

Being a Floodplain Administrator

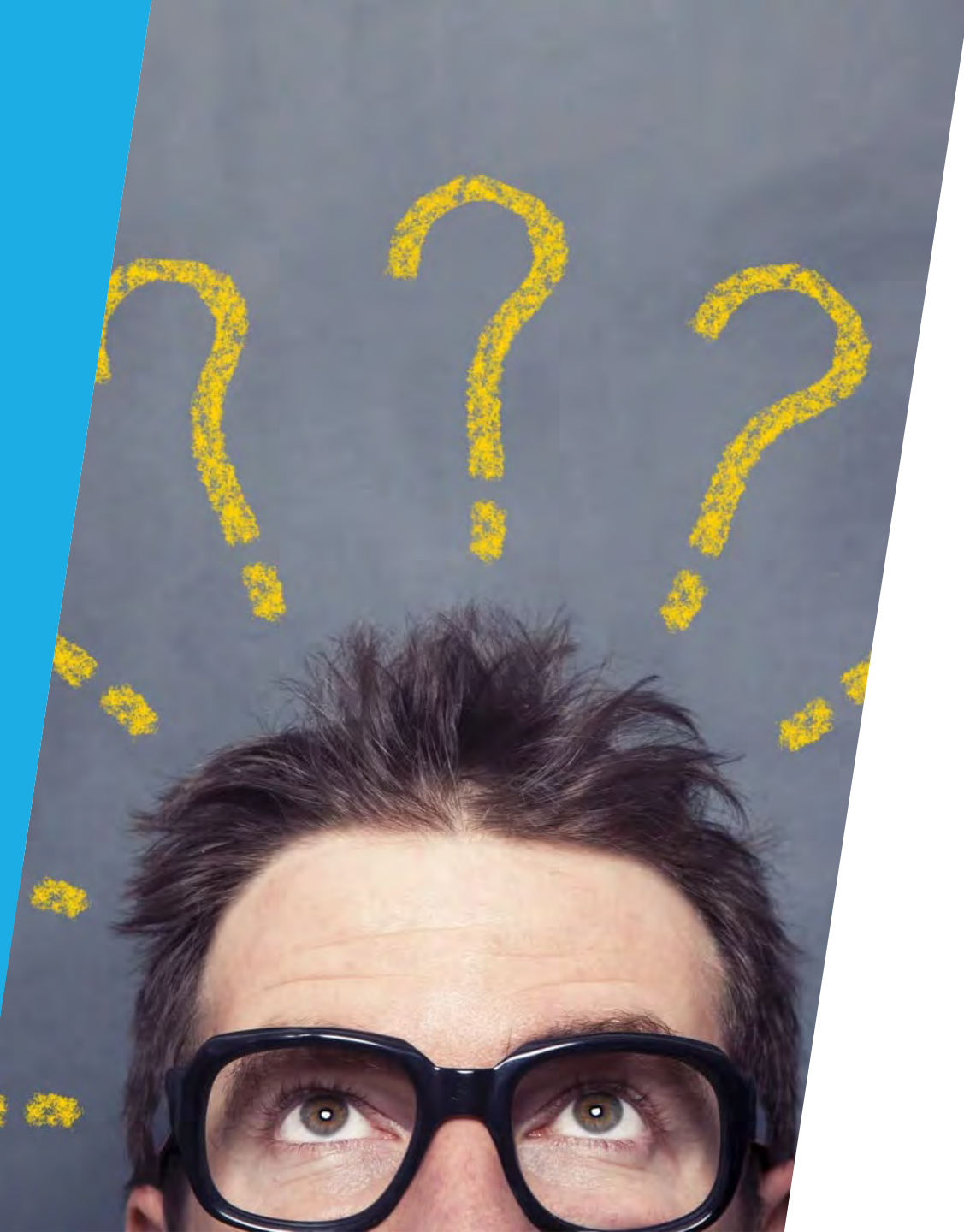
DCR's Flood Hazard Management Program



While we're waiting, please enter your name & community in the chat.
And if you are a CFM please note this if you want credit for the course.

This course

- ▶ Welcome!
- ▶ This course is primarily for new Floodplain Administrators (FPAs) and is a refresher for others.
- ▶ If you are already a Certified Floodplain Manager (CFM) you may receive 2 CECs from ASFPM as long as you attend the full 2 hours and answer every quiz question throughout the entire class.
- ▶ A link to the PDF of this slide deck will be placed in the chat before we begin. You may download this and use for your note-taking.
- ▶ You are welcome to put your questions in the chat- we will try to answer them as we go, and we'll also be available after the session for more conversation if desired. Our contact information will be offered at the end of the session.

A close-up photograph of a man with dark hair and black-rimmed glasses, looking upwards with a curious expression. The background is a dark grey chalkboard with three large, hand-drawn yellow question marks. The image is partially obscured by a white and blue geometric graphic on the right side of the slide.

Ask questions please

This class is interactive
throughout.

Class content

- ▶ Floodplain and the NFIP
- ▶ Who should be the community's FPA?
- ▶ FPA role as coordinator
- ▶ FEMA flood maps
- ▶ Local implementation of NFIP requirements
- ▶ Permitting & documentation
- ▶ Compliance & variances
- ▶ Letters of Map Revision
- ▶ Submitting technical data





Some acronyms

- ▶ FPA = Floodplain Administrator
- ▶ NFIP = National Flood Insurance Program
- ▶ FEMA = Federal Emergency Management Agency
- ▶ MSC = Map Service Center
- ▶ SFHA = Special Flood Hazard Area (1%-chance floodplain)
- ▶ WPA = Wetlands Protection Act (MA)
- ▶ LOMR = Letter of Map Revision

Flood Plain or Floodplain?

But NOT flood plane...



- ▶ Cambridge English Dictionary: an area of low, flat land near a river that often floods when the level of the river rises and flows over its sides
- ▶ MA Wetlands Protection Act does not define 'floodplain.'
- ▶ MA State Building Code uses this definition by reference (ASCE 24-14):
"Any land area, including watercourse, susceptible to partial or complete inundation by water from any source."
- ▶ 44CFR 59.1: Flood plain or flood-prone area means any land area susceptible to being inundated by water from any source
- ▶ FEMA defines the regulatory floodplain as the "Special Flood Hazard Area": Land in the floodplain subject to a 1% or greater chance of flooding in any given year; area delineated on the Flood Insurance Rate Map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE, or V1-30.



Quiz 1.

The Cambridge English Dictionary defines 'floodplain' as *an area of low, flat land near a river that often floods when the level of the river rises and flows over its sides.*

In a few general words, what kind of floodplain does this definition not include?



About the NFIP

- ▶ Enacted by Congress in 1968
- ▶ Most MA communities joined in the early 1970's by agreeing to implement the regulations through local enforcement.
- ▶ FEMA has the authority to enroll and suspend communities.
- ▶ Each state has a FEMA agreement to assist local communities in implementation.

Why an FPA?

- ▶ From Title 44 of the Code of Federal Regulations, section 59.22:

The community “shall legislatively...

- ▶ (1) Appoint or designate the agency or official with the responsibility, authority, and means to implement the commitments made in paragraph (a) of this section...



Who can be designated as the FPA?

- ▶ anyone with the responsibility, authority, and means to locally coordinate implementation of the NFIP
- ▶ someone who has at least a general concept of NFIP requirements
- ▶ no specifications regarding who can be your FPA as long as they are...

Someone with local authority
to coordinate floodplain management

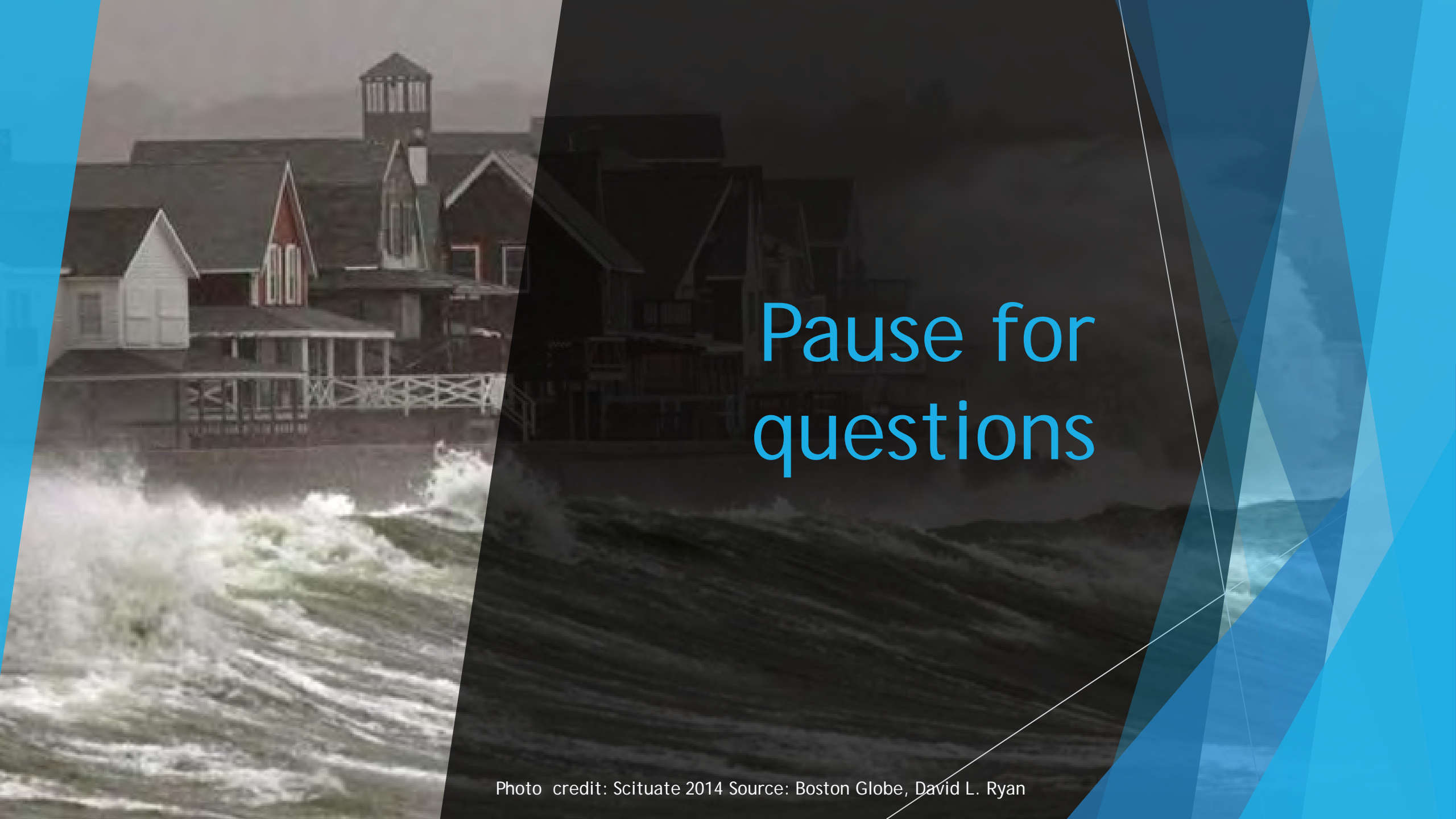




Quiz 2.

True or false:

A town planner cannot be a floodplain administrator.



Pause for questions

Photo credit: Scituate 2014 Source: Boston Globe, David L. Ryan

So... what
does the FPA
have to do?

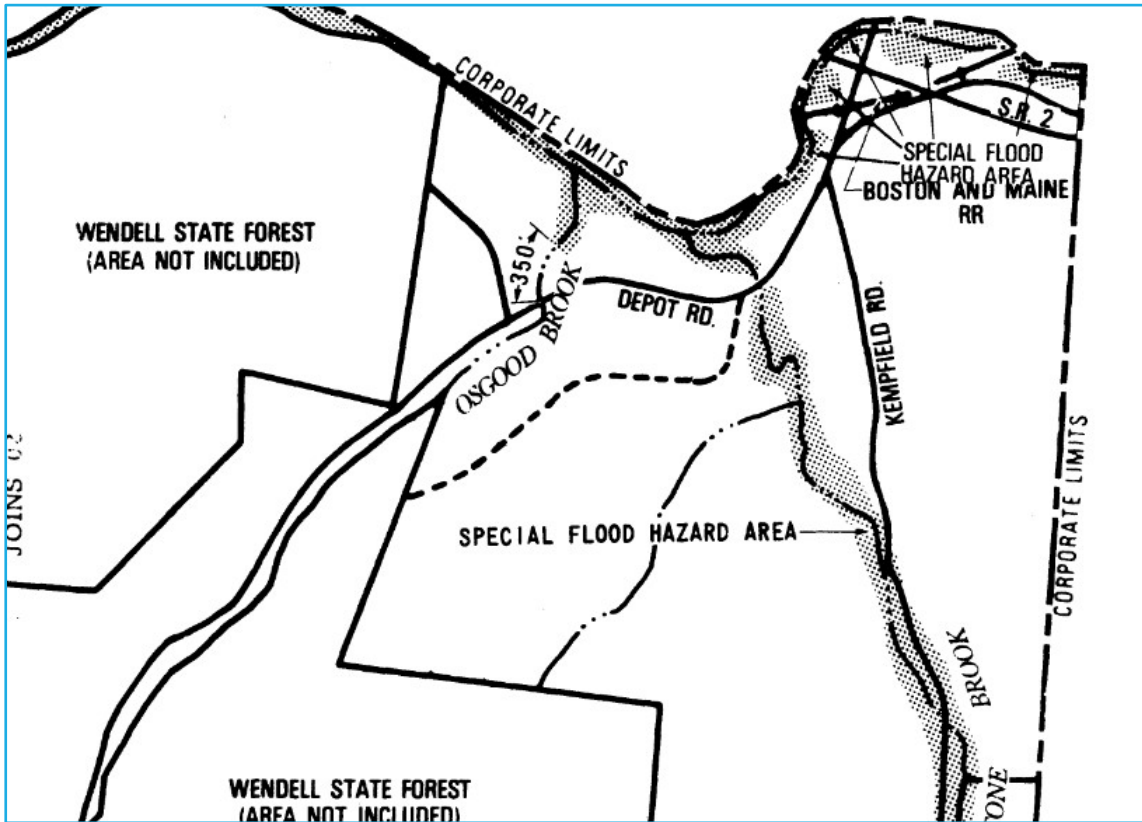




Make sure all the pieces are on the table...

- A. Referencing FEMA **flood maps**
 - B. Local **coordination** for best floodplain management practices
 - C. Locally enforceable **regulations** for floodplain development
 - D. **Compliance** & variances
 - E. **Permitting** & documentation
 - F. Letters of Map Revision
 - G. Submitting **technical data** to FEMA
- 

A. Referencing FEMA flood maps



- ▶ In local bylaws
- ▶ On behalf of the public
- ▶ For enforcement & compliance

Referencing FEMA flood maps in local bylaws

Already in your local bylaws

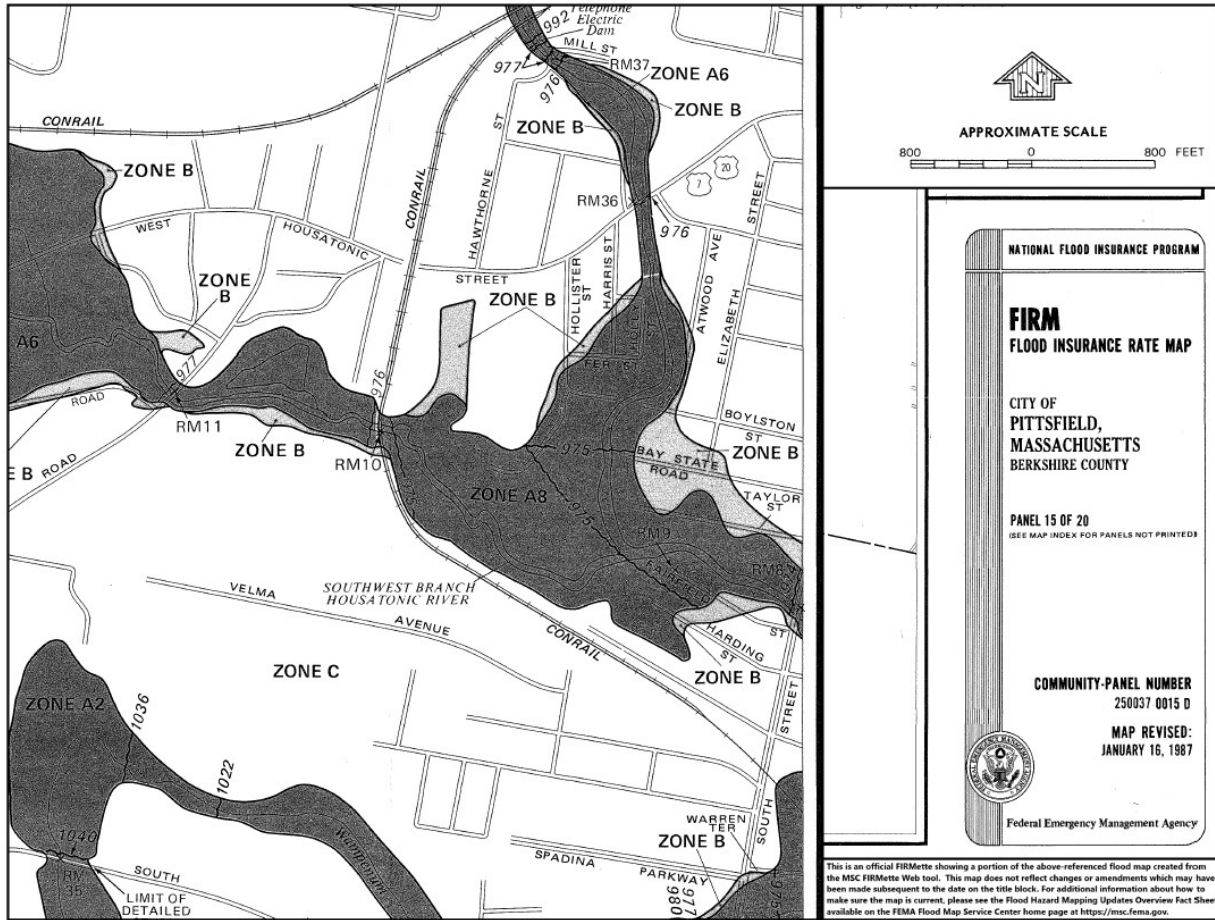
Looks something like this:

The Floodplain District is herein established as an overlay district. The District includes all special flood hazard areas within [Community Name] designated as Zone A, AE, AH, AO, A99, V, or VE on the [County Name] Flood Insurance Rate Map (FIRM) dated [FIRM date] issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The exact boundaries of the District shall be defined by the 1%-chance base flood elevations shown on the FIRM and further defined by the [County Name] Flood Insurance Study (FIS) report dated [FIS date]. The FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, Building Official, Conservation Commission and [other].

Referencing FEMA
flood maps on
behalf of your
public

FEMA no longer prints out maps for the community.
The FIRMs and other FEMA map products are available
here:

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



This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <https://msc.fema.gov>.

al Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A, A9, A99
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
 - OTHER AREAS OF FLOOD HAZARD**
 - 0.2% Annual Chance Flood Hazard. Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile. Zone X
 - Future conditions 1% Annual Chance Flood Hazard Zone X
 - Area with Reduced Flood Risk due to Levee. See Notes, Zone X
 - Area with Flood Risk due to Levee Zone D
 - OTHER AREAS**
 - NO SCREEN Area of Minimal Flood Hazard Zone X
 - Effective LOMRS
 - Area of undetermined Flood Hazard Zone D
 - GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
 - OTHER FEATURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
 - MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped
- The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/9/2023 at 8:53 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Basemap Imagery Source: USGS National Map 2023

Referencing FEMA flood maps for enforcement & compliance

State building code flood-resistant standards for development in the SFHA

Building department

Wetlands Protection Act for conservation commission approved activities in the BLSF or LSCSF

Conservation Commission/ Conservation Agent

Title V septic and sewer

Board of Health, Title V, 310 CMR 15

Pause for questions



2018 source: www.houzz.com. American Red Cross photo

Quiz 3.

True or false:

The community's designated FPA is all on their own to figure out floodplain management and FEMA maps.



B. Local coordination for best floodplain management practices

The NFIP definition of development means “any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials. [44CFR 59.1]

- ▶ Buildings and other structures
- ▶ Mining or dredging
- ▶ Filling
- ▶ Grading, paving
- ▶ Excavation or drilling
- ▶ Storage of equipment or materials





C. Locally enforceable regulations for floodplain development

- ▶ Local Zoning Regulations
 - ▶ Local Zoning Enforcement Officer
- ▶ State building code flood-resistant standards for development in the SFHA
 - ▶ Building department/ building official
- ▶ Wetlands Protection Act
 - ▶ Conservation Commission/ conservation agent
- ▶ Title V septic and sewer
 - ▶ Board of Health/ chairperson

An illustration on the left side of the slide shows two hands assembling puzzle pieces. One hand, wearing an orange sleeve, holds a green puzzle piece. The other hand, wearing a light blue sleeve, holds an orange puzzle piece. Several other puzzle pieces in blue, green, and orange are scattered in the background against a dark grey backdrop. The right side of the slide features a white background with blue geometric shapes at the bottom right.

Quiz 4.

An effective local FPA will coordinate with:

- a) The building official
- b) The conservation agent
- c) FEMA and the state
- d) All the above

Pause for questions

Houston, one month after Hurricane Harvey.
Photo credit: Chicago Tribune



E. Permitting

- ▶ Permit for building or conservation?
- ▶ Floodplain development permit?
- ▶ Other permits required (state or federal)? Such as:
 - ▶ MA DEP Chapter 91 for docks, seawalls, bridges, fill, dredging and more
 - ▶ EPA Clean Water Act for water quality/ stormwater impacts (NPDES)
 - ▶ US Army Corps Section 404 permit for dredging or filling

SECTION III : (Forms which may be required by the Floodplain Administrator)

ELEVATION CERTIFICATE

Attached - submit only if required to do so by the Floodplain Administrator

SECTION II: (To be completed by Floodplain Administrator)

FLOOD INFORMATION

1. The proposed development is located on FIRM map panel: _____ (number and suffix)


2. The date on the FIRM is _____

PROJECT INFORMATION

Project _____ Map No. _____ Parcel _____

Address _____ Subdivision _____

_____ Legal Description *(Attach to this document)*

 **CITY OF BEVERLY**
FLOODPLAIN DEVELOPMENT PERMIT APPLICATION FORM

OFFICE USE ONLY
Date Received: _____
File Number: _____

SECTION I: Applicant and Project Information

GENERAL INFORMATION

1. No work of any kind may begin in a floodplain area designated as A, AO, AH, AE, A99, VE or V until a floodplain development permit is issued.
2. The permit may be revoked if any false statements are made in this application.
3. If revoked, all work must cease until a permit is re-issued.
4. The development may not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within 6 months of the date of issue.
6. The permit will not be issued until any other necessary local, state or federal permits have been obtained.
7. By signing and submitting this application, the Applicant gives consent to the local Floodplain Administrator or his/her representative to make reasonable inspections prior to the issuance of a Certificate of Compliance.
8. By signing and submitting this application, the Applicant certifies that all statements contained in SECTION I of the application, and in any additional attachments submitted by the Applicant, are true and accurate.

OWNER INFORMATION

Property owner(s): _____ Mailing address: _____

Telephone number: _____ e-mail address: _____

Fax number: _____

Signature(s) of property owner(s) listed above¹ _____

¹Attach forms if there are additional property owners. This permit application will not be accepted without the signature of all property owners. The signature is an acknowledgement and consent to this floodplain development permit application.

APPLICANT INFORMATION

Applicant: _____ Notes: _____

Telephone number: _____

Fax number: _____

Signature of applicant listed above _____

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NO

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NAVD 88

structure: \$ _____
Project \$ _____

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E. Documentation

- ▶ What documentation is required?

Some examples include:

- ▶ As-built certification of finished elevation of new construction or Elevation Certificate for Finished Construction
- ▶ Notice of Intent
- ▶ Order of Condition(s) compliance
- ▶ Certification for engineered openings
- ▶ Dry-floodproofing certification for non-residential construction
- ▶ Documentation of substantial improvement or substantial damage (yes or no)
- ▶ V-zone foundation engineering certification



Quiz 5.

True or false:

If the building official denies a permit for floodplain development, the applicant can get a variance from the Conservation Commission.





Pause for questions

August 2017: In Wellfleet, which received between 6 and 7 inches of rain, the weather caused a car to fall into a sinkhole as the beach eroded away. Photo credit: David Curran for The Boston Globe

D. Compliance & variances

The same local officials listed in the previous slide are responsible for local compliance with the regulations.

- ▶ With minor exception, MA communities follow one of these 2 variance procedures:
 - ▶ For a variance to the state building code, applicants must file with the state Building Code Appeals Board.
 - ▶ For a variance to the local zoning code, the code itself contains information about the process. For a variance to local floodplain management requirements, the local code should contain something like this text:
 - ▶ *A variance from these floodplain bylaws must meet the requirements set out by State law and may only be granted if: 1) Good and sufficient cause and exceptional non-financial hardship exist; 2) the variance will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public; and 3) the variance is the minimum action necessary to afford relief.*

Quiz 6.

▶ True or False:

The variance process for building code permits and for local zoning is the same under the NFIP.






Pause for
questions

F. Letters of Map Change (LOMC)

- ▶ Letter of Map Amendment (LOMA)
- ▶ Letter of Map Revision (LOMR)
- ▶ Letter of Map Revision based on Fill (LOMR-F)
- ▶ Conditional Letter of Map Revision based on Fill (CLOMR-F)

Zoom out (Ctrl+Minus) Case No.: 22-01-0707A LOMA



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP AMENDMENT DETERMINATION DOCUMENT (REMOVAL)

LID MAP PANEL INFORMATION	LEGAL PROPERTY DESCRIPTION
OF FALL RIVER, BRISTOL COUNTY, MASSACHUSETTS NO.: 250055 05C0432F	Lot 9, as described in the Quit Claim Deed recorded as Document No. 201500019391, in Book 08833, Pages 200, 201, and 202, in the Office of the Register of Deeds, Bristol County, Massachusetts This determination is based on LiDAR topographic data showing the elevation of the subject. The elevation data that were used are not certified by a Licensed Land Surveyor or Professional Engineer, but they meet or exceed FEMA requirements. This determination is subject to change if more detailed data becomes available.
APPROXIMATE LATITUDE & LONGITUDE OF PROPERTY: 41.613676, -71.1415 SOURCE OF LAT & LONG: LOMA LOGIC	

DETERMINATION

SECTION	STREET	OUTCOME WHAT IS REMOVED FROM THE SFHA	FLOOD ZONE	1% ANNUAL CHANCE FLOOD ELEVATION (NAVD 88)	LOWEST ADJACENT GRADE ELEVATION (NAVD 88)
--	140 Sawdy Pond Road	Structure	X (unshaded)	--	139.0 feet

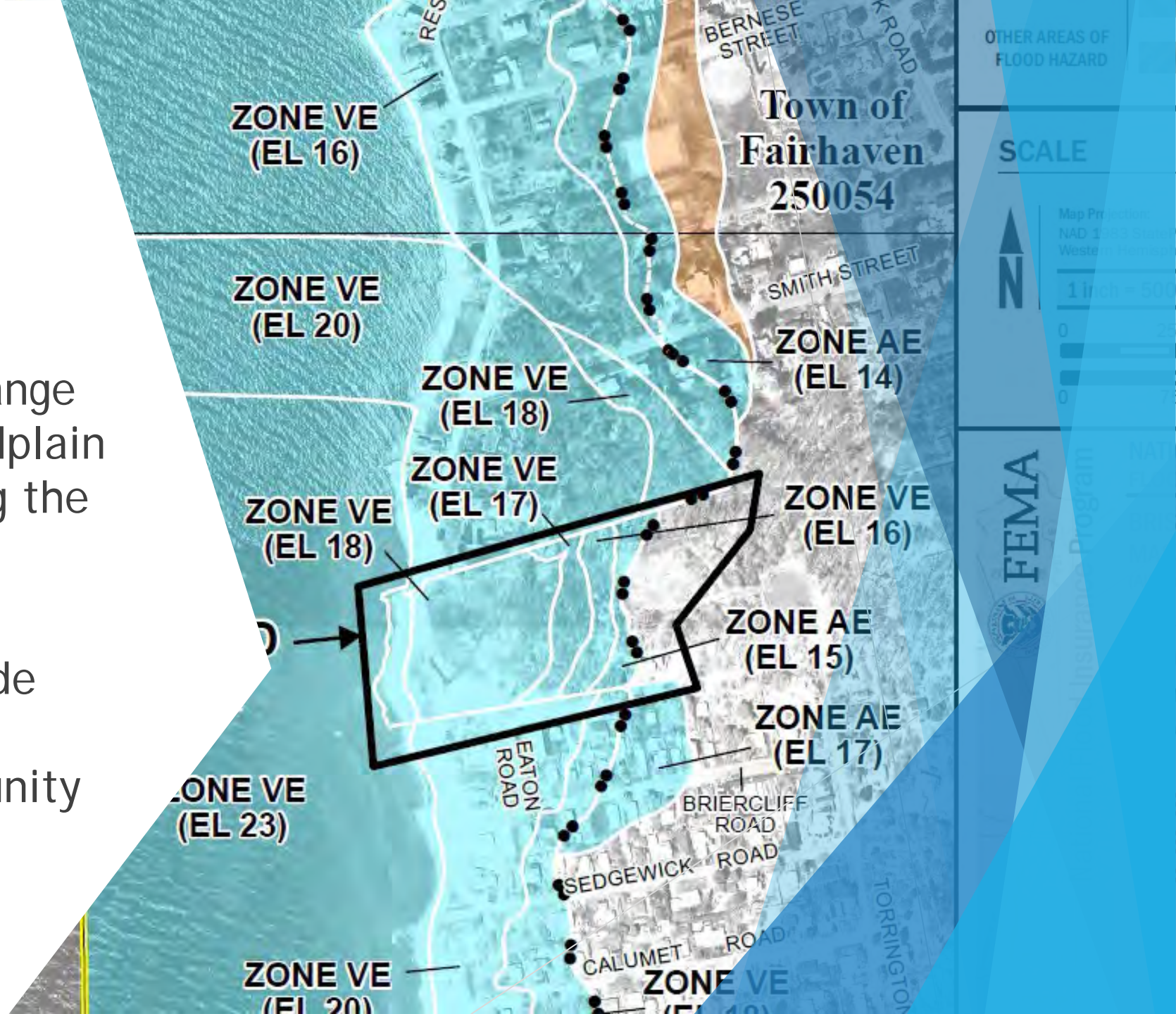
Hazard Area (SFHA) - The SFHA is an area that would be inundated by the flood having a 1-percent chance of being exceeded in any given year (base flood).

ADDITIONAL CONSIDERATIONS (Please refer to the appropriate section on Attachment 1 for the additional considerations.)

NO ADDITIONAL CONSIDERATIONS REMAIN IN THE SFHA

Letter of Map Revision

- ▶ Applicant proposes to change the FEMA 1%-chance floodplain by either raising/lowering the flood level or by extending/decreasing it
- ▶ The applicant must provide supporting engineering/technical data for community and FEMA review.



PAPERWORK BURDEN DISCLOSURE NOTICE

The estimated burden for this data collection is estimated to average 1.38 hours per response. The burden estimate includes the time for reviewing instructions, gathering data sources, gathering and maintaining the needed data, and completing and submitting the form. This collection is required to obtain or retain information. You are not required to respond to this collection of information unless a valid OMB control number is displayed on this form. Send comments regarding this collection of information, including suggestions for reducing this burden to: Information Collections Management, Department of Homeland Security, Federal Emergency Management Agency, 1800 South Bell Street, Arlington, VA 20598-3005, Paperwork Reduction Project (1660-0015). NOTE: Do not send your comments to this address.

This form must be completed for requests involving the existing or proposed placement of fill (complete Section A) *OR* to provide acknowledgment of this request to a property from the SFHA which was previously located within the regulatory floodway (complete Section B).

This form must be completed and signed by the official responsible for floodplain management in the community. **The six digit NFIP community number and the property address must appear in the spaces provided below. Incomplete submissions will result in processing delays.** Please refer to the MT-1 instructions for additional information about this form.

Community Number: _____ Property Name or Address: _____

REQUESTS INVOLVING THE PLACEMENT OF FILL

I, the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this Letter of Map Revision Based on Fill (LOMR-F) or Conditional LOMR-F request. Based upon the community's review, we find the completed or proposed project meets or is designed to meet all of the community floodplain management requirements, including the requirement that no fill be placed in the regulatory floodway, and that all necessary Federal, State, and local permits have been, or in the case of a Conditional LOMR-F, will be obtained. For Conditional LOMR-F requests, the applicant has or will document Endangered Species Act (ESA) compliance to FEMA prior to issuance of the Conditional LOMR-F determination. For LOMR-F requests, I acknowledge that compliance with Sections 9 and 10 of the ESA has been achieved independently of FEMA's process. Section 9 of the ESA prohibits anyone from "taking" or harming an endangered species. If an action might harm an endangered species, a permit is required from U.S. Fish and Wildlife Service or National Marine Fisheries Service under Section 10 of the ESA or actions authorized, funded, or being carried out by Federal or State agencies, documentation from the agency showing its compliance with Section 7(a)(2) of the ESA will be submitted. In addition, we have determined that the land and any existing or proposed structures to be removed from the SFHA are or will be reasonably safe from flooding as defined in 44CFR 65.2(c), and that we have available upon request by DHS-FEM analyses and documentation used to make this determination. For LOMR-F requests, we understand that this request is being forwarded to FEMA for a possible map revision.

Community Comments:

Community Official's Name and Title: *(Please Print or Type)* Telephone No.:

Community Name:	Community Official's Signature: (required)	Date:
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B. PROPERTY LOCATED WITHIN THE REGULATORY FLOODWAY

As the community official responsible for floodplain management, I hereby acknowledge that we have received and reviewed this request for LOMA. We understand that this request is being forwarded to DHS-FEMA to determine if this property has been inadvertently included in the regulatory floodway. We acknowledge that no fill on this property has been or will be placed within the designated regulatory floodway that the completed or proposed project meets or is designed to meet all of the community floodplain management requirements.

Community Comments:

Community Official's Name and Title: *(Please Print or Type)* Telephone No.:

Community Name:	Community Official's Signature (required):	Date:
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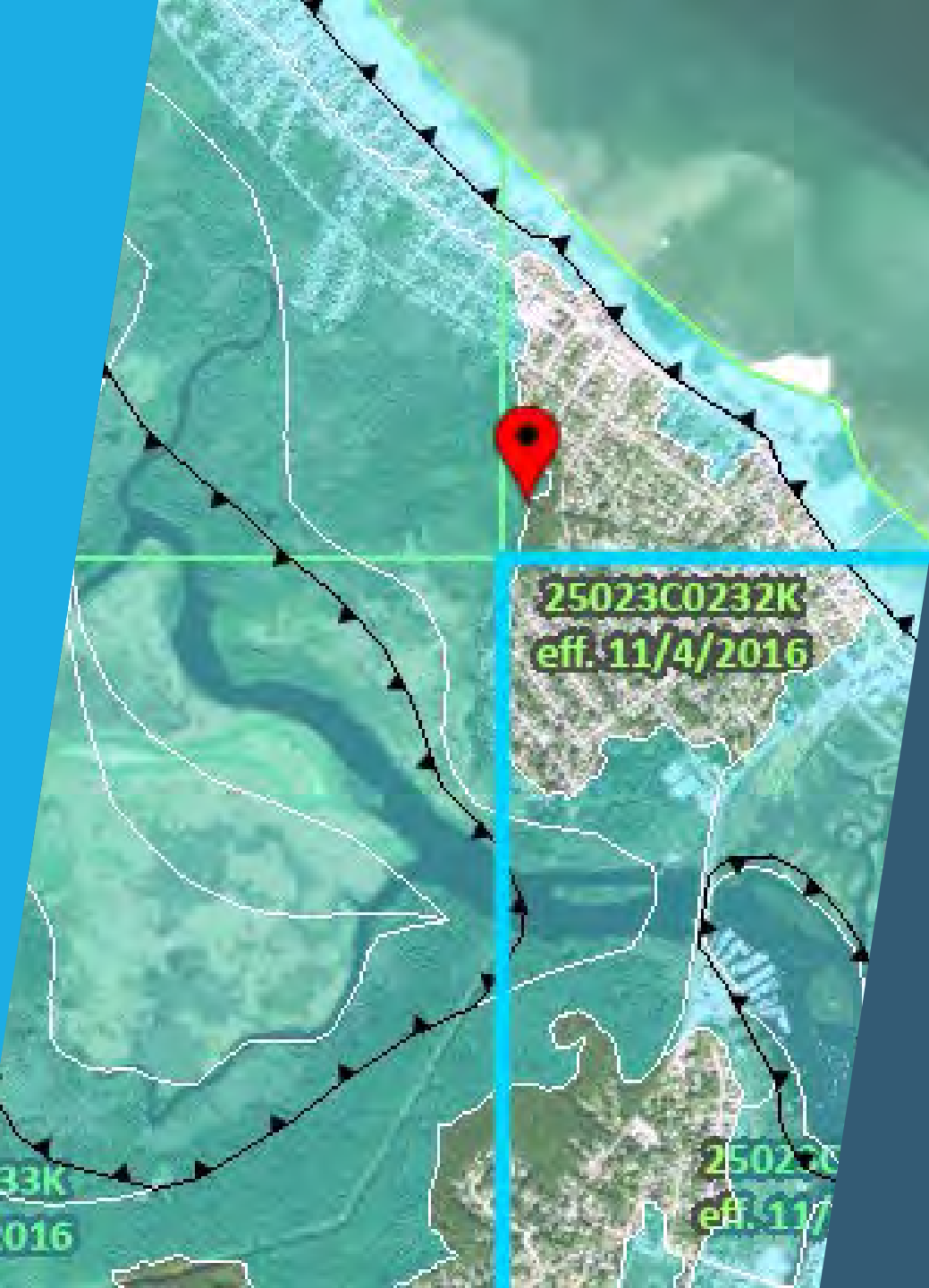
The Community Acknowledgment Form

- ▶ If fill or the regulatory floodway is involved, the community must approve or express concerns (regarding the request) over signature.
- ▶ Applicant then submits the request package (including community acknowledgment form and signature) to FEMA for ultimate approval before development activity begins.
- ▶ This is often a LOMR-F: Letter of Map Revision based upon Fill.
- ▶ Local Conservation Commission is typically involved.

Quiz 7.

Which of the following Letters of Map Change is not a FEMA LOMC process?

- a. Letter of Map Amendment
- b. Letter of Map Revision based on Fill
- c. Letter of Technical Data
- d. Conditional Letter of Map Revision based on Fill





G. Submitting technical data to FEMA

Water course alterations

- ▶ Adjacent Communities, especially upstream and downstream
- ▶ Bordering States, if affected
- ▶ State NFIP Coordinating office
- ▶ FEMA Regional offices

New technical data

- ▶ State NFIP Coordinating office
- ▶ FEMA Regional offices

Questions???

From MA MyCoast Storm Report: Reservation Terrace, Newburyport.
Substantial damage from 1/16- 1/17/22 nor'easter.
Erosion of foundation.



Quiz 8.

- ▶ The local Floodplain Administrator must be able to work effectively with many other community officials. Whom might this include?
 - a. DPW Director or Highway Superintendent
 - b. Building Official or Inspector
 - c. Conservation Agent
 - d. Planning Board
 - e. FEMA Regional staff
 - f. State NFIP staff
 - g. All of the above.





MA DCR Flood Hazard Management Program contacts

Eric Carlson, Floodplain Engineer

857-278-5062 or eric.carlson@mass.gov

Nadia Madden, Floodplain Specialist

857-287-1603 or
nadia.madden@mass.gov

Joy Duperault, CFM, State NFIP
Coordinator, Program Director

857-286-0326 or joy.duperault@mass.gov