B.3) to see if criteria is met, incl.:***

- Involves physically raising an existing structure; no new additions (except if needed for new utility room if no existing space in house to relocate existing utilities); no new decks (new stairs & landings OK)
- Buildings proposed for elevation must be structurally sound and capable of being elevated safely
- Must be designed to meet NFIP standards and ASCE 24 criteria, and meet Federal Flood Risk Management Standard req'ts. if in SFHA
- Must raise the lowest floor above BFE or elevation required by FEMA, local ordinance or design flood elevation, whichever is highest (VE and Coastal A zones the lowest horizontal structural member must be raised above the BFE or elevation required by FEMA, local ordinance or DFE, whichever is highest)



# How to Determine if You're a Candidate

- For VE and Coastal A zones the space below the lowest floor must be free of obstructions or constructed with non-supporting breakaway walls (AE zone has flood vent requirements)
- Ground level area must be used solely for parking of vehicles, building access or storage
- Applicants and subapplicants must demonstrate that mitigation projects are cost-effective
- All subapplications submitted to FEMA must meet the EHP criteria
- **Property must be NFIP-insured at the time of the opening of the application period; the flood insurance policy must be maintained throughout the period of performance and for the life of the structure**
- Structure must have been in compliance with current NFIP standards at the time of construction
- **Be prepared for lengthy review/approval process (over 1 year from submission) – grant funding can't be retroactively applied to work carried out ahead of time**
- Be prepared for this being a reimbursement-based grant (partial reimbursements at milestones are ok as long as community approves partial reimbursements)
- Be prepared for there being a grant “match” depending on FEMA grant program & RL status

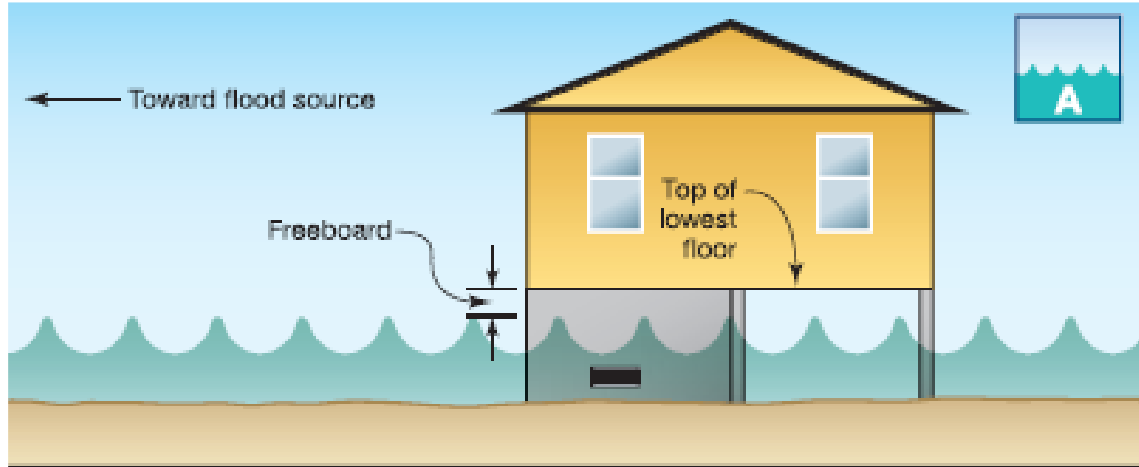


# How High Should You Elevate? (1 of 2)

## It Depends!

- The proposed 10<sup>th</sup> Ed. Building Code would require that buildings in A Zones be elevated so that the top of the lowest floor be **two feet above** the Base Flood Elevation (1% chance storm elevation from the FEMA Flood Insurance Rate Map).
- This gets the structural part of the building one foot above the Base Flood Elevation

## Proposed 10<sup>th</sup> Ed. A Zone Freeboard



*Note: there may be other factors such as NFIP standards and ASCE 24 criteria, and meeting Federal Flood Risk Management Standard req'ts.*



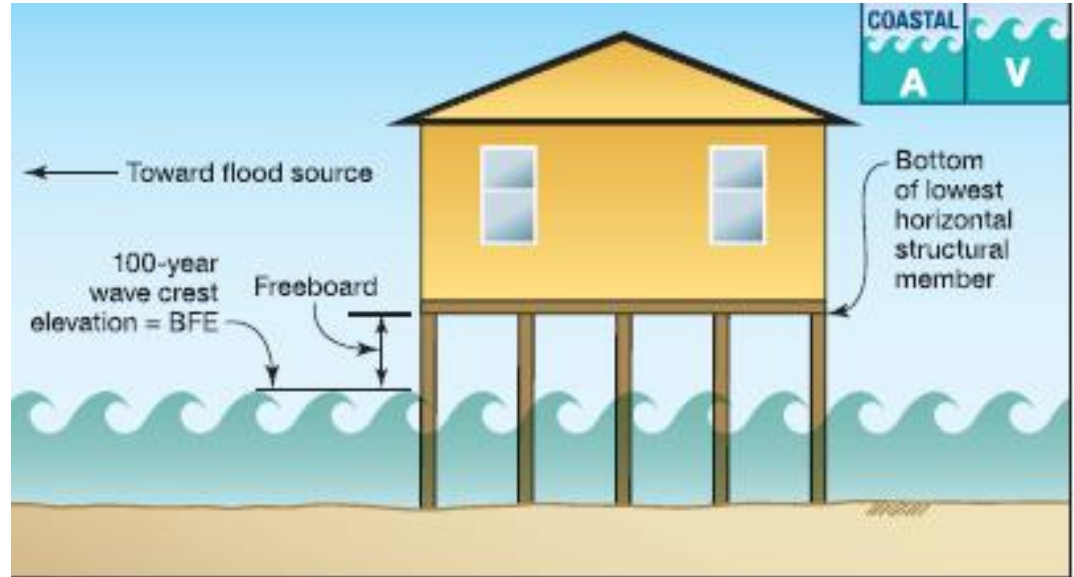
# How High Should You Elevate? (2 of 2)

## It Depends!

(Residential Code)

- The proposed 10<sup>th</sup> Ed. Building Code would require that new or substantially improved buildings in V zones and coastal A zones be elevated so that the bottom of the lowest horizontal structural member is **at least 3 feet above** the Base Flood Elevation.

## Proposed 10<sup>th</sup> Ed. V Zone Freeboard



*Note: there may be other factors such as NFIP standards and ASCE 24 criteria, and meeting Federal Flood Risk Management Standard req'ts.*



# HOW TO APPLY FOR FUNDING FOR HOME ELEVATION

# Application Elements

Application Information

Hazard Mitigation Plan  
Information

Scope of Work

Project Schedule

Detailed Budget

Source of Local Cost  
Share

FEMA Benefit-Cost  
Analysis (BCA)

Environmental  
Considerations

Additional Documentation  
May Be Required





## E.3 Elevation Project Application Package

In addition to the items identified in Part IV, H of the HMA Guidance, the following data are required for each structure:

- ◆ Physical address and property owner's name
- ◆ Estimated cost to elevate each structure
- ◆ Name and location of flooding source (e.g., creek, river, watershed, or location of stormwater ponding) and location on the applicable Flood Insurance Rate Map
- ◆ The proposed elevation of the lowest floor for each structure to be mitigated, the BFE, and the current elevation of the lowest finished floor
- ◆ Type of existing foundation (slab-on-grade, crawl space, basement, or open foundation) and the proposed elevation method and standard to be used
- ◆ A statement that the project will be designed in compliance with NFIP standards in 44 CFR Part 60



# Elevation Specific Additional Information (2 of 2)

- Elevation Certificates (existing and proposed)
- Site Plans (existing and proposed)
- Structural Plans
- Existing Photos
- Model Deed Restriction
- Any Additional Requirements from the Town
  - Con Comm WP-5 Permit
  - Building Permits
  - Other
- Other (Such as estimated rental cost information during project implementation if applicable, etc.)



# Non-Federal Cost Share



- Cost share is typically 25% of the total project for Community Flood Mitigation Projects cost.
- Individual Flood Mitigation Projects that include Severe Repetitive Loss (SRL) and/or Repetitive Loss (RL) home may have a local cost share of either 0% or 10% (under FMA)
- Non-Federal cost share may include:
  - Local, state, or private cash payments
  - For private homes, if there is a cost share, it would come from the homeowner



# Reimbursement Process

When work has been completed, the homeowner submits the required reimbursement documentation to the town.

Town submits a reimbursement request to MEMA.

MEMA reimburses the Town for eligible expenses, up to the amount of the Federal award.

The Town provides reimbursement to the homeowner.



# Closeout Documentation Includes

Final Property Elevation Certificate

Certificate of Occupancy

Letter(s) certifying structure compliant with NFIP and local ordinances

Recorded deed amendment including flood insurance requirements

Signed “Acknowledgement of Conditions” document

Current (updated) flood insurance policy

Other documentation that may be applicable to a particular property



# FMA FY24 Cycle Timeline

MA Open/Rolling Statement of Interest (SOI) Period	Open and Ongoing
Sub-applicant Register with FEMA GO	Ongoing
Federal Notice of Funding Opportunity (NOFO)	~August 2024
Federal Grant Application Period Opens	September 2024
Iterative State Pre-Application and Review	October - December 2024
Sub-application Final Submittal	Early December 2024
State Review Committee	December 2024 – January 2025
Submittal to FEMA for National Competitive Review	January 2025
Award Notification for FFY24 Cycle	Beginning Summer 2025
Project Initiation	~Spring 2026



# Application Process & Timeline

Assistance from Town is available to apply to FEMA FMA Program for Home Elevation

Month	Action
May	Contact Town to start process
September	Apply to Town for help with FMA application
October	HMA application period opens
November	Town submits application on behalf of homeowners
January	MEMA processes applications
February	FEMA reviews applications
8+ months after application submission	Notification of award



# Repetitive Loss (RL) and Severe, Repetitive Loss (SRL) Properties & FEMA Flood Insurance

For detailed data on Rep Loss, SRL and NFIP Insurance, please contact at FEMA:

**Ryan Fisher (RL & SRL)**

Floodplain Management Specialist

FEMA - Region I

[ryan.fisher@fema.dhs.gov](mailto:ryan.fisher@fema.dhs.gov)

**Patricia Lorizio (NFIP)**

Regional Support Liaison

FEMA - Region I

[Patricia.lorizio@associates.fema.dhs.gov](mailto:Patricia.lorizio@associates.fema.dhs.gov)





# Contact MEMA

## David Woodbury

Coordinator, MEMA Region 2 & 4

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## Mike Enko

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## Beth Dubrawski

Grants Support Coordinator

[Beth.Dubrawski@mass.gov](mailto:Beth.Dubrawski@mass.gov)

(508) 820-1425



[MEMA Hazard Mitigation Website](#)

Also, **Joy Duperault**, [State NFIP Coordinator](#) at DCR, [Joy.Duperault@mass.gov](mailto:Joy.Duperault@mass.gov)



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# WHAT'S NEXT?

- Learn more: 2023 Home Elevation Grant Program – [tinyurl.com/HullHomeElevation](https://tinyurl.com/HullHomeElevation)
- Request a meeting with Town staff for individual questions/assistance
- Apply to the Town in May for the next round

**Contact - Chris Krahforst: [ckrahforst@town.hull.ma.us](mailto:ckrahforst@town.hull.ma.us)**



**QUESTIONS?**

# thank you

[westonandsampson.com](http://westonandsampson.com)



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# APPENDIX OF ADDITIONAL RESOURCES

# Terminology Related to Flooding

**NFIP** – National Flood Insurance Program

**SFHA** – Special Flood Hazard Area or the area flooded by a 100-year flood (1% annual chance) (this does not mean a flood that happens every 100 years!)

**BFE** – Base Flood Elevation, the height of the water of the 100-year flood

**Flood Zone** – The SFHA contains different areas (zones) that are defined by the type and/or elevation of the 100 yr flood

**Repetitive Loss** – An NFIP-insured structure that has had at least 2 paid flood losses of more than \$1,000 each in any 10-year period since 1978.

**Severe Repetitive Loss** – An NFIP-insured property that has 4 or more separate claims of >\$5,000 (including building and contents payments); or 2 or more separate claim payments (building payments only) where the total of the payments exceeds the current value of the property in any 10-year period since 1978

*(FMA expands on the definitions of RL & SRL – refer to FEMA NOFO)*

# FEMA FLOOD ZONE DESIGNATIONS

**Velocity (VE Zone)** – Highest risk ocean front areas where water is rushing and wave height is greater than 3 ft. during a flood

**Coastal A Zone** – Water is flowing with wave heights between 1.5 ft and 3 ft

**AE Zone** – lower hazard than Velocity but still subject to inundation by a 1%-annual-chance flood and has a known BFE

**AO Zone** – subject to shallow ponding (usually overwash in Hull)

**X Zones** – outside the areas inundated by the 1%-annual-chance flood; Shaded **X Zones** designate areas subject to inundation by the 0.2%-annual chance flood (also known as the 500-year flood)

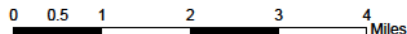
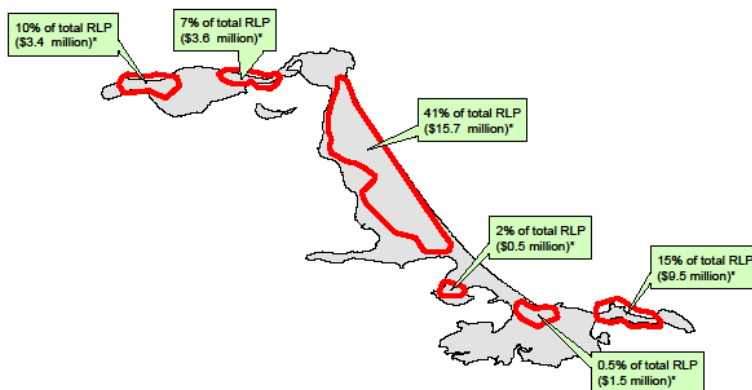
*FEMA Flood Map Service Center:*

<https://msc.fema.gov/portal/home>



# FEMA REQUIREMENTS

## TOWN OF HULL Areas of Concentrated Repetitive Loss Properties (RLP) 1978 - 2018



Data Sources: MassGIS, Hull Assessor, FEMA National Flood Insurance Program  
Created May 2021, C. Krahforst, Hull Community Rating System Coordinator

\*adjusted for inflation as 2020 dollars





# COMMUNITY RATING SYSTEM PARTICIPATION

- The Town of Hull is currently a Class 7 in the CRS program, earning its citizens a 15% discount on flood insurance premiums
- The Town of Hull has 1,830 flood insurance policies in force
- Some activities that the Town receives CRS credit for include:
  - Flood map information service to the community
  - Outreach, flood protection information
  - Open space preservation
  - Higher Regulator Standards (floodplain overlay district bylaw before ATM)
  - Flood data reporting
  - Stormwater management
  - Repetitive loss, drainage system maintenance



# COMMUNITY RATING SYSTEM PARTICIPATION

- CRS participation is necessary for access to the National Flood Insurance Program (NFIP)
- An approved and adopted local Hazard Mitigation Plan is required for CRS participation *and* for FEMA funds to elevate structures to above the Base Flood Elevation (BFE)