

Partial Implementation of the Federal Flood Risk Management Standard for Public Assistance

July 2022 Stakeholder Webinar



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Partial Implementation of the Federal Flood Risk Management Standard (FFRMS)

The Federal Flood Risk Management Standard (FFRMS), EO 13690, aims to improve the resilience of communities and federal assets against the impacts of flooding.

- **Outcome:** To increase community resilience to flooding events by requiring a higher vertical elevation standard for substantially damaged/improved/new construction of structures in the floodplain.
- **Details:** Agency will go through the regulatory process to fully implement the FFRMS. FEMA Public Assistance has issued a policy to partially implement FFRMS in the short-term. The policy:
 - Applies to substantially damaged/improved/new construction of structures in the floodplain.
 - Sets an elevation requirement for both critical and non-critical actions.



Partial Implementation

This policy partially implements the Federal Flood Risk Management Standard (FFRMS) under the authority of Section 406(e)(1)(A) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121 *et seq* (Stafford Act). The FFRMS is a flood standard, established in Executive Order (EO) 13690, to increase community resilience to flooding. EO 14030 requires FEMA to implement the FFRMS.

While full FFRMS implementation will expand floodplain management to a higher vertical flood elevation and corresponding horizontal floodplain, this partial implementation only applies a vertical elevation requirement for structures in the floodplain.

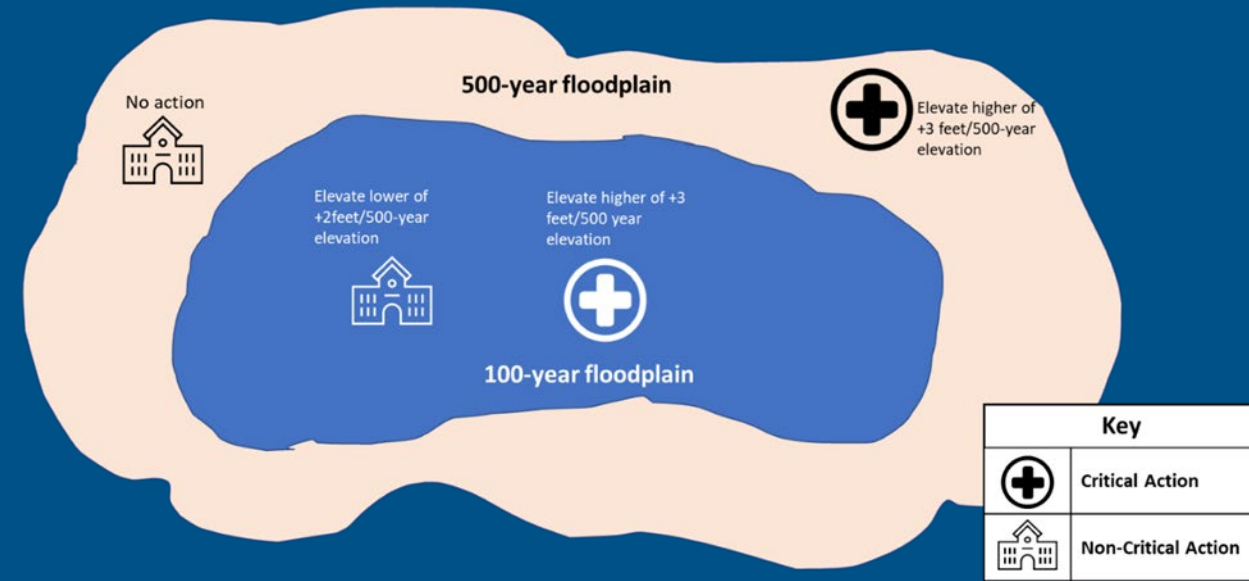
What is FFRMS?

This policy ensures consideration of current and future flood risk by elevating or floodproofing structures beyond current minimum standards, which are based on the 1% and 0.2% floodplain elevations.

The elevation or floodproofing requirements of the PA FFRMS interim policy apply if those structures:

- Are within floodplains (1% or 0.2%)
- Have been substantially damaged, will undergo work that constitutes substantial improvement, or are newly constructed
- Are eligible for FEMA Public Assistance

FEMA PA provides funding to applicants to elevate or floodproof applicable structures to meet the requirements of this policy.



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What is a critical action?

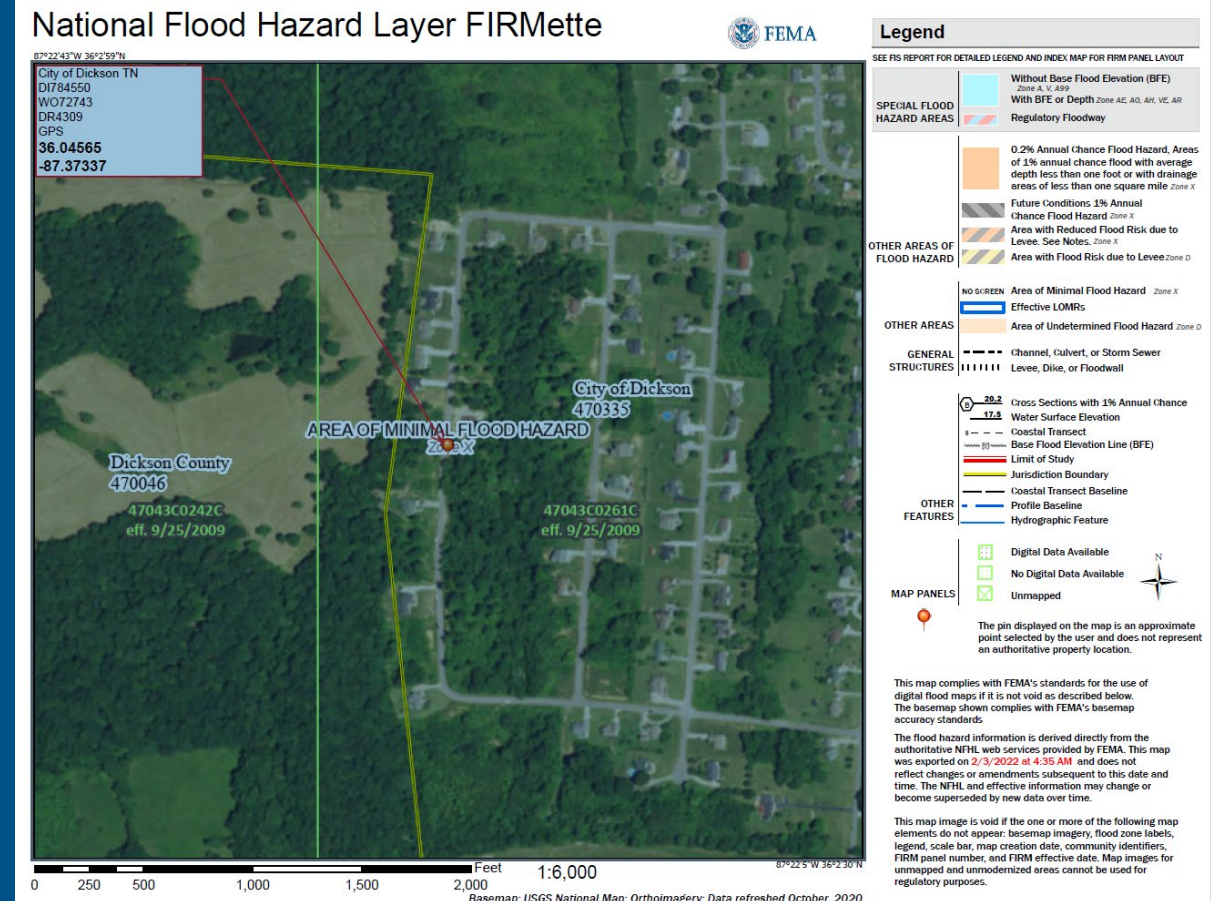
- A critical action is an activity or action for which even a slight chance of flooding is too great.
- Examples of critical actions include:
 - Structures that store highly volatile, flammable, explosive, toxic or water reactive materials;
 - Hospitals and nursing homes, and housing for the elderly;
 - Emergency operation centers or data storage centers;
 - Power generating plants and other principal points of utility lines.



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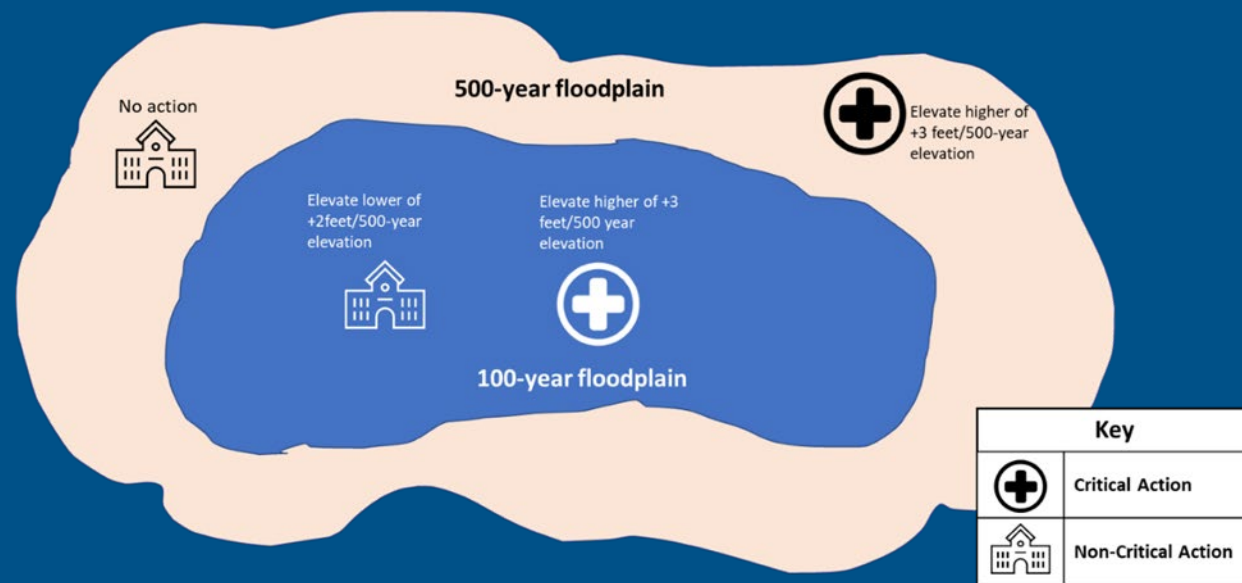
Where do we find flood information?

- Flood Insurance Rate Maps (FIRMs) or Flood Insurance Studies (FIS);
- Best available information beyond the effective FIRM must be used if it is available and more restrictive. This information may be found on preliminary FIRMs or on advisory flood hazard information.



What are the requirements for critical actions?

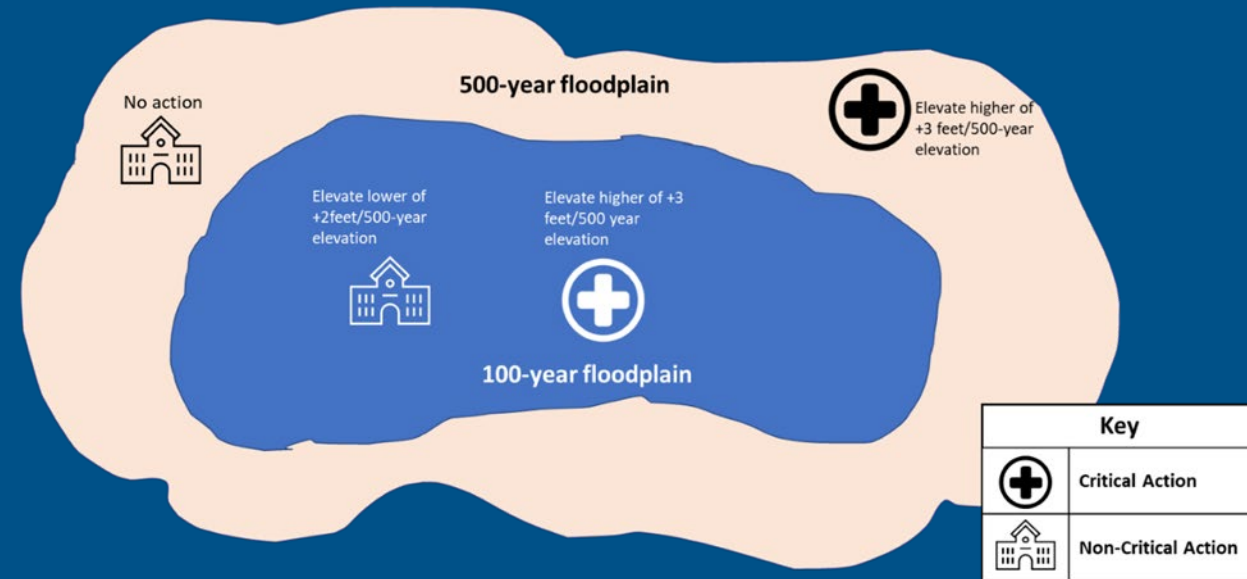
For critical actions involving structures with substantial damage, substantial improvement, or new construction in the 100 or 500-year floodplain, applicants must elevate or floodproof the structures to the 500-year flood elevation or to 3-feet above the base flood elevation (BFE), whichever is higher.



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What are the requirements for non-critical actions?

- For non-critical actions within the 100-year floodplain, Applicants must elevate or floodproof the structures to the 500-year flood elevation or to 2 feet above the BFE, whichever is **lower**.
- For non-critical actions within the 500-year floodplain, no action is required.



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An aerial photograph of a coastal town, likely in New England, featuring a harbor filled with numerous sailboats. The town is built on a hillside, with a prominent church steeple visible on the right. The entire image is overlaid with a semi-transparent blue filter. The text "Maximizing PA Mitigation" is centered in white.

Maximizing PA Mitigation

Saving Lives and Financial Resources

FEMA's Resilience Initiative

Table 1: Benefit-Cost Ratio by Hazard and Mitigation Measure.

	ADOPT CODE	ABOVE CODE	BUILDING RETROFIT	LIFELINE RETROFIT	FEDERAL GRANTS
Overall Benefit-Cost Ratio	11:1	4:1	4:1	4:1	6:1
Cost (\$ billion)	\$1/year	\$4/year	\$520	\$0.6	\$27
Benefit (\$ billion)	\$13/year	\$16/year	\$2200	\$2.5	\$160
 Riverine Flood	6:1	5:1	6:1	8:1	7:1
 Hurricane Surge	not applicable	7:1	not applicable	not applicable	not applicable
 Wind	10:1	5:1	6:1	7:1	5:1
 Earthquake	12:1	4:1	13:1	3:1	3:1
 Wildland-Urban Interface Fire	not applicable	4:1	2:1	not applicable	3:1

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-National Institute of Building Sciences Natural Hazard Mitigation Saves 2019 Report

Maximize Public Assistance Mitigation

- Currently there is a limitation for PA mitigation on replacement facilities unless:
 - The measure is in Appendix J (pre-determined to be cost-effective up to 100% of the project cost);
 - The Applicant is utilizing the Alternative Procedures Pilot Program, or
 - The Recipient or Applicant demonstrates cost-effectiveness by performing benefit-cost analysis independently.
- FEMA is planning to remove the limitation to allow funding for mitigation measures for any replacement facility



Expand List of Cost-Effective Measures (Appendix J)

- Appendix J of the Public Assistance Program and Policy Guide (PAPPG) includes a list of measures pre-determined to be cost-effective up to 100% of the project cost.
 - Incorporate some of the measures pre-determined to be cost-effective under the Hazard Mitigation Grant Program
 - Identify additional common hazard mitigation measures that are cost-effective but not currently listed in Appendix J





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