

Being a Floodplain Administrator Slide Deck Content

DCR's Flood Hazard Management Program

Slide 1: Introduction

- While we're waiting, please enter your name & community in the chat.
- If you are a CFM (Certified Floodplain Manager), please note this for course credit.

Slide 2: DCR Flood Hazard Management Program

- We are the State Coordinating Office for the National Flood Insurance Program (NFIP).
- We provide:
 - Technical assistance on the NFIP (email, letter, phone, or site visits).
 - FEMA floodplain management materials and maps.
 - Updates to local floodplain regulations.
 - Training on FEMA maps, MA building codes, elevation certificates, and more.
 - Flood insurance questions and referrals.
 - Hazard mitigation project funding information.
- Contact our office at [Floodplain Management | Mass.gov](https://www.mass.gov/doc/dcr-fhmp-floodplain-management-training-calendar/download)

Slide 3: Floodplain Basics Training Series

- **Upcoming Trainings:** <https://www.mass.gov/doc/dcr-fhmp-floodplain-management-training-calendar/download>

Slide 4: Course Welcome & Logistics

- Primary audience: New Floodplain Administrators (FPAs).
- Credits: 1 CEC from ASFPM for CFMs; 1.5 CECs for MA Certified Building Officials.
- Attendance: Course is recorded, but credit requires live attendance and answering chat questions.
- Materials: A PDF of the slide deck is available for note-taking.
- Break: 5-minute break halfway through.

Slide 5: Interactive Session

- Please ask questions; this class is interactive throughout.

Slide 6: Class Content

- Floodplain and the NFIP.
- The role and designation of the FPA.
- FEMA flood maps and local implementation.
- Permitting, documentation, compliance, and variances.
- Letters of Map Revision and technical data submission.

Slide 7: Common 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.

Slide 8: Defining a Floodplain

- **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 WPA:** Does not define "floodplain".
- **MA State Building Code (ASCE 24-14):** 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 Regulatory Floodplain (SFHA):** 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.

Slide 9: Quiz 1

- **Q:** 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. What kind of floodplain does the Cambridge English Dictionary not include?
- **A:** Coastal Floodplains, Ponding or sheet flow areas, other non-riverine floodplains.

Slide 10: About the NFIP

- Enacted by Congress in 1968.
- Most MA communities joined in the early 1970s.
- FEMA makes the flood maps and has the authority to enroll or suspend communities.
- States have agreements, including local coordinating offices to assist local implementation.
- FEMA Publication 496: Joining the National Flood Insurance Program:
<https://frcog.org/wp-content/uploads/2021/03/FEMA-National-Flood-Insurance-Program.pdf>

Slide 11: Why an FPA?

- Per Title 44 CFR 59.22, communities must legislatively appoint an official with the responsibility, authority and means to implement NFIP commitments.

Slide 12: Who can be the FPA?

- Someone with local authority to coordinate floodplain management.
- Must have a general concept of NFIP requirements.
- No specific job title required as long as they have the local authority to coordinate floodplain management.

Slide 13: Quiz 2

- **Q:** True or False: A town planner cannot be a floodplain administrator.
- **A:** False.

Slide 14: Questions

- **Q:** How many hours a week does a local floodplain administrator need to work?

- **A:** This depends on how much development in a floodplain is happening. This varies considerably across the state. Some communities have no structural or non-structural development in floodplains, and many communities only review floodplain development a handful of times a year. On the other hand, some communities are processing permits for floodplain development every single week. On average, there are ~ 500 housing units sited in the floodplain per municipality across the state. The only community in MA with a full-time floodplain administrator is the City of Boston, which has over 12,000 housing units sited in a floodplain.

Slide 15-16: FPA Responsibilities

- Referencing FEMA flood maps.
- Local coordination for best practices.
- Enforcing regulations for floodplain development.
- Handling permitting, documentation, compliance, and variances.
- Signing Community Acknowledgement Forms on Letters of Map Revision
- Submitting watercourse alterations and other technical data to FEMA.

Slide 17-21: Referencing FEMA Maps

- Used in local bylaws, for public information, and enforcement & compliance.
- Maps accessed via FEMA's Map Service Center (MSC): msc.fema.gov.
- Users can search by address to find Flood Insurance Rate Maps (FIRMs) and FIRMettes.
- Review slides from our **Understanding FEMA Flood Maps** training for more information.

Slide 22: Public Access to Maps

- Communities should provide maps via libraries, building/planning departments, or links on the town website.
- Is there a physical place to go or a phone number where a resident can see and/or ask questions about the map?
- Can they print out a copy of their section of the map? (AKA FIRMette)
- Does the community have a link to the FEMA MSC on their website?

- Who would be assigned to help them? Could be the Building clerk, planning, or town clerk.

Slide 23: Enforcement & Compliance Coordination

- **Building Dept:** Building code flood-resistant standards.
- **Conservation Commission:** Wetlands Protection Act.
- **Zoning Enforcement:** Local Floodplain Zoning Regulations
- **Board of Health:** Title V septic and sewer.

Slide 24: Quiz 3

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

Slide 25: Questions on Floodplain Administrator

- **Q:** How do other communities handle the responsibilities of a floodplain administrator when no staff is designated?
- **A:** We recommend that you designate a floodplain administrator in your local floodplain regulations, and you will be required to do so by FEMA the next time you adopt updated flood maps. Check out the MA Model Floodplain Bylaw for a more detailed description of this regulation.

Slide 26: Defining "Development"

- 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]

- Who in your community handles each of these proposed development types in the floodplain?
 - Buildings/structures = building department/ building official
 - Mining/ dredging = Con Comm coordinates with DEP
 - Filling = Con Comm thru WPA
 - Grading/ paving = building dept./ Con Comm/ DPW/ planning (impervious surfaces)
 - Excavation/ drilling = depending upon size/ impact, community coordinates with state agencies beginning with DEP
 - Overview of equipment or materials storage = maybe DPW, Con Comm, town manager
- How do these different departments coordinate their work, especially as it relates to permitting? We recommend integrating your permitting processes so that nothing slips through the cracks.

Slide 27: Enforceable Regulations

- Floodplain District Zoning (Zoning Officer).
- Building Code (Building Official).
- Wetlands Protection Act (Conservation Agent).
- Title V (Board of Health).

Slide 28: Best Practices for FPAs

- Promote inter-departmental communication.
- Assist with online project tracking.
- Hold regular project review meetings.
- Coordinate with state and FEMA staff.

Slide 29: Quiz 4

- Q: An effective FPA coordinates with: a) Building official, b) Conservation agent, c) FEMA/State, d) All the above.

Slide 31: Permitting & Documentation

- Permit for building or conservation?
- Floodplain development permit?
- Identify if additional state/federal permits are needed, these are the most common:
 - 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

Slide 32: Permit Review

Review for completeness and correctness

- Is any key information missing?
- Are the surveyed plans signed and stamped?
- Location – is it in the SFHA, and are the floodplain boundaries on the plans accurate?

Review for compliance

- Structure – will it be built to flood codes, including elevation above BFE?
- Substantial Improvement/Substantial Damage
- Other development – are relevant performance standards being met?
- Engineering – be sure engineer reviews any relevant forms

Permit approval or denial

- Date determines start of construction for a building permit
- If denied, applicant can resubmit or apply for variance

Slide 33: Building Inspections (10th edition CMR 780)

110.2 Preliminary Inspection.

“Before issuing a permit, the building official is authorized to examine or cause to be examined buildings, structures, and sites for which an application has been filed” (10th edition CMR 780)

- Check floodplain and floodway boundaries
- Check setbacks, and encroachments (if applicable)
- If structure is staked, check that it matches permit plans

110.3.3 Lowest Floor Elevation.

“In flood hazard areas, upon placement of the lowest floor, including the basement, and prior to further vertical construction, the elevation certification required in section 1612.4 shall be submitted to the building official.” (10th edition CMR 780)

- Check that as-builts have elevations correctly documented and that they meet building code standards - easier to correct now than once the whole building is complete.
- Check that fill meets compaction, slope and protection standard
- Check # and size of crawlspace/enclosure openings
- Check whether project work encroaches on floodway
- V-zones need as-built foundation certification.

110.3.10.1 Flood hazard documentation

“If located in a flood hazard area, documentation of the elevation of the lowest floor as required in section 1612.4 shall be submitted to the building official prior to the final inspection.” (10th edition CMR 780)

- Get elevation or floodproofing certificates, if applicable
- Final check to see that as-builts have elevations correctly documented and that they meet building code standards.
- Ensure nothing below lowest floor will be subject to flood damage
- Confirm compliance with permit/previous inspections.

Slide 34: Required Documentation

- **Building:** As-built plans, Elevation Certificates, V-zone certifications, and flood opening certifications, dry floodproofing certificate for non-residential construction, and documentation of substantial improvement/substantial damage determinations.

- **Conservation:** RDA/DOA, Notices of Intent and Orders of Conditions, and Certificates of Compliance.
- **Local Ordinance:** No-Rise Certifications and Variance documentation.

Slide 35: Quiz 5

- **Q:** True or False: If a permit is denied by the building official, the applicant can get a variance from the Zoning Board of Appeals.
- **A:** False. The applicant would need to go to the MA Building Code Appeals Board for a variance.

Slide 37: Compliance & Variances

Building code variances go to the State Building Code Appeals Board.

- The documentation to be kept in the community is found in the compliant local bylaw and includes:
 - *The Town/City will request from the State Building Code Appeals Board a written and/or audible copy of the portion of the hearing related to the variance and will maintain this record in the community's files.*
 - *The Town/City shall also issue a letter to the property owner regarding potential impacts to the annual premiums for the flood insurance policy covering that property, in writing over the signature of a community official that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property.*
 - *Such notification shall be maintained with the record of all variance actions for the referenced development in the floodplain overlay district.*
- Variances to the state building code should be documented in the building official's permit file, along with the original permit denial by the local official.

Local zoning variances follow the local process outlined in local regulations.

- Recommended local bylaw language for NFIP compliance:
 - *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; 3) and the variance is the minimum action necessary to afford relief.

- Variances to the local floodplain regulations should also be documented and kept in the appropriate files.

Slide 38: Quiz 6

- **Q:** True or False: The variance process for building code and local zoning is the same under the NFIP.
- **A:** False. These are different processes with different forms of regulation.

Slide 40-41: Letters of Map Change (LOMC)

- **LOMA:** Letter of Map Amendment. A property owner can file a LOMA online, submitting whatever documentation is required for that type of map determination. This does not change the maps, but is a record of where FEMA has officially determined if a property or a structure is in or out of a flood zone.
- **LOMR:** Letter of Map Revision (requires technical data). When someone is proposing floodplain development that will cause a physical revision to the existing FEMA flood map through a Letter of Map Revision, they must get a signature on the Community Acknowledgement Form from the community to do this. This is so the community is made aware of the proposed change and can approve or submit concerns about any impacts to flood risk to FEMA.
- **LOMR-F:** LOMR based on fill (also requires Community Acknowledgment Form).
- **CLOMR-F:** Conditional LOMR-F. These are issued for a proposed project and should be followed by a LOMR-F after the fill is completed.

Slide 42: Community Acknowledgement 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 acknowledgement 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.

- Some things to remember: Any proposal that causes an increase in flooding (either on the property, to adjacent lands, or in upstream or downstream communities) is not allowed in Massachusetts under the WPA.
- And if someone is developing in the regulatory **floodway** (as shown on the FEMA map), they are required to present a hydrologic and hydraulic analysis to show that there will be no rise at all in the flood elevation.
- The state NFIP coordinating office (DCR's Flood Hazard Management Program) has a brief training on the use of the Community Acknowledgement Form and is available to help you through it as needed.

Slide 43: Quiz 7

Q: Which is not a FEMA LOMC? a) LOMA, b) LOMR-F, c) Letter of Technical Data, d) CLOMR-F.

A: c) Letter of Technical Data

Slide 44: Submitting Technical Data

- Watercourse alterations require notification of adjacent communities, bordering states, the State NFIP Coordinating Office, and FEMA.
- New technical data should be sent to the State NFIP Coordinating Office and FEMA.

Slide 46: Quiz 8

- **Q:** Whom should an FPA work with? (DPW, Building Official, Conservation, Planning Board, FEMA, State staff) .
- **A:** All of the above

Slide 50: Free Training Resources

- FEMA <https://www.fema.gov/floodplain-management/training>
- American Society of Floodplain Managers (ASFPM) <https://www.floods.org/training-center/>
- Community Ratings System (CRS) <https://crsresources.org/>

Slide 51: DCR Flood Hazard Management Program Office

Our website and contact information: [Floodplain Management | Mass.gov](#)