

# FEMA Policy: Federal Flood Risk Management Standard (FFRMS)

## FEMA Policy 206-24-005

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### BACKGROUND

This policy facilitates implementation of the Federal Flood Risk Management Standard (FFRMS) as part of FEMA's responsibilities to provide leadership in floodplain management and bolster the resilience of communities and federal assets against the impacts of flooding, interpreting and implementing the requirements included at 44 Code of Federal Regulations (CFR) Part 9.<sup>1</sup> This policy incorporates requirements of Executive Order (EO) 11988, *Floodplain Management*, as amended.<sup>2</sup> This policy reflects the updates made to the agency's 8-step decision-making process<sup>3</sup> in 44 CFR Part 9 for carrying out the directives of EO 11988, as amended, consistent with the agency's authorities pursuant to the National Flood Insurance Act, the National Environmental Policy Act, the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), and other agency statutory and regulatory authorities.<sup>4</sup>

The National Flood Insurance Act of 1968 [42 U.S.C. § 4001 et seq.] calls for a "unified national program for flood plain management" and as such, any application of EO 11988, as amended, must not result in a standard lower than any standard established for the National Flood Insurance Program (NFIP).

### PURPOSE

This policy provides greater detail on applicability, processes, resources, and responsibilities for implementing the FFRMS as part of the 8-step decision making process established in 44 CFR Part 9.

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<sup>1</sup> See the complete regulations at <https://www.ecfr.gov/current/title-44/chapter-I/subchapter-A/part-9>.

<sup>2</sup> EO 11988 requires Federal agencies to evaluate and minimize potential effects of their actions on floodplains and to consider and minimize flood hazards.

<sup>3</sup> See 44 CFR § 9.6 for further information on the 8-step decision-making process.

<sup>4</sup> FEMA will provide adequate funding to comply with the requirements of this policy subject to program eligibility criteria and considerations. See FEMA Instruction 108-1-1, *Instruction on Implementation of the Environmental Planning and Historic Preservation Responsibilities and Program Requirements*, Section 2.3.C, [https://www.fema.gov/sites/default/files/2020-07/fema\\_ehp\\_instructions\\_implementation\\_2018.pdf](https://www.fema.gov/sites/default/files/2020-07/fema_ehp_instructions_implementation_2018.pdf).

## PRINCIPLES

- A. Reduce vulnerability to loss of life and property caused by flooding.
- B. Avoid, to the extent possible, the long- and short-term adverse impacts associated with occupancy and modification of floodplains and avoid direct or indirect support of floodplain development wherever there is a practicable alternative.
- C. Improve resilience of FEMA-funded actions against current and future flood risk to ensure they serve their purpose for as long as intended.
- D. Rely on best available<sup>5</sup> information to inform agency decision making, including information on current and future flood risk and actionable climate science information, where available.

## REQUIREMENTS

### A. APPLICABILITY

1. **Effective Date:** This policy is effective September 9, 2024. For disaster-related programs (e.g., Public Assistance, Individual Assistance, Hazard Mitigation Grant Program), this policy applies to disasters declared on or after the effective date of the policy. For non-disaster grant programs, this policy is applicable to notices of funding opportunity published on or after the effective date of the policy. See Appendix A for a copy of the 44 CFR part 9 regulations applicable prior to the effective date of this policy.
2. **Applicability:** The Natural Features and Nature-Based Solutions requirements of this policy apply to all Actions subject to the full 8-step decision-making process. The remainder of the policy applies to all structure elevation, mitigation reconstruction, and dry floodproofing actions under FEMA's Hazard Mitigation Assistance programs and all Actions Subject to the FFRMS. "Actions Subject to the FFRMS" is defined as actions where FEMA funds are used for new construction, substantial improvement, or to address substantial damage<sup>6</sup> to a structure or facility.
3. **Supersession:** This policy supersedes FEMA Policy 104-22-0003: *Partial Implementation of the Federal Flood Risk Management Standard for Public Assistance (Interim)*, and FEMA Policy 206-21-003-0001: *Partial Implementation of the Federal Flood Risk Management Standard for Hazard Mitigation Assistance Programs*.

### B. FFRMS EXCEPTIONS AND 8-STEP PROCESS EXEMPTIONS

Outcome: Explain exceptions to use of the FFRMS and how those exceptions relate to existing emergency action exemptions.

1. **8-Step Process Exemption:** While FFRMS provides an exception for emergency actions, FEMA has an existing exemption for such activities. Assistance provided for emergency work essential to save lives and protect

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<sup>5</sup> See "Guidelines for Implementing Executive Order 11998, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input," 80 FR 64008 (Oct. 22, 2015) ("Best available" refers to information that is "transparent, technically credible, usable, and legitimate.")

<sup>6</sup> Substantial improvement includes work to address substantial damage to a structure or facility. See definition of "substantial improvement" below.

property, public health, and safety performed pursuant to Stafford Act sections 403 and 502 is exempt from the 8-step process and not subject to the FFRMS.<sup>7</sup>

2. **FFRMS Exceptions:** FEMA may provide an exception from the FFRMS in the following circumstances: (1) where it is in the interest of national security; (2) where it is an emergency action; or (3) where the agency action is a mission-critical requirement related to a national security interest or an emergency action.<sup>8</sup>
3. For actions subject to a FFRMS exception, but not exempt from the 8-step process, the applicable flood elevation and corresponding floodplain are the 1% annual chance (AC) flood elevation and 1% AC floodplain for non-critical actions and 0.2% AC flood elevation and 0.2% AC floodplain for critical actions.

### C. DETERMINATION OF THE FFRMS FLOODPLAIN<sup>9</sup>

Outcome: Explain how FEMA determines the appropriate vertical flood elevation and corresponding horizontal FFRMS floodplain under this policy.

1. FFRMS flood elevations and corresponding FFRMS floodplains are determined using one of the three different approaches described below:
  - a. **Climate-Informed Science Approach (CISA):** The elevation and corresponding horizontal floodplain that result from using the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science.<sup>10</sup>
  - b. **Freeboard Value Approach (FVA):** The elevation and corresponding horizontal floodplain that result from using the freeboard value, reached by adding 2 feet to the base flood elevation (BFE)<sup>11</sup> for non-critical actions<sup>12</sup> (+2' FVA) and from adding 3 feet to the BFE for critical actions (+3' FVA).
  - c. **0.2-Percent-Annual-Chance Flood Approach (0.2PFA):** The area subject to flooding by the 0.2% AC flood.
2. FEMA will determine the FFRMS flood elevation and corresponding FFRMS floodplain according to CISA for all locations where the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science exist. When using CISA, for non-critical actions the FFRMS floodplain will be at least as restrictive as the 1% AC flood elevation and corresponding horizontal floodplain, and for critical actions the FFRMS floodplain will be at least as restrictive as the 0.2% AC flood elevation and corresponding horizontal floodplain.
3. For locations where CISA is not available and actionable, FEMA will determine the FFRMS elevation and FFRMS floodplain according to the approaches described below.

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<sup>7</sup> 44 CFR § 9.5(c)(1).

<sup>8</sup> 44 CFR § 9.7(c)(1)(iii); EO 11988, as amended, Sec. 6(c)(2)

<sup>9</sup> For purposes of compliance with FFRMS, floodplains include both a vertical extent (flood elevation) and a horizontal extent.

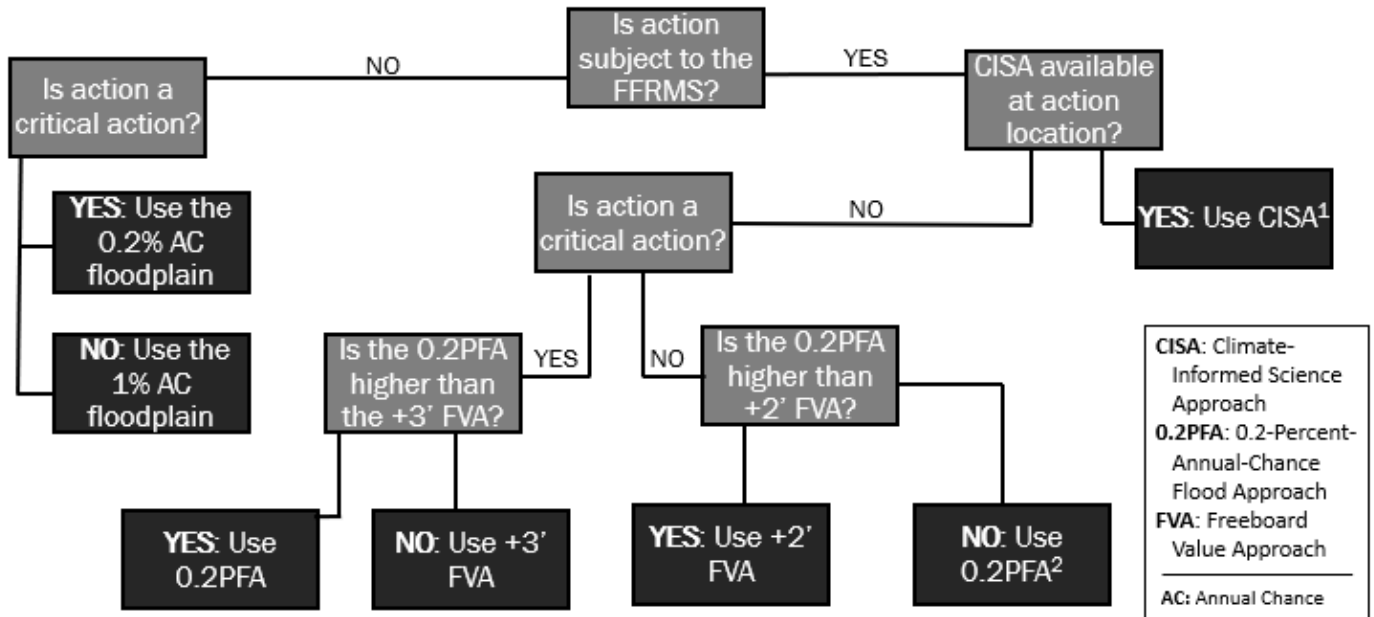
<sup>10</sup> CISA instructions and resources are included in Appendix H of the *Guidelines for Implementing EO 11988 and EO 13690*, October 2015. [https://www.fema.gov/sites/default/files/documents/fema\\_IGA-appendices-a-h\\_10082015.pdf](https://www.fema.gov/sites/default/files/documents/fema_IGA-appendices-a-h_10082015.pdf). The federal government may periodically publish new CISA resources to support determining the CISA FFRMS floodplain.

<sup>11</sup> As used in this policy, "base flood elevation" and 1% AC flood elevation are synonymous.

<sup>12</sup> Non-critical action means any activity that does not meet the definition of critical action (see Definitions below).

- a. **For non-critical actions:** The FFRMS floodplain is the area that would be inundated by the lower of the 0.2% AC flood or +2' FVA.<sup>13</sup>
  - b. **For critical actions:** The FFRMS floodplain is the area that would be inundated by the higher of the 0.2% AC flood or +3' FVA. For locations where information about the elevation and/or extent of the 0.2% AC floodplain is not available, the FFRMS floodplain is the +3' FVA.
4. FEMA may not take an action if it is inconsistent with the criteria of the NFIP or any more restrictive federal, state, or local floodplain management standards or building code.<sup>14</sup>

**Determining the Appropriate Floodplain for the 8-Step Process**



<sup>1</sup> When using CISA, the floodplain must be at least as restrictive as:

- For non-critical actions, the 1% AC floodplain
- For critical actions, the 0.2% AC floodplain

<sup>2</sup> In coastal areas, if 0.2% AC flood elevations do not account for wave action, the appropriate FVA must be used.

**Figure 1:** Determining the Appropriate Floodplain for the 8-Step Process

**D. FFRMS FLOODPLAIN DETERMINATION AND BEST AVAILABLE INFORMATION**

Outcome: The applicable floodplain for an action is determined by consulting the following sources of flood hazard information.

1. In determining the applicable floodplain, FEMA follows the processes outlined in 44 CFR § 9.7 and in FEMA Policy 104-008-2: *Guidance on the Use of Available Flood Hazard Information*. FEMA will rely on

<sup>13</sup> In coastal areas Flood Insurance Rate Maps (FIRMs) and Flood Insurance Studies (FISs) provide 1% AC flood elevations that account for the effects of wave action. However, 0.2% AC flood elevations are generally stillwater elevations that do not account for the effects of wave action. In coastal areas, if the 0.2% AC flood elevation does not account for the effects of wave action, the FVA flood elevation must be used.

<sup>14</sup> 44 CFR § 9.11(d)(6).

the best available information to determine whether an action is inside or outside of the applicable floodplain and to determine appropriate minimization requirements. The best available information may include information that is non-regulatory or FEMA preliminary flood hazard data. To be designated as the best available information, it must be at least as restrictive as information provided by effective FIRMs.

2. FEMA is coordinating across the federal government to develop tools to assist agencies and stakeholders in determining the appropriate vertical flood elevation and corresponding horizontal FFRMS floodplain. FEMA will rely on these tools, such as the FFRMS Floodplain Determination Job Aid,<sup>15</sup> as the best available information to determine CISA flood elevations and corresponding horizontal floodplains.

## E. SUBSTANTIAL IMPROVEMENT, SUBSTANTIAL DAMAGE, AND NEW CONSTRUCTION

Outcome: Explain definitions, requirements, and procedures related to determinations of new construction, substantial improvement (SI), and substantial damage (SD) for compliance with the FFRMS. FEMA will follow the process below to identify actions that may receive substantial damage or substantial improvement determinations.

1. For purposes of application of 44 CFR Part 9 and this policy, substantial improvement includes repair to structures and facilities that have been substantially damaged.
2. To assist in identifying Actions Subject to the FFRMS, FEMA will rely on local floodplain administrator determinations, if available, for determining whether an action entails substantial improvement<sup>16</sup> or work to address substantial damage.<sup>17</sup> For communities that participate in the NFIP, local officials determine whether activities within the 1% AC floodplain trigger substantial damage or substantial improvement requirements as part of their floodplain management responsibilities.
3. In cases where local officials are unavailable or unable to make a determination, FEMA will make SI/SD determinations for Actions Subject to the FFRMS.
4. FEMA will make SI/SD determinations where necessary in the expanded FFRMS floodplain, in NFIP non-participating communities, and for facilities.
5. **SI/SD Determinations for Structures.** FEMA will determine that an action involving work on a structure constitutes SI/SD when the cost equals or exceeds 50% of the market value of the structure.
6. **SI/SD Determinations for Facilities.** Cases where the cost of improvement to a facility or cost to repair damage to a facility exceeds 50% of the facility's replacement cost will be determined SI/SD. For example, if work to repair a culvert costs more than 50% of replacing the culvert, FEMA will consider that facility to be substantially damaged. If a facility is an essential link in a larger system, such as a roadway or electrical system, the percentage of damage will be based on the relative cost of repairing the damaged facility to the replacement cost of the portion of the system which is operationally dependent on the facility.

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<sup>15</sup> Available at [https://www.fema.gov/sites/default/files/documents/fema\\_ffrms-floodplain-determination-job-aid.pdf](https://www.fema.gov/sites/default/files/documents/fema_ffrms-floodplain-determination-job-aid.pdf).

<sup>16</sup> See definition of "substantial improvement" in Definitions below.

<sup>17</sup> Determining whether an action entails substantial improvement or work to address substantial damage is often referred to as making an "SI/SD Determination."

7. **New Construction.** FEMA will determine that a FEMA action is new construction when it is construction of a new structure or facility or replacement of a structure or a facility that has been completely destroyed.<sup>18</sup>

## F. NATURAL FEATURES AND NATURE-BASED SOLUTIONS

Outcome: Require consideration of natural features and nature-based approaches as alternatives to a proposed action. Nature-based solutions are also known as nature-based approaches, bioengineering, or green infrastructure.

1. **Alternatives to a proposed action:** For actions located within or that may affect a floodplain or wetland, the following alternatives must be considered: a) no action; b) alternative locations; and c) alternative actions, including alternative actions that use natural features or nature-based solutions. Where possible, the Agency shall use natural systems, ecosystem processes, and nature-based solutions.<sup>19</sup>

The requirement to consider natural features and nature-based solutions applies to all actions that are subject to the alternatives analysis (Step 3 of the 8-step process)—not only to Actions Subject to the FFRMS.

2. **Examples and Benefits:** Natural features, use of ecosystem processes, and nature-based solutions, whether existing or proposed to be restored, cover a wide variety of solutions for disaster recovery and mitigation projects. One example is to consider constructing a living shoreline or incorporating bioengineering rather than building a seawall.<sup>20</sup> Choosing alternatives that incorporate natural features and nature-based solutions enhances the natural and beneficial values of floodplains and wetlands while also reducing flood risk.
3. **Incorporation as a Minimization Measure:** If not practicable as an alternative on their own, natural features and nature-based solutions may be incorporated into actions as minimization measures. For example, natural features and nature-based solutions may not be a practicable alternative for replacing a structure on a school campus, but they could be incorporated into the project site. Possible nature-based solutions include permeable pavement, native vegetation, and stormwater quality improvements. Such minimization measures enhance the natural and beneficial values of floodplains and wetlands as well as minimize some of the impacts of actions within those areas.

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<sup>18</sup> See definition of “new construction” in Definitions below. The FFRMS does not apply to the placement of Temporary Housing Units due to the short-term nature of their placement. However, the FFRMS does apply to those units when the unit is permanently installed.

<sup>19</sup> 44 CFR § 9.9(b)(2).

<sup>20</sup> See additional FEMA and other federal agency resources on nature-based solutions for more examples: [Nature-Based Solutions](#).

## G. FLOOD RISK MINIMIZATION MEASURES<sup>21</sup>

Outcome: Explain requirements under this policy to minimize flood risk.

### 1. Flood Risk Minimization for Structures

- a. Structure elevation, mitigation reconstruction, and dry floodproofing Actions under FEMA's Hazard Mitigation Assistance Programs and Actions Subject to the FFRMS must be either located outside the FFRMS floodplain or elevated or floodproofed to the flood elevation determined in Section C of this policy.
- b. FEMA does not generally allow floodproofing for residential structures.<sup>22</sup> Minimization requirements for residential structures must be met by elevation above the applicable FFRMS floodplain.
- c. For nonresidential structures, instead of elevating to the appropriate flood elevation, FEMA may approve a floodproofing design for a structure and its attendant utility and sanitary facilities so that the structure is watertight below the flood elevation, with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.<sup>23</sup> Elevation and floodproofing requirements must be consistent with NFIP criteria or any more restrictive local standard.
- d. FEMA guidance provides technical information on elevation methods for new construction and retrofitting existing structures with various types of foundations. Guidance is available in NFIP Technical Bulletins (1-11), FEMA P-758, Substantial Improvement/ Substantial Damage Desk Reference, FEMA P-936 Floodproofing Non-Residential Buildings, FEMA P-348, Protecting Building Utility Systems from Flood Damage, FEMA P-467-2 Floodplain Management Bulletin on Historic Structures, among other FEMA publications.

### 2. Flood Risk Minimization for Facilities<sup>24</sup>

- a. The FFRMS is a resilience standard.<sup>25</sup> Particularly in cases where elevation may not be feasible or appropriate for non-structure facilities, the FFRMS floodplain, determined according to the process described in section C of this policy, establishes the level to which a structure or facility must be resilient. Resilience measures include using structural or nonstructural methods to reduce or prevent damage; elevating a structure; or, where appropriate, designing it to adapt to, withstand and rapidly recover from a flood event.

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<sup>21</sup> The first goal of the FEMA Building Codes Strategy is to Integrate building codes and standards across FEMA (see: <https://www.fema.gov/emergency-managers/risk-management/building-science/building-codes-strategy>). Accordingly, FEMA's Hazard Mitigation Assistance (HMA) and Public Assistance (PA) grant programs have additional minimum building requirements, including but not limited to design and construction requirements established in *ASCE 24 – Flood Resistant Design and Construction*, published by the American Society of Civil Engineers. When elevation requirements in ASCE 24 are lower than elevation requirements in this policy, applicants must follow the requirements in this policy. ASCE 24 highlights are available at [https://www.fema.gov/sites/default/files/2020-07/asce24-14\\_highlights\\_jan2015.pdf](https://www.fema.gov/sites/default/files/2020-07/asce24-14_highlights_jan2015.pdf). Refer to HMA and PA policy for more details on program-specific building requirements.

<sup>22</sup> 44 CFR §.9.11(d)(3)(ii).

<sup>23</sup> 44 CFR § 9.11(d)(3)(ii).

<sup>24</sup> Facilities are also known as non-structure facilities.

<sup>25</sup> Resilience means the ability to adapt to changing conditions and withstand and rapidly recover from disruption due to emergencies (*Guidelines for Implementing EO 11988 and EO 13690*, October 2015).

- b. To the extent practicable and in accordance with applicable grant program requirements, projects for non-structure facilities located within a FFRMS floodplain must be designed to ensure resilience against flooding up to the flood elevation of the FFRMS floodplain.

### 3. Water Surface Elevation/No Rise Requirement

- a. To ensure FEMA actions comply with the provisions of the NFIP, FEMA will adhere to the minimization measure specified in 44 CFR § 9.11(d)(4), ensuring that FEMA actions do not result in any increase in water surface elevation within the community during the occurrence of a 1% annual chance flood beyond what is allowed under the NFIP or more restrictive local requirements. Encroachments, including fill, new construction, substantial improvements, and other development are prohibited within any adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood elevation within the community during the occurrence of the 1% AC flood discharge.<sup>26</sup>
- b. Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the 1% AC floodplain, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the 1% AC flood more than one foot or the amount designated by local floodplain ordinance, whichever is more restrictive.<sup>27</sup>

## H. COORDINATION WITH OTHER FEDERAL AGENCIES

Outcome: FEMA coordinates with other federal agencies when engaging with or implementing actions in the same area as another federal agency.

1. When multiple federal agencies are conducting, supporting (including funding), or permitting actions in the same geographic area, early coordination is essential to avoid applying conflicting standards on the same project.
  - a. Accordingly, when FEMA is funding an action in conjunction with another federal agency, FEMA will coordinate with the applicable federal agencies as early in the planning process as possible.
  - b. When coordinating with other federal agencies, FEMA will generally default to the FFRMS policy approach outlined in Section C above, as appropriate.<sup>28</sup>
  - c. FEMA will include in NEPA documents (such as Environmental Assessments or Environmental Impact Statements) analysis of impacts of applying conflicting FFRMS standards within the same geographic area.
2. In a declared major disaster, the Unified Federal Review (UFR) process offers additional coordination opportunities for FEMA and other federal agencies. The goal of UFR is to expedite and unify the process for completing environmental and historic preservation reviews required for disaster recovery projects, while maintaining the technical rigor and public participation associated with those reviews. This is done by developing agreements and tools which assist federal agencies in coordinating their reviews to

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<sup>26</sup> 44 CFR § 60.3(d)(3).

<sup>27</sup> 44 CFR § 60.3(c)(10).

<sup>28</sup> Per 44 CFR § 9.11(d)(6), actions must be consistent with the NFIP as well as any more restrictive federal, State, or local floodplain management standards. Those floodplain management standards may include a more restrictive application of another federal agency's FFRMS approach.



streamline the decision-making process and improve delivery of disaster-related services and assistance. For more information on the UFR Process, see FEMA's website at [Unified Federal Environmental and Historic Preservation Review \(UFR\) Library](#).

## I. NON-DISCRIMINATION, EQUITY, AND ENVIRONMENTAL JUSTICE REQUIREMENTS

Outcome: The FFRMS is applied in a non-discriminatory and equitable manner.

1. The Stafford Act, Rehabilitation Act of 1973, and Title VI of the Civil Rights Act of 1964 require that all FEMA-funded relief and assistance activities shall be accomplished in an equitable and impartial manner, without discrimination on the grounds of race, color, religion, nationality, sex, age, disability, English proficiency, or economic status.
2. FEMA is required to pursue a comprehensive approach to advancing equity for all, including people of color and others who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.<sup>29</sup> FEMA is also responsible for identifying and addressing the disproportionate and adverse human health or environmental effects of programs, policies, and activities on communities with environmental justice concerns, to the greatest extent practicable and permitted by law.<sup>30</sup>
3. Accordingly, the FFRMS policy is designed to be sufficiently standardized to be easily understood and consistently applied, while allowing sufficient flexibility to account for future updates to the FFRMS and ensuring an appropriate level of resilience without excessive risk minimization requirements. FEMA will continue to examine current policies and practices in the field of floodplain management to address any injustices or inequities that may exist.



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Victoria Inéz Salinas  
Senior Official Performing the Duties of Deputy  
Administrator for Resilience

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<sup>29</sup> See EO 13985: *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, January 25, 2021.

<sup>30</sup> See EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*, 88 Fed. Reg. 25,251 (Apr. 26, 2023).

## ADDITIONAL INFORMATION

### REVIEW CYCLE

This policy will be reviewed, revised, extended, and/or rescinded within four years of the issue date.

### AUTHORITIES and REFERENCES

#### AUTHORITIES

- A. Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. § 5121-5207, as amended.
- B. Title VI of the Civil Rights Act of 1964, 42 U.S.C. § 2000d et seq.
- C. Title 44 of the Code of Federal Regulations, Parts 7, 9 and 206.
- D. Title 44 of the Code of Federal Regulations, Parts 59-63.
- E. Executive Order 11988: *Floodplain Management*, May 24, 1977, as amended.
- F. Executive Order 11990: *Protection of Wetlands*, May 24, 1977.
- G. Executive Order 13690: *Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, January 30, 2015.
- H. Executive Order 14030: *Climate-Related Financial Risk*, May 20, 2021.

#### REFERENCES

- A. Water Resources Council. *Guidelines for Implementing Executive Order 11988, Floodplain Management, and Executive Order 13690, Establishing a Federal Flood Risk Management Standard and a Process for Further Soliciting and Considering Stakeholder Input*, October 2015.
- B. Interagency Task Force on Floodplain Management. *Further Advice on Executive Order 11988 Floodplain Management*, 1986.
- C. FEMA Policy 104-008-2: [Guidance on the Use of Available Flood Hazard Information](#), October 11, 2016.
- D. NFIP Technical Bulletins (1-11)
- E. FEMA P-758, Substantial Improvement/Substantial Damage Desk Reference
- F. FEMA P-936 Floodproofing Non-Residential Buildings
- G. FEMA P-348, Protecting Building Utility Systems from Flood Damage
- H. FEMA P-467-2 Floodplain Management Bulletin on Historic Structures

## DEFINITIONS

*The following definitions apply throughout this policy.*

**0.2% Annual Chance Flood Elevation** means the elevation to which floodwater is anticipated to rise during the 0.2 percent annual chance flood (also known as the 500-year flood) (44 CFR § 9.4).

**0.2% Annual Chance Floodplain** means the area subject to flooding by the 0.2 percent annual chance flood (also known as the 500-year floodplain) (44 CFR § 9.4).

**1% Annual Chance Flood Elevation** means the elevation to which floodwater is anticipated to rise during the 1% annual chance flood (also known as the base or 100-year flood). The terms “base flood elevation,” “1% annual chance flood elevation,” and “100-year flood elevation” are synonymous and are used interchangeably (44 CFR § 9.4 – Base Flood Elevation).

**1% Annual Chance Floodplain** means the area subject to flooding by the 1 percent annual chance flood (also known as the 100-year floodplain or base floodplain) (44 CFR § 9.4).

**Action** means any activity including (1) acquiring, managing, and disposing of Federal lands and facilities; (2) providing federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including, but not limited to, water and related land resources, planning, regulating and licensing activities (44 CFR § 9.4).

**Action Subject to the Federal Flood Risk Management Standard** means an action where FEMA funds are used for new construction, substantial improvement, or to address substantial damage to a structure or facility (44 CFR § 9.4).

**Base Flood Elevation** – See 1% annual chance flood elevation.

**Critical action** means any activity for which even a slight chance of flooding is too great. Critical actions include, but are not limited to, those which create or extend the useful life of structures or facilities: (1) Such as those which produce, use, or store highly volatile, flammable, explosive, toxic, or water-reactive materials; (2) Such as hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood and storm events; (3) Such as emergency operation centers, or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and (4) Such as generating plants, and other principal points of utility lines (44 CFR § 9.4).

**Facility** means any man-made or man-placed item other than a structure (44 CFR § 9.4).

**Federal Flood Risk Management Standard (FFRMS)** means the Federal flood risk management standard to be incorporated into existing processes used to implement Executive Order 11988, as amended (44 CFR § 9.4).

**Federal Flood Risk Management Standard (FFRMS) Floodplain** means the floodplain established using one of the approaches described in section C.1 of this policy (44 CFR § 9.4).

**Natural and beneficial values of floodplains and wetlands** means features or resources that provide environmental and societal benefits. Water and biological resources are often referred to as “natural function of floodplains and wetlands.” These values include but are not limited to: (1) Water resource values (storing and conveying floodwaters, maintaining water quality, and groundwater recharge); (2) living resource values (providing habitats and enhancing biodiversity for fish, wildlife, and plant resources); (3) cultural resource values (providing open space, natural beauty, recreation, scientific study, historical and archaeological resources, and education); and (4) cultivated resource values (creating rich soils for agriculture, aquaculture, and forestry) (44 CFR § 9.4).

**Natural features** means characteristics of a particular environment (e.g., barrier islands, sand dunes, wetlands) that are created by physical, geological, biological, and chemical processes and exist in dynamic equilibrium. Natural features are self-sustaining parts of the landscape that require little or no maintenance to continue providing their ecosystem services (functions) (44 CFR § 9.4).

**Nature-based solutions** (also referred to as Nature-based approaches) means the features designed to mimic natural processes and provide specific services such as reducing flood risk and/or improving water quality. Nature-based solutions are created by human design (in concert with and to accommodate natural processes) and generally, but not always, must be maintained in order to reliably provide the intended level of service (44 CFR § 9.4).

**New Construction** means the construction of a new structure or facility or the replacement of a structure or facility which has been totally destroyed. New construction includes permanent installation of temporary housing units. New construction in wetlands includes draining, dredging, channelizing, filling, diking, impounding, and related activities (44 CFR § 9.4).

**Practicable** means capable of being done within existing constraints.<sup>31</sup> The test of what is practicable depends upon the situation and includes consideration of all pertinent factors, such as natural environment, social concerns, economic aspects, legal constraints, and agency authorities (44 CFR § 9.4).

**Structures** means walled and roofed buildings, including temporary housing units and gas or liquid storage tanks (44 CFR § 9.4).

**Substantial Improvement** means any repair, reconstruction or other improvement of a structure or facility, which has been damaged in excess of, or the cost of which equals or exceeds, 50% of the market value of the structure or replacement cost of the facility (including all “public facilities” as defined in the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988) (1) before the repair or improvement is started, or (2) if the structure or facility has been damaged and is proposed to be restored, before the damage occurred. Substantial improvement includes work to address substantial damage to a structure or facility. If a facility is an essential link in a larger system, the percentage of damage will be based on the relative cost of repairing the damaged facility to the replacement cost of the portion of the system which is operationally dependent on the facility. The term “substantial

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<sup>31</sup> 44 CFR 9.9(c) provides more information on practicability factors.

improvement” does not include any alteration of a structure or facility listed on the National Register of Historic Places or a State Inventory of Historic Places (44 CFR § 9.4).

**Wetlands** means those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated soil conditions, including wetlands areas separated from their natural supply of water as a result of construction activities such as structural flood protection methods or solid-fill road beds and activities such as mineral extraction and navigation improvements. Examples of wetlands include, but are not limited to swamps, fresh and saltwater marshes, estuaries, bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows, and other similar areas. This definition is intended to be consistent with the definition utilized by the U.S. Fish and Wildlife Service (44 CFR § 9.4).

## **MONITORING AND EVALUATION**

FEMA will monitor the implementation of this policy through close coordination with regional and field staff, as appropriate, as well as interagency partners and state, local, Tribal, and territorial stakeholders.

## **QUESTIONS**

Direct questions to [fema-oehp-policy-branch@fema.dhs.gov](mailto:fema-oehp-policy-branch@fema.dhs.gov)

**APPENDIX A**  
**Code of Federal Regulations Title 44 Part 9 –**  
**Floodplain Management and Protection of Wetlands**  
**Prior to Policy Effective Date**

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This content is from the eCFR and is authoritative but unofficial.

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## **Title 44 –Emergency Management and Assistance**

### **Chapter I –Federal Emergency Management Agency, Department of Homeland Security**

#### **Subchapter A –General**

#### **Part 9 Floodplain Management and Protection of Wetlands**

- § 9.1 Purpose of part.
- § 9.2 Policy.
- § 9.3 Authority.
- § 9.4 Definitions.
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- § 9.6 Decision-making process.
- § 9.7 Determination of proposed action's location.
- § 9.8 Public notice requirements.
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- § 9.10 Identify impacts of proposed actions.
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- § 9.17 Instructions to applicants.
- § 9.18 Responsibilities.

#### **Appendix A to Part 9**

Decision-making Process for E.O. 11988

## **PART 9—FLOODPLAIN MANAGEMENT AND PROTECTION OF WETLANDS**

**Authority:** E.O. 11988 of May 24, 1977, 3 CFR, 1977 Comp., p. 117; E.O. 11990 of May 24 1977, 3 CFR, 1977 Comp. p. 121; Reorganization Plan No. 3 of 1978, 43 FR 41943, 3 CFR, 1978 Comp., p. 329; E.O. 12127 of March 31, 1979, 44 FR 19367, 3 CFR, 1979 Comp., p. 376; E.O. 12148 of July 20, 1979, 44 FR 43239, 3 CFR, 1979 Comp., p. 412, as amended.; E.O. 12127; E.O. 12148; 42 U.S.C. 5201.

**Source:** 45 FR 59526, Sept. 9, 1980, unless otherwise noted.

## § 9.1 Purpose of part.

This regulation sets forth the policy, procedure and responsibilities to implement and enforce Executive Order 11988, Floodplain Management, and Executive Order 11990, Protection of Wetlands.

## § 9.2 Policy.

- (a) FEMA shall take no action unless and until the requirements of this regulation are complied with.
- (b) It is the policy of the Agency to provide leadership in floodplain management and the protection of wetlands. Further, the Agency shall integrate the goals of the Orders to the greatest possible degree into its procedures for implementing NEPA. The Agency shall take action to:
  - (1) Avoid long- and short-term adverse impacts associated with the occupancy and modification of floodplains and the destruction and modification of wetlands;
  - (2) Avoid direct and indirect support of floodplain development and new construction in wetlands wherever there is a practicable alternative;
  - (3) Reduce the risk of flood loss;
  - (4) Promote the use of nonstructural flood protection methods to reduce the risk of flood loss;
  - (5) Minimize the impact of floods on human health, safety and welfare;
  - (6) Minimize the destruction, loss or degradation of wetlands;
  - (7) Restore and preserve the natural and beneficial values served by floodplains;
  - (8) Preserve and enhance the natural values of wetlands;
  - (9) Involve the public throughout the floodplain management and wetlands protection decision-making process;
  - (10) Adhere to the objectives of the Unified National Program for Floodplain Management; and
  - (11) Improve and coordinate the Agency's plans, programs, functions and resources so that the Nation may attain the widest range of beneficial uses of the environment without degradation or risk to health and safety.

## § 9.3 Authority.

The authority for these regulations is (a) Executive Order 11988, May 24, 1977, which replaced Executive Order 11296, August 10, 1966, (b) Executive Order 11990, May 24, 1977, (c) Reorganization Plan No. 3 of 1978 (43 FR 41943); and (d) Executive Order 12127, April 1, 1979 (44 FR 1936). E.O. 11988 was issued in furtherance of the National Flood Insurance Act of 1968, as amended (Pub. L. 90-488); the Flood Disaster Protection Act of 1973, as amended (Pub. L. 93-234); and the National Environmental Policy Act of 1969 (NEPA) (Pub. L. 91-190). Section 2(d) of Executive Order 11988 requires issuance of new or amended regulations and procedures to satisfy its substantive and procedural provisions. E.O. 11990 was issued in furtherance of NEPA, and at section 6 required issuance of new or amended regulations and procedures to satisfy its substantive and procedural provisions.

[45 FR 59526, Sept. 9, 1980, as amended at 48 FR 44543, Sept. 29, 1983]



## § 9.4 Definitions.

The following definitions shall apply throughout this regulation.

**Action** means any action or activity including:

- (a) Acquiring, managing and disposing of Federal lands and facilities;
- (b) providing federally undertaken, financed or assisted construction and improvements; and
- (c) conducting Federal activities and programs affecting land use, including, but not limited to, water and related land resources, planning, regulating and licensing activities.

**Actions Affecting or Affected by Floodplains or Wetlands** means actions which have the potential to result in the long- or short-term impacts associated with

- (a) the occupancy or modification of floodplains, and the direct or indirect support of floodplain development, or
- (b) the destruction and modification of wetlands and the direct or indirect support of new construction in wetlands.

**Administrator** means the Administrator of the Federal Emergency Management Agency.

**Agency** means the Federal Emergency Management Agency (FEMA).

**Agency Assistance** means grants for projects or planning activities, loans, and all other forms of financial or technical assistance provided by the Agency.

**Base Flood** means the flood which has a one percent chance of being equalled or exceeded in any given year (also known as a 100-year flood). This term is used in the National Flood Insurance Program (NFIP) to indicate the minimum level of flooding to be used by a community in its floodplain management regulations.

**Base Floodplain** means the 100-year floodplain (one percent chance floodplain).

**Coastal High Hazard Area** means the areas subject to high velocity waters including but not limited to hurricane wave wash or tsunamis. On a Flood Insurance Rate Map (FIRM), this appears as zone V1–30, VE or V.

**Critical Action** means an action for which even a slight chance of flooding is too great. The minimum floodplain of concern for critical actions is the 500-year floodplain, i.e., critical action floodplain. Critical actions include, but are not limited to, those which create or extend the useful life of structures or facilities:

- (a) Such as those which produce, use or store highly volatile, flammable, explosive, toxic or water-reactive materials;
- (b) Such as hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood and storm events;
- (c) Such as emergency operation centers, or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and
- (d) Such as generating plants, and other principal points of utility lines.

**Direct Impacts** means changes in floodplain or wetland values and functions and changes in the risk to lives and property caused or induced by an action or related activity. Impacts are caused whenever these natural values and functions are affected as a direct result of an action. An action which would result in the discharge of polluted storm waters into a floodplain or wetland, for example, would directly affect their natural values and functions. Construction-related activities, such as dredging and filling operations within the floodplain or a wetland would be another example of impacts caused by an action.

**Emergency Actions** means emergency work essential to save lives and protect property and public health and safety performed under sections 305 and 306 of the Disaster Relief Act of 1974 (42 U.S.C. 5145 and 5146). See 44 CFR part 205, subpart E.

**Enhance** means to increase, heighten, or improve the natural and beneficial values associated with wetlands.

**Facility** means any man-made or man-placed item other than a structure.

**FEMA** means the Federal Emergency Management Agency.

**FIA** means the Federal Insurance Administration.

**Five Hundred Year Floodplain** (the 500-year floodplain or 0.2 percent change floodplain) means that area, including the base floodplain, which is subject to inundation from a flood having a 0.2 percent chance of being equalled or exceeded in any given year.

**Flood or flooding** means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland and/or tidal waters, and/or the unusual and rapid accumulation or runoff of surface waters from any source.

**Flood Fringe** means that portion of the floodplain outside of the floodway (often referred to as "floodway fringe").

**Flood Hazard Boundary Map** (FHBM) means an official map of a community, issued by the Administrator, where the boundaries of the flood, mudslide (i.e., mudflow) and related erosion areas having special hazards have been designated as Zone A, M, or E.

**Flood Insurance Rate Map** (FIRM) means an official map of a community on which the Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. FIRMs are also available digitally, and are called Digital Flood Insurance Rate Maps (DFIRM).

**Flood Insurance Study** (FIS) means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

**Floodplain** means the lowland and relatively flat areas adjoining inland and coastal waters including, at a minimum, that area subject to a one percent or greater chance of flooding in any given year. Wherever in this regulation the term "floodplain" is used, if a critical action is involved, "floodplain" shall mean the area subject to inundation from a flood having a 0.2 percent chance of occurring in any given year (500-year floodplain). "Floodplain" does not include areas subject only to mudflow until FIA adopts maps identifying "M" Zones.

**Floodproofing** means the modification of individual structures and facilities, their sites, and their contents to protect against structural failure, to keep water out, or to reduce effects of water entry.

**Floodway** means that portion of the floodplain which is effective in carrying flow, within which this carrying capacity must be preserved and where the flood hazard is generally highest, i.e., where water depths and velocities are the greatest. It is that area which provides for the discharge of the base flood so the cumulative increase in water surface elevation is no more than one foot.

**Functionally Dependent Use** means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water, (e.g., bridges, and piers).

**Indirect Impacts** means an indirect result of an action whenever the action induces or makes possible related activities which effect the natural values and functions of floodplains or wetlands or the risk to lives and property. Such impacts occur whenever these values and functions are potentially affected, either in the short- or long-term, as a result of undertaking an action.

**Minimize** means to reduce to the smallest amount or degree possible.

**Mitigation** means all steps necessary to minimize the potentially adverse effects of the proposed action, and to restore and preserve the natural and beneficial floodplain values and to preserve and enhance natural values of wetlands.

**Mitigation Directorate** means the Mitigation Directorate of the Federal Emergency Management Agency.

**Natural Values of Floodplains and Wetlands** means the qualities of or functions served by floodplains and wetlands which include but are not limited to:

- (a) Water resource values (natural moderation of floods, water quality maintenance, groundwater recharge);
- (b) living resource values (fish, wildlife, plant resources and habitats);
- (c) cultural resource values (open space, natural beauty, scientific study, outdoor education, archeological and historic sites, recreation); and
- (d) cultivated resource values (agriculture, aquaculture, forestry).

**New Construction** means the construction of a new structure (including the placement of a mobile home) or facility or the replacement of a structure or facility which has been totally destroyed.

**New Construction in Wetlands** includes draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective dates of the Orders, May 24, 1977.

**Orders** means Executive Orders 11988, Floodplain Management, and 11990, Protection of Wetlands.

**Practicable** means capable of being done within existing constraints. The test of what is practicable depends upon the situation and includes consideration of all pertinent factors, such as environment, cost and technology.

**Preserve** means to prevent alterations to natural conditions and to maintain the values and functions which operate the floodplains or wetlands in their natural states.

**Regional Administrator** means the Regional Administrator of the Federal Emergency Management Agency for the Region in which FEMA is acting, or the Disaster Recovery Manager when one is designated.

**Regulatory Floodway** means the area regulated by federal, State or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program).

**Restore** means to reestablish a setting or environment in which the natural functions of the floodplain can again operate.

**Structures** means walled or roofed buildings, including mobile homes and gas or liquid storage tanks.

**Substantial Improvement** means any repair, reconstruction or other improvement of a structure or facility, which has been damaged in excess of, or the cost of which equals or exceeds, 50% of the market value of the structure or replacement cost of the facility (including all "public facilities" as defined in the Disaster Relief Act of 1974)

- (a) before the repair or improvement is started, or
- (b) if the structure or facility has been damaged and is proposed to be restored, before the damage occurred. If a facility is an essential link in a larger system, the percentage of damage will be based on the relative cost of repairing the damaged facility to the replacement cost of the portion of the system which is operationally dependent on the facility. The term "substantial improvement" does not include any alteration of a structure or facility listed on the National Register of Historic Places or a State Inventory of Historic Places.

**Support** means to encourage, allow, serve or otherwise facilitate floodplain or wetland development. Direct support results from actions within a floodplain or wetland, and indirect support results from actions outside of floodplains or wetlands.

**Wetlands** means those areas which are inundated or saturated by surface or ground water with a frequency sufficient to support, or that under normal hydrologic conditions does or would support, a prevalence of vegetation or aquatic life typically adapted for life in saturated or seasonally saturated soil conditions. Examples of wetlands include, but are not limited to, swamps, fresh and salt water marshes, estuaries, bogs, beaches, wet meadows, sloughs, potholes, mud flats, river overflows and other similar areas. This definition includes those wetlands areas separated from their natural supply of water as a result of activities such as the construction of structural flood protection methods or solid-fill road beds and activities such as mineral extraction and navigation improvements. This definition is intended to be consistent with the definition utilized by the U.S. Fish and Wildlife Service in the publication entitled *Classification of Wetlands and Deep Water Habitats of the United States* (Cowardin, et al., 1977).

[45 FR 59526, Sept. 9, 1980, as amended at 47 FR 13149, Mar. 29, 1982; 50 FR 40006, Oct. 1, 1985; 74 FR 15335, Apr. 3, 2009]

## § 9.5 Scope.

### (a) **Applicability.**

- (1) These regulations apply to all Agency actions which have the potential to affect floodplains or wetlands or their occupants, or which are subject to potential harm by location in floodplains or wetlands.
- (2) The basic test of the potential of an action to affect floodplains or wetlands is the action's potential (both by itself and when viewed cumulatively with other proposed actions) to result in the long- or short-term adverse impacts associated with:
  - (i) The occupancy or modification of floodplains, and the direct and indirect support of floodplain development; or
  - (ii) The destruction or modification of wetlands and the direct or indirect support of new construction in wetlands.

- (3) This regulation applies to actions that were, on the effective date of the Orders (May 24, 1977), ongoing, in the planning and/or development stages, or undergoing implementation, and are incomplete as of the effective date of these regulations. The regulation also applies to proposed (new) actions. The Agency shall:
  - (i) Determine the applicable provisions of the Orders by analyzing whether the action in question has progressed beyond critical stages in the floodplain management and wetlands protection decision-making process, as set out below in § 9.6. This determination need only be made at the time that followup actions are being taken to complete or implement the action in question; and
  - (ii) Apply the provisions of the Orders and of this regulation to all such actions to the fullest extent practicable.

(b) ***Limited exemption of ongoing actions involving wetlands located outside the floodplains.***

- (1) Executive Order 11990, Protection of Wetlands, contains a limited exemption not found in Executive Order 11988, Floodplain Management. Therefore, this exemption applies only to actions affecting wetlands which are located outside the floodplains, and which have no potential to result in harm to or within floodplains or to support floodplain development.
- (2) The following proposed actions that impact wetlands located outside of floodplains are exempt from this regulation:
  - (i) Agency-assisted or permitted projects which were under construction before May 24, 1977; and
  - (ii) Projects for which the Agency has proposed a draft of a final environmental impact statement (EIS) which adequately analyzes the action and which was filed before October 1, 1977. Proposed actions that impact wetlands outside of floodplains are not exempt if the EIS:
    - (A) Only generally covers the proposed action;
    - (B) Is devoted largely to related activities; or
    - (C) Treats the project area or program without an adequate and specific analysis of the floodplain and wetland implications of the proposed action.

(c) ***Decision-making involving certain categories of actions.*** The provisions set forth in this regulation are *not applicable* to the actions enumerated below except that the Regional Administrators shall comply with the spirit of the Order to the extent practicable. For any action which is excluded from the actions enumerated below, the full 8-step process applies (see § 9.6) (except as indicated at paragraphs (d), (f) and (g) of this section regarding other categories of partial or total exclusions). The provisions of these regulations do not apply to the following (all references are to the Disaster Relief Act of 1974, Pub. L. 93–288, as amended, except as noted):

- (1) Assistance provided for emergency work essential to save lives and protect property and public health and safety performed pursuant to sections 305 and 306;
- (2) Emergency Support Teams (section 304);
- (3) Unemployment Assistance (section 407);
- (4) Emergency Communications (section 415);
- (5) Emergency Public Transportation (section 416);

- (6) Fire Management Assistance (Section 420);
  - (7) Community Disaster Loans (section 414), except to the extent that the proceeds of the loan will be used for repair of facilities or structures or for construction of additional facilities or structures;
  - (8) The following Individual and Family Grant Program (section 408) actions:
    - (i) Housing needs or expenses, except for restoring, repairing or building private bridges, purchase of mobile homes and provision of structures as minimum protective measures;
    - (ii) Personal property needs or expenses;
    - (iii) Transportation expenses;
    - (iv) Medical/dental expenses;
    - (v) Funeral expenses;
    - (vi) Limited home repairs;
    - (vii) Flood insurance premium;
    - (viii) Cost estimates;
    - (ix) Food expenses; and
    - (x) Temporary rental accommodations.
  - (9) Mortgage and rental assistance under section 404(b);
  - (10) Use of existing resources in the temporary housing assistance program [section 404(a)], except that Step 1 (§ 9.7) shall be carried out;
  - (11) Minimal home repairs [section 404(c)];
  - (12) Debris removal (section 403), except those grants involving non-emergency disposal of debris within a floodplain or wetland;
  - (13) Repairs or replacements under section 402, of less than \$5,000 to damaged structures or facilities.
  - (14) Placement of families in existing resources and Temporary Relocation Assistance provided to those families so placed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, Public Law 96–510.
- (d) For each action enumerated below, the Regional Administrator *shall apply steps 1, 2, 4, 5 and 8* of the decision-making process (§§ 9.7, 9.8, 9.10 and 9.11, see § 9.6). Steps 3 and 6 (§ 9.9) shall be carried out except that alternative sites outside the floodplain or wetland need not be considered. After assessing impacts of the proposed action on the floodplain or wetlands and of the site on the proposed action, alternative actions to the proposed action, if any, and the “no action” alternative shall be considered. The Regional Administrator may also require certain other portions of the decision-making process to be carried out for individual actions as is deemed necessary. For any action which is excluded from the actions listed below. (except as indicated in paragraphs (c), (f) and (g) of this section regarding other categories of partial or total exclusion), the full 8-step process applies (see § 9.6). The references are to the Disaster Relief Act of 1974, Public Law 93–288, as amended.

- (1) Actions performed under the Individual and Family Grant Program (section 408) for restoring or repairing a private bridge, except where two or more individuals or families are authorized to pool their grants for this purpose.
- (2) Small project grants (section 419), except to the extent that Federal funding involved is used for construction of new facilities or structures.
- (3) Replacement of building contents, materials and equipment. (sections 402 and 419).
- (4) Repairs under section 402 to damaged facilities or structures, except any such action for which one or more of the following is applicable:
  - (i) FEMA estimated cost of repairs is more than 50% of the estimated reconstruction cost of the entire facility or structure, or is more than \$100,000, or
  - (ii) The action is located in a floodway or coastal high hazard area, or
  - (iii) The facility or structure is one which has previously sustained structural damage from flooding due to a major disaster or emergency or on which a flood insurance claim has been paid, or
  - (iv) The action is a critical action.
- (e) **Other categories of actions.** Based upon the completion of the 8-step decision-making process (§ 9.6), the Director may find that a specific category of actions either offers no potential for carrying out the purposes of the Orders and shall be treated as those actions listed in § 9.5(c), or has no practicable alternative sites and shall be treated as those actions listed in § 9.5(d), or has no practicable alternative actions or sites and shall be treated as those actions listed in § 9.5(g). This finding will be made in consultation with the Federal Insurance Administration and the Council on Environmental Quality as provided in section 2(d) of E.O. 11988. Public notice of each of these determinations shall include publication in the FEDERAL REGISTER and a 30-day comment period.
- (f) **The National Flood Insurance Program (NFIP).**
  - (1) Most of what is done by FIA or the Mitigation Directorate, in administering the National Flood Insurance Program is performed on a program-wide basis. For all regulations, procedures or other issuances making or amending program policy, FIA or the Mitigation Directorate, shall apply the 8-step decision-making process to that program-wide action. The action to which the 8-step process must be applied is the establishment of programmatic standards or criteria, not the application of programmatic standards or criteria to specific situations. Thus, for example, FIA or the Mitigation Directorate, would apply the 8-step process to a programmatic determination of categories of structures to be insured, but not to whether to insure each individual structure. The two prime examples of where FIA or the Mitigation Directorate, does take site specific actions which would require individual application of the 8-step process are property acquisition under section 1362 of the National Flood Insurance Act of 1968, as amended, and the issuance of an exception to a community under 44 CFR 60.6(b). (See also § 9.9(e)(6) and § 9.11(e).)
  - (2) The provisions set forth in this regulation are not applicable to the actions enumerated below except that the Federal Insurance Administrator or the Assistant Administrator for Mitigation, as appropriate shall comply with the spirit of the Orders to the extent practicable:
    - (i) The issuance of individual flood insurance policies and policy interpretations;
    - (ii) The adjustment of claims made under the Standard Flood Insurance Policy;

- (iii) The hiring of independent contractors to assist in the implementation of the National Flood Insurance Program;
  - (iv) The issuance of individual flood insurance maps, Map Information Facility map determinations, and map amendments; and
  - (v) The conferring of eligibility for emergency or regular program (NFIP) benefits upon communities.
- (g) For the action listed below, the Regional Administrator *shall apply steps 1, 4, 5 and 8* of the decision-making process (§§ 9.7, 9.10 and 9.11). For any action which is excluded from the actions listed below, (except as indicated in paragraphs (c), (d) and (f) of this section regarding other categories of partial or total exclusion), the full 8-step process applies (See § 9.6). The Regional Administrator may also require certain other portions of the decision-making process to be carried out for individual actions as is deemed necessary. The references are to the Disaster Relief Act of 1974, Public Law 93–288. The above requirements apply to repairs, under section 402, between \$5,000 and \$25,000 to damaged structures of facilities except for:
- (1) Actions in a floodway or coastal high hazard area; or
  - (2) New or substantially improved structures or facilities; or
  - (3) Facilities or structures which have previously sustained structural damage from flooding due to a major disaster or emergency.

[45 FR 59526, Sept. 9, 1980, as amended at 47 FR 13149, Mar. 29, 1982; 49 FR 35583, Sept. 10, 1984; 50 FR 40006, Oct. 1, 1985; 51 FR 39531, Oct. 29, 1986; 66 FR 57347, Nov. 14, 2001]

## § 9.6 Decision-making process.

- (a) **Purpose.** The purpose of this section is to set out the floodplain management and wetlands protection decision-making process to be followed by the Agency in applying the Orders to its actions. While the decision-making process was initially designed to address the floodplain Order's requirements, the process will also satisfy the wetlands Order's provisions due to the close similarity of the two directives. The numbering of Steps 1 through 8 does not firmly require that the steps be followed sequentially. As information is gathered throughout the decision-making process and as additional information is needed, reevaluation of lower numbered steps may be necessary.
- (b) Except as otherwise provided in § 9.5 (c), (d), (f), and (g) regarding categories of partial or total exclusion when proposing an action, the Agency shall apply the 8-step decision-making process. FEMA shall:
- Step 1.** Determine whether the proposed action is located in a wetland and/or the 100-year floodplain (500-year floodplain for critical actions); and whether it has the potential to affect or be affected by a floodplain or wetland (see § 9.7);
  - Step 2.** Notify the public at the earliest possible time of the intent to carry out an action in a floodplain or wetland, and involve the affected and interested public in the decision-making process (see § 9.8);
  - Step 3.** Identify and evaluate practicable alternatives to locating the proposed action in a floodplain or wetland (including alternative sites, actions and the “no action” option) (see § 9.9). If a practicable alternative exists outside the floodplain or wetland FEMA must locate the action at the alternative site.



- Step 4.** Identify the potential direct and indirect impacts associated with the occupancy or modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action (see § 9.10);
- Step 5.** Minimize the potential adverse impacts and support to or within floodplains and wetlands to be identified under Step 4, restore and preserve the natural and beneficial values served by floodplains, and preserve and enhance the natural and beneficial values served by wetlands (see § 9.11);
- Step 6.** Reevaluate the proposed action to determine first, if it is still practicable in light of its exposure to flood hazards, the extent to which it will aggravate the hazards to others, and its potential to disrupt floodplain and wetland values and second, if alternatives preliminarily rejected at Step 3 are practicable in light of the information gained in Steps 4 and 5. FEMA shall not act in a floodplain or wetland unless it is the only practicable location (see § 9.9);
- Step 7.** Prepare and provide the public with a finding and public explanation of any final decision that the floodplain or wetland is the only practicable alternative (see § 9.12); and
- Step 8.** Review the implementation and post-implementation phases of the proposed action to ensure that the requirements stated in § 9.11 are fully implemented. Oversight responsibility shall be integrated into existing processes.

[45 FR 59526, Sept. 9, 1980, as amended at 49 FR 35583, Sept. 10, 1984; 50 FR 40006, Oct. 1, 1985]

### § 9.7 Determination of proposed action's location.

- (a) The purpose of this section is to establish Agency procedures for determining whether any action as proposed is located in or affects
- (1) the base floodplain (the Agency shall substitute the 500-year floodplain for the base floodplain where the action being proposed involves a critical action), or
  - (2) a wetland.
- (b) **Information needed.** The Agency shall obtain enough information so that it can fulfill the requirements of the Orders to
- (1) avoid floodplain and wetland locations unless they are the only practicable alternatives; and
  - (2) minimize harm to and within floodplains and wetlands. In all cases, FEMA shall determine whether the proposed action is located in a floodplain or wetland. In the absence of a finding to the contrary, FEMA may assume that a proposed action involving a facility or structure that has been flooded is in the floodplain. Information about the 100-year and 500-year floods and location of floodways and coastal high hazard areas may also be needed to comply with these regulations, especially § 9.11. The following additional flooding characteristics shall be identified by the Regional Administrator as appropriate:
    - (i) Velocity of floodwater;
    - (ii) Rate of rise of floodwater;
    - (iii) Duration of flooding;
    - (iv) Available warning and evacuation time and routes;
    - (v) Special problems:

- (A) Levees;
- (B) Erosion;
- (C) Subsidence;
- (D) Sink holes;
- (E) Ice jams;
- (F) Debris load;
- (G) Pollutants;
- (H) Wave heights;
- (I) Groundwater flooding;
- (J) Mudflow.

(c) ***Floodplain determination.***

- (1) In the search for flood hazard information, FEMA shall follow the sequence below:
  - (i) The Regional Administrator shall consult the FEMA Flood Insurance Rate Map (FIRM) the Flood Boundary Floodway Map (FBFM) and the Flood Insurance Study (FIS).
  - (ii) If a detailed map (FIRM or FBFM) is not available, the Regional Administrator shall consult an FEMA Flood Hazard Boundary Map (FHBM) . If data on flood elevations, floodways, or coastal high hazard areas are needed, or if the map does not delineate the flood hazard boundaries in the vicinity of the proposed site, the Regional Administrator shall seek the necessary detailed information and assistance from the sources listed below.

## Sources of Maps and Technical Information

Department of Agriculture: Soil Conservation Service

Department of the Army: Corps of Engineers

Department of Commerce: National Oceanic and Atmospheric Administration

Federal Insurance Administration

FEMA Regional Offices/Natural and Technological Hazards Division

Department of the Interior:

Geological Survey

Bureau of Land Management

Bureau of Reclamation

Tennessee Valley Authority  
Delaware River Basin Commission  
Susquehanna River Basin Commission  
States

- (iii) If the sources listed do not have or know of the information necessary to comply with the Orders' requirements, the Regional Administrator shall seek the services of a Federal or other engineer experienced in this type of work.
- (2) If a decision involves an area or location within extensive Federal or state holdings or a headwater area, and an FIS, FIRM, FBFM, or FHBM is not available, the Regional Administrator shall seek information from the land administering agency before information and/or assistance is sought from the sources listed in this section. If none of these sources has information or can provide assistance, the services of an experienced Federal or other engineer shall be sought as described above.
- (d) **Wetland determination.** The following sequence shall be followed by the Agency in making the wetland determination.
- (1) The Agency shall consult with the U.S. Fish and Wildlife Service (FWS) for information concerning the location, scale and type of wetlands within the area which could be affected by the proposed action.
- (2) If the FWS does not have adequate information upon which to base the determination, the Agency shall consult wetland inventories maintained by the Army Corps of Engineers, the Environmental Protection Agency, various states, communities and others.
- (3) If state or other sources do not have adequate information upon which to base the determination, the Agency shall carry out an on-site analysis performed by a representative of the FWS or other qualified individual for wetlands characteristics based on the performance definition of what constitutes a wetland.
- (4) If an action is in a wetland but not in a floodplain, and the action is new construction, the provisions of this regulation shall apply. Even if the action is not in a wetland, the Regional Administrator shall determine if the action has the potential to result in indirect impacts on wetlands. If so, all adverse impacts shall be minimized. For actions which are in a wetland and the floodplain, completion of the decision-making process is required. (See § 9.6.) In such a case the wetland will be considered as one of the natural and beneficial values of floodplain.

[45 FR 59526, Sept. 9, 1980, as amended at 47 FR 13149, Mar. 29, 1982; 49 FR 33879, Aug. 27, 1984; 50 FR 40006, Oct. 1, 1985; 51 FR 34605, Sept. 30, 1986]

## § 9.8 Public notice requirements.

- (a) **Purpose.** The purpose of this section is to establish the initial notice procedures to be followed when proposing any action in or affecting floodplains or wetlands.

- (b) **General.** The Agency shall provide adequate information to enable the public to have impact on the decision outcome for all actions having potential to affect, adversely, or be affected by floodplains or wetlands that it proposes. To achieve this objective, the Agency shall:
- (1) Provide the public with adequate information and opportunity for review and comment at the earliest possible time and throughout the decision-making process; and upon completion of this process, provide the public with an accounting of its final decisions (see § 9.12); and
  - (2) Rely on its environmental assessment processes, to the extent possible, as vehicles for public notice, involvement and explanation.
- (c) **Early public notice.** The Agency shall provide opportunity for public involvement in the decision-making process through the provision of public notice upon determining that the proposed action can be expected to affect or be affected by floodplains or wetlands. Whenever possible, notice shall precede major project site identification and analysis in order to preclude the foreclosure of options consistent with the Orders.
- (1) For an action for which an environmental impact statement is being prepared, the Notice of Intent to File an EIS is adequate to constitute the early public notice, if it includes the information required under paragraph (c)(5) of this section.
  - (2) For each action having national significance for which notice is being provided, the Agency shall use the FEDERAL REGISTER as the minimum means for notice, and shall provide notice by mail to national organizations reasonably expected to be interested in the action. The additional notices listed in paragraph (c)(4) of this section shall be used in accordance with the determination made under paragraph (c)(3) of this section.
  - (3) The Agency shall base its determination of appropriate notices, adequate comment periods, and whether to issue cumulative notices (paragraphs (c)(4), (6) and (7) of this section) on factors which include, but are not limited to:
    - (i) Scale of the action;
    - (ii) Potential for controversy;
    - (iii) Degree of public need;
    - (iv) Number of affected agencies and individuals; and
    - (v) Its anticipated potential impact.
  - (4) For each action having primarily local importance for which notice is being provided, notice shall be made in accordance with the criteria under paragraph (c)(3) of this section, and shall entail as appropriate:
    - (i) [Reserved]
    - (ii) Notice to Indian tribes when effects may occur on reservations.
    - (iii) Information required in the affected State's public notice procedures for comparable actions.
    - (iv) Publication in local newspapers (in papers of general circulation rather than legal papers).
    - (v) Notice through other local media.
    - (vi) Notice to potentially interested community organizations.

- (vii) Publication in newsletters that may be expected to reach potentially interested persons.
- (viii) Direct mailing to owners and occupants of nearby or affected property.
- (ix) Posting of notice on and off site in the area where the action is to be located.
- (x) Holding a public hearing.

(5) The notice shall include:

- (i) A description of the action, its purpose and a statement of the intent to carry out an action affecting or affected by a floodplain or wetland;
- (ii) Based on the factors in paragraph (c)(3) of this section, a map of the area or other identification of the floodplain and/or wetland areas which is of adequate scale and detail so that the location is discernible; instead of publication of such map, FEMA may state that such map is available for public inspection, including the location at which such map may be inspected and a telephone number to call for information;
- (iii) Based on the factors in paragraph (c)(3) of this section, a description of the type, extent and degree of hazard involved and the floodplain or wetland values present; and
- (iv) Identification of the responsible official or organization for implementing the proposed action, and from whom further information can be obtained.

(6) The Agency shall provide for an adequate comment period.

(7) In a post-disaster situation in particular, the requirement for early public notice may be met in a cumulative manner based on the factors set out in paragraph (c)(3) of this section. Several actions may be addressed in one notice or series of notices. For some actions involving limited public interest a single notice in a local newspaper or letter to interested parties may suffice.

- (d) **Continuing public notice.** The Agency shall keep the public informed of the progress of the decision-making process through additional public notices at key points in the process. The preliminary information provided under paragraph (c)(5) of this section shall be augmented by the findings of the adverse effects of the proposed actions and steps necessary to mitigate them. This responsibility shall be performed for actions requiring the preparation of an EIS, and all other actions having the potential for major adverse impacts, or the potential for harm to the health and safety of the general public.

[45 FR 59526, Sept. 9, 1980, as amended at 48 FR 29318, June 24, 1983]

## § 9.9 Analysis and reevaluation of practicable alternatives.

(a) **Purpose.**

- (1) The purpose of this section is to expand upon the directives set out in § 9.6, of this part, in order to clarify and emphasize the Orders' key requirements to avoid floodplains and wetlands unless there is no practicable alternative.
- (2) Step 3 is a preliminary determination as to whether the floodplain is the only practicable location for the action. It is a preliminary determination because it comes early in the decision-making process when the Agency has a limited amount of information. If it is clear that there is a practicable alternative, or the floodplain or wetland is itself not a practicable location, FEMA shall then act on that basis. Provided that the location outside the floodplain or wetland does not indirectly impact

floodplains or wetlands or support development therein (see § 9.10), the remaining analysis set out by this regulation is not required. If such location does indirectly impact floodplains or wetlands or support development therein, the remaining analysis set out by this regulation is required. If the preliminary determination is to act in the floodplain, FEMA shall gather the additional information required under Steps 4 and 5 and then reevaluate all the data to determine if the floodplain or wetland is the only practicable alternative.

- (b) **Analysis of practicable alternatives.** The Agency shall identify and evaluate practicable alternatives to carrying out a proposed action in floodplains or wetlands, including:
- (1) Alternative sites outside the floodplain or wetland;
  - (2) Alternative actions which serve essentially the same purpose as the proposed action, but which have less potential to affect or be affected by the floodplain or wetlands; and
  - (3) **No action.** The floodplain and wetland site itself must be a practicable location in light of the factors set out in this section.
- (c) The Agency shall analyze the following factors in determining the practicability of the alternatives set out in paragraph (b) of this section:
- (1) Natural environment (topography, habitat, hazards, etc.);
  - (2) Social concerns (aesthetics, historical and cultural values, land patterns, etc.);
  - (3) Economic aspects (costs of space, construction, services, and relocation); and
  - (4) Legal constraints (deeds, leases, etc.).
- (d) **Action following the analysis of practicable alternatives.**
- (1) The Agency shall not locate the proposed action in the floodplain or in a wetland if a practicable alternative exists outside the floodplain or wetland.
  - (2) For critical actions, the Agency shall not locate the proposed action in the 500-year floodplain if a practicable alternative exists outside the 500-year floodplain.
  - (3) Even if no practicable alternative exists outside the floodplain or wetland, in order to carry out the action the floodplain or wetland must itself be a practicable location in light of the review required in this section.
- (e) **Reevaluation of alternatives.** Upon determination of the impact of the proposed action to or within the floodplain or wetland and of what measures are necessary to comply with the requirement to minimize harm to and within floodplains and wetlands (§ 9.11), FEMA shall:
- (1) Determine whether:
    - (i) The action is still practicable at a floodplain or wetland site in light of the exposure to flood risk and the ensuing disruption of natural values;
    - (ii) The floodplain or wetland site is the only practicable alternative;
    - (iii) There is a potential for limiting the action to increase the practicability of previously rejected non-floodplain or wetland sites and alternative actions; and
    - (iv) Minimization of harm to or within the floodplain can be achieved using all practicable means.

- (2) Take no action in a floodplain unless the importance of the floodplain site clearly outweighs the requirement of E.O. 11988 to:
  - (i) Avoid direct or indirect support of floodplain development;
  - (ii) Reduce the risk of flood loss;
  - (iii) Minimize the impact of floods on human safety, health and welfare; and
  - (iv) Restore and preserve floodplain values.
- (3) Take no action in a wetland unless the importance of the wetland site clearly outweighs the requirements of E.O. 11990 to:
  - (i) Avoid the destruction or modification of the wetlands;
  - (ii) Avoid direct or indirect support of new construction in wetlands;
  - (iii) Minimize the destruction, loss or degradation of wetlands; and
  - (iv) Preserve and enhance the natural and beneficial values of wetlands.
- (4) In carrying out this balancing process, give the factors in paragraphs (e)(2) and (3) of this section, the great weight intended by the Orders.
- (5) Choose the “no action” alternative where there are no practicable alternative actions or sites and where the floodplain or wetland is not itself a practicable alternative. In making the assessment of whether a floodplain or wetland location is itself a practicable alternative, the practicability of the floodplain or wetland location shall be balanced against the practicability of not carrying out the action at all. That is, even if there is no practicable alternative outside of the floodplain or wetland, the floodplain or wetland itself must be a practicable location in order for the action to be carried out there. To be a practicable location, the importance of carrying out the action must clearly outweigh the requirements of the Orders listed in paragraphs (e)(2) and (e)(3) of this section. Unless the importance of carrying out the action clearly outweighs those requirements, the “no action” alternative shall be selected.
- (6) In any case in which the Regional Director has selected the “no action” option, FIA may not provide a new or renewed contract of flood insurance for that structure.

**Effective Date Note:** At 45 FR 79070, Nov. 28, 1980, § 9.9(e)(6) was temporarily suspended until further notice.

### § 9.10 Identify impacts of proposed actions.

- (a) **Purpose.** The purpose of this section is to ensure that the effects of proposed Agency actions are identified.
- (b) The Agency shall identify the potential direct and indirect adverse impacts associated with the occupancy and modification of floodplains and wetlands and the potential direct and indirect support of floodplain and wetland development that could result from the proposed action. Such identification of impacts shall be to the extent necessary to comply with the requirements of the Orders to avoid floodplain and wetland locations unless they are the only practicable alternatives and to minimize harm to and within floodplains and wetlands.

- (c) This identification shall consider whether the proposed action will result in an increase in the useful life of any structure or facility in question, maintain the investment at risk and exposure of lives to the flood hazard or forego an opportunity to restore the natural and beneficial values served by floodplains or wetlands. Regional Offices of the U.S. Fish and Wildlife Service may be contacted to aid in the identification and evaluation of potential impacts of the proposed action on natural and beneficial floodplain and wetland values.
- (d) In the review of a proposed or alternative action, the Regional Administrator shall specifically consider and evaluate: impacts associated with modification of wetlands and floodplains regardless of its location; additional impacts which may occur when certain types of actions may support subsequent action which have additional impacts of their own; adverse impacts of the proposed actions on lives and property and on natural and beneficial floodplain and wetland values; and the three categories of factors listed below:
  - (1) **Flood hazard-related factors.** These include for example, the factors listed in § 9.7(b)(2);
  - (2) **Natural values-related factors.** These include, for example, the following: Water resource values (natural moderation of floods, water quality maintenance, and ground water recharge); living resource values (fish and wildlife and biological productivity); cultural resource values (archeological and historic sites, and open space recreation and green belts); and agricultural, aquacultural and forestry resource values.
  - (3) **Factors relevant to a proposed action's effects on the survival and quality of wetlands.** These include, for example, the following: Public health, safety, and welfare, including water supply, quality, recharge and discharge; pollution; flood and storm hazards; and sediment and erosion; maintenance of natural systems, including conservation and long term productivity of existing flora and fauna, species and habitat diversity and stability, hydrologic utility, fish, wildlife, timber, and food and fiber resources; and other uses of wetlands in the public interest, including recreational, scientific, and cultural uses.

## § 9.11 Mitigation.

- (a) **Purpose.** The purpose of this section is to expand upon the directives set out in § 9.6 of this part, and to set out the mitigative actions required if the preliminary determination is made to carry out an action that affects or is in a floodplain or wetland.
- (b) **General provisions.**
  - (1) The Agency shall design or modify its actions so as to minimize harm to or within the floodplain;
  - (2) The Agency shall minimize the destruction, loss or degradation of wetlands;
  - (3) The Agency shall restore and preserve natural and beneficial floodplain values; and
  - (4) The Agency shall preserve and enhance natural and beneficial wetland values.
- (c) **Minimization provisions.** The Agency shall minimize:
  - (1) Potential harm to lives and the investment at risk from the base flood, or, in the case of critical actions, from the 500-year flood;
  - (2) Potential adverse impacts the action may have on others; and
  - (3) Potential adverse impact the action may have on floodplain and wetland values.



(d) **Minimization Standards.** In its implementation of the Disaster Relief Act of 1974, the Agency shall apply at a minimum, the following standards to its actions to comply with the requirements of paragraphs (b) and (c), of this section, (except as provided in § 9.5 (c), (d), and (g) regarding categories of partial or total exclusion). Any Agency action to which the following specific requirements do not apply, shall nevertheless be subject to the full 8-step process (§ 9.6) including the general requirement to minimize harm to and within floodplains:

(1) There shall be no new construction or substantial improvement in a floodway, and no new construction in a coastal high hazard area, except for:

(i) A functionally dependent use; or

(ii) A structure or facility which facilitates an open space use.

(2) For a structure which is a functionally dependent use, or which facilitates an open space use, the following applies. There shall be no construction of a new or substantially improved structure in a coastal high hazard area unless it is elevated on adequately anchored pilings or columns, and securely anchored to such piles or columns so that the lowest portion of the structural members of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level (the 500-year flood level for critical actions) (including wave height). The structure shall be anchored so as to withstand velocity waters and hurricane wave wash. The Regional Administrator shall be responsible for determining the base flood level, including the wave height, in all cases. Where there is a FIRM in effect, it shall be the basis of the Regional Administrator's determination. If the FIRM does not reflect wave heights, or if there is no FIRM in effect, the Regional Administrator is responsible for delineating the base flood level, including wave heights.

(3) **Elevation of structures.**

(i) There shall be no new construction or substantial improvement of structures unless the lowest floor of the structures (including basement) is at or above the level of the base flood.

(ii) There shall be no new construction or substantial improvement of structures involving a critical action unless the lowest floor of the structure (including the basement) is at or above the level of the 500-year flood.

(iii) If the subject structure is nonresidential, FEMA may, instead of elevating the structure to the 100-year or 500-year level, as appropriate, approve the design of the structure and its attendant utility and sanitary facilities so that below the flood level the structure is water tight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(iv) The provisions of paragraphs (d)(3)(i), (ii), and (iii) of this section do not apply to the extent that the Federal Insurance Administration has granted an exception under 44 CFR § 60.6(b) (formerly 24 CFR 1910.6(b)), or the community has granted a variance which the Regional Administrator determines is consistent with 44 CFR 60.6(a) (formerly 24 CFR 1910.6(a)). In a community which does not have a FIRM in effect, FEMA may approve a variance from the standards of paragraphs (d)(3)(i), (ii), and (iii) of this section, after compliance with the standards of 44 CFR 60.6(a).

(4) There shall be no encroachments, including fill, new construction, substantial improvements of structures or facilities, or other development within a designated regulatory floodway that would result in any increase in flood levels within the community during the occurrence of the base flood

discharge. Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the base floodplain unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

- (5) Even if an action is a functionally dependent use or facilitates open space uses (under paragraph (d)(1) or (2) of this section) and does not increase flood heights (under paragraph (d)(4) of this section), such action may only be taken in a floodway or coastal high hazard area if:
  - (i) Such site is the only practicable alternative; and
  - (ii) Harm to and within the floodplain is minimized.
- (6) In addition to standards (d)(1) through (d)(5) of this section, no action may be taken if it is inconsistent with the criteria of the National Flood Insurance Program (44 CFR part 59 *et seq.*) or any more restrictive Federal, State or local floodplain management standards.
- (7) New construction and substantial improvement of structures shall be elevated on open works (walls, columns, piers, piles, etc.) rather than on fill, in all cases in coastal high hazard areas and elsewhere, where practicable.
- (8) To minimize the effect of floods on human health, safety and welfare, the Agency shall:
  - (i) Where appropriate, integrate all of its proposed actions in floodplains into existing flood warning and preparedness plans and ensure that available flood warning time is reflected;
  - (ii) Facilitate adequate access and egress to and from the site of the proposed action; and
  - (iii) Give special consideration to the unique hazard potential in flash flood, rapid-rise or tsunami areas.
- (9) In the replacement of building contents, materials and equipment, the Regional Administrator shall require as appropriate, disaster proofing of the building and/or elimination of such future losses by relocation of those building contents, materials and equipment outside or above the base floodplain or the 500-year floodplain for critical actions.

**(e) *In the implementation of the National Flood Insurance Program.***

- (1) The Federal Insurance Administration shall make identification of all coastal high hazard areas a priority;
- (2) Beginning October 1, 1981, the Federal Insurance Administration of FEMA may only provide flood insurance for new construction or substantial improvements in a coastal high hazard area if:
  - (i) Wave heights have been designated for the site of the structure either by the Administrator of FEMA based upon data generated by FEMA or by another source, satisfactory to the Administrator; and
  - (ii) The structure is rated by FEMA-FIA based on a system which reflects the capacity to withstand the effects of the 100-year frequency flood including, but not limited to, the following factors:
    - (A) Wave heights;
    - (B) The ability of the structure to withstand the force of waves.

(3)

(i) FEMA shall accept and take fully into account information submitted by a property owner indicating that the rate for a particular structure is too high based on the ability of the structure to withstand the force of waves. In order to obtain a rate adjustment, a property owner must submit to FEMA specific information regarding the structure and its immediate environment. Such information must be certified by a registered professional architect or engineer who has demonstrable experience and competence in the fields of foundation, soils, and structural engineering. Such information should include:

- (A) Elevation of the structure (bottom of lowest floor beam) in relation to the Base Flood Elevation including wave height;
- (B) Distance of the structure from the shoreline;
- (C) Dune protection and other environmental factors;
- (D) Description of the building support system; and
- (E) Other relevant building details.

Adequate completion of the "V-Zone Risk Factor Rating Form" is sufficient for FEMA to determine whether a rate adjustment is appropriate. The form is available from and applications for rate adjustments should be submitted to:

National Flood Insurance Program

Attention: V-Zone Underwriting Specialist

9901-A George Palmer Highway

Lanham, MD 20706

Pending a determination on a rate adjustment, insurance will be issued at the class rate. If the rate adjustment is granted, a refund of the appropriate portion of the premium will be made. *Unless a property owner is seeking an adjustment of the rate prescribed by FEMA-FIA, this information need not be submitted.*

(ii) FIA shall notify communities with coastal high hazard areas and federally related lenders in such communities, of the provisions of this paragraph. Notice to the lenders may be accomplished by the Federal instrumentalities to which the lenders are related.

(4) In any case in which the Regional Director has been, pursuant to § 9.11(d)(1), precluded from providing assistance for a new or substantially improved structure in a floodway, FIA may not provide a new or renewed policy of flood insurance for that structure.

(f) **Restore and preserve.**

(1) For any action taken by the Agency which affects the floodplain or wetland and which has resulted in, or will result in, harm to the floodplain or wetland, the Agency shall act to restore and preserve the natural and beneficial values served by floodplains and wetlands.

(2) Where floodplain or wetland values have been degraded by the proposed action, the Agency shall identify, evaluate and implement measures to restore the values.

- (3) If an action will result in harm to or within the floodplain or wetland, the Agency shall design or modify the action to preserve as much of the natural and beneficial floodplain and wetland values as is possible.

[45 FR 59526, Sept. 9, 1980, as amended at 46 FR 51752, Oct. 22, 1981; 48 FR 44543, Sept. 29, 1983; 49 FR 33879, Aug. 27, 1984; 49 FR 35584, Sept. 10, 1984; 50 FR 40006, Oct. 1, 1985]

**Effective Date Note:** At 45 FR 79070, Nov. 28, 1980, § 9.11(e)(4) was temporarily suspended until further notice.

## § 9.12 Final public notice.

If the Agency decides to take an action in or affecting a floodplain or wetland, it shall provide the public with a statement of its final decision and shall explain the relevant factors considered by the Agency in making this determination.

- (a) In addition, those sent notices under § 9.8 shall also be provided the final notice.
- (b) For actions for which an environmental impact statement is being prepared, the FEIS is adequate to constitute final notice in all cases except where:
  - (1) Significant modifications are made in the FEIS after its initial publication;
  - (2) Significant modifications are made in the development plan for the proposed action; or
  - (3) Significant new information becomes available in the interim between issuance of the FEIS and implementation of the proposed action.

If any of these situations develop, the Agency shall prepare a separate final notice that contains the contents of paragraph (e) of this section and shall make it available to those who received the FEIS. A minimum of 15 days shall, without good cause shown, be allowed for comment on the final notice.

- (c) For actions for which an environmental assessment was prepared, the Notice of No Significant Impact is adequate to constitute final public notice, if it includes the information required under paragraph (e) of this section.
- (d) For all other actions, the finding shall be made in a document separate from those described in paragraphs (a), (b), and (c) of this section. Based on an assessment of the following factors, the requirement for final notice may be met in a cumulative manner:
  - (1) Scale of the action;
  - (2) Potential for controversy;
  - (3) Degree of public need;
  - (4) Number of affected agencies and individuals;
  - (5) Its anticipated potential impact; and
  - (6) Similarity of the actions, i.e., to the extent that they are susceptible of common descriptions and assessments.

When a damaged structure or facility is already being repaired by the State or local government at the time of the Damage Survey Report, the requirements of Steps 2 and 7 (§§ 9.8 and 9.12) may be met by a single notice. Such notice shall contain all the information required by both sections.

- (e) The final notice shall include the following:
  - (1) A statement of why the proposed action must be located in an area affecting or affected by a floodplain or a wetland;
  - (2) A description of all significant facts considered in making this determination;
  - (3) A list of the alternatives considered;
  - (4) A statement indicating whether the action conforms to applicable state and local floodplain protection standards;
  - (5) A statement indicating how the action affects or is affected by the floodplain and/or wetland, and how mitigation is to be achieved;
  - (6) Identification of the responsible official or organization for implementation and monitoring of the proposed action, and from whom further information can be obtained; and
  - (7) A map of the area or a statement that such map is available for public inspection, including the location at which such map may be inspected and a telephone number to call for information.
- (f) After providing the final notice, the Agency shall, without good cause shown, wait at least 15 days before carrying out the action.

*[45 FR 59526, Sept. 9, 1980, as amended at 48 FR 29318, June 24, 1983]*

### **§ 9.13 Particular types of temporary housing.**

- (a) The purpose of this section is to set forth the procedures whereby the Agency will provide certain specified types of temporary housing.
- (b) Prior to providing the types of temporary housing enumerated in paragraph (c) of this section, the Agency shall comply with the provisions of this section. For all temporary housing not enumerated below, the full 8-step process (see § 9.6) applies.
- (c) The following temporary housing actions are subject to the provisions of this section and not the full 8-step process:
  - (1) [Reserved]
  - (2) Placing a mobile home or readily fabricated dwelling on a private or commercial site, but not a group site.
- (d) The actions set out in paragraph (c) of this section are subject to the following decision-making process:
  - (1) The temporary housing action shall be evaluated in accordance with the provisions of § 9.7 to determine if it is in or affects a floodplain or wetland.
  - (2) No mobile home or readily fabricated dwelling may be placed on a private or commercial site in a floodway or coastal high hazard area.

- (3) An individual or family shall not be housed in a floodplain or wetland unless the Regional Administrator has complied with the provisions of § 9.9 to determine that such site is the only practicable alternative. The following factors shall be substituted for the factors in § 9.9 (c) and (e) (2) through (4):
  - (i) Speedy provision of temporary housing;
  - (ii) Potential flood risk to the temporary housing occupant;
  - (iii) Cost effectiveness;
  - (iv) Social and neighborhood patterns;
  - (v) Timely availability of other housing resources; and
  - (vi) Potential harm to the floodplain or wetland.
- (4) An individual or family shall not be housed in a floodplain or wetland (except in existing resources) unless the Regional Administrator has complied with the provisions of § 9.11 to minimize harm to and within floodplains and wetlands. The following provisions shall be substituted for the provisions of § 9.11(d) for mobile homes:
  - (i) No mobile home or readily fabricated dwelling may be placed on a private or commercial site unless it is elevated to the fullest extent practicable up to the base flood level and adequately anchored.
  - (ii) No mobile home or readily fabricated dwelling may be placed if such placement is inconsistent with the criteria of the National Flood Insurance Program (44 CFR part 59 *et seq.*) or any more restrictive Federal, State or local floodplain management standard. Such standards may require elevation to the base flood level in the absence of a variance.
  - (iii) Mobile homes shall be elevated on open works (walls, columns, piers, piles, etc.) rather than on fill where practicable.
  - (iv) To minimize the effect of floods on human health, safety and welfare, the Agency shall:
    - (A) Where appropriate, integrate all of its proposed actions in placing mobile homes for temporary housing in floodplains into existing flood warning and preparedness plans and ensure that available flood warning time is reflected;
    - (B) Provide adequate access and egress to and from the proposed site of the mobile home; and
    - (C) Give special consideration to the unique hazard potential in flash flood and rapid-rise areas.
- (5) FEMA shall comply with Step 2 Early Public Notice (§ 9.8(c)) and Step 7 Final Public Notice (§ 9.12). In providing these notices, the emergency nature of temporary housing shall be taken into account.
- (e) FEMA shall not sell or otherwise dispose of mobile homes or other readily fabricated dwellings which would be located in floodways or coastal high hazard areas. FEMA shall not sell or otherwise dispose of mobile homes or other readily fabricated dwellings which would be located in floodplains or wetlands unless there is full compliance with the 8-step process. Given the vulnerability of mobile homes to flooding, a rejection of a non-floodplain location alternative and of the no-action alternative shall be based on

- (1) a compelling need of the family or individual to buy a mobile home for permanent housing, and
- (2) a compelling requirement to locate the unit in a floodplain. Further, FEMA shall not sell or otherwise dispose of mobile homes or other readily fabricated dwellings in a floodplain unless they are elevated at least to the level of the 100-year flood. The Regional Administrator shall notify the Assistant Administrator for Mitigation of each instance where a floodplain location has been found to be the only practicable alternative for a mobile home sale.

[45 FR 59526, Sept. 9, 1980, as amended at 47 FR 13149, Mar. 29, 1982; 49 FR 35584, Sept. 10, 1984; 50 FR 40006, Oct. 1, 1985]

### § 9.14 Disposal of Agency property.

- (a) The purpose of this section is to set forth the procedures whereby the Agency shall dispose of property.
- (b) Prior to its disposal by sale, lease or other means of disposal, property proposed to be disposed of by the Agency shall be reviewed according to the decision-making process set out in § 9.6 of this part, as follows:
  - (1) The property shall be evaluated in accordance with the provisions of § 9.7 to determine if it affects or is affected by a floodplain or wetland;
  - (2) The public shall be notified of the proposal and involved in the decision-making process in accordance with the provisions of § 9.8;
  - (3) Practicable alternatives to disposal shall be evaluated in accordance with the provisions of § 9.9. For disposals, this evaluation shall focus on alternative actions (conveyance for an alternative use that is more consistent with the floodplain management and wetland protection policies set out in § 9.2 than the one proposed, e.g., open space use for park or recreational purposes rather than high intensity uses), and on the “no action” option (retain the property);
  - (4) Identify the potential impacts and support associated with the disposal of the property in accordance with § 9.10;
  - (5) Identify the steps necessary to minimize, restore, preserve and enhance in accordance with § 9.11. For disposals, this analysis shall address all four of these components of mitigation where unimproved property is involved, but shall focus on minimization through floodproofing and restoration of natural values where improved property is involved;
  - (6) Reevaluate the proposal to dispose of the property in light of its exposure to the flood hazard and its natural values-related impacts, in accordance with § 9.9. This analysis shall focus on whether it is practicable in light of the findings from §§ 9.10 and 9.11 to dispose of the property, or whether it must be retained. If it is determined that it is practicable to dispose of the property, this analysis shall identify the practicable alternative that best achieves all of the components of the Orders' mitigation responsibility;
  - (7) To the extent that it would decrease the flood hazard to lives and property, the Agency shall, wherever practicable, dispose of the properties according to the following priorities:
    - (i) Properties located outside the floodplain;
    - (ii) Properties located in the flood fringe; and
    - (iii) Properties located in a floodway, regulatory floodway or coastal high hazard area.

- (8) The Agency shall prepare and provide the public with a finding and public explanation in accordance with § 9.12.
- (9) The Agency shall ensure that the applicable mitigation requirements are fully implemented in accordance with § 9.11.
- (c) At the time of disposal, for all disposed property, the Agency shall reference in the conveyance uses that are restricted under existing Federal, State and local floodplain management and wetland protection standards relating to flood hazards and floodplain and wetland values.

### § 9.15 Planning programs affecting land use.

The Agency shall take floodplain management into account when formulating or evaluating any water and land use plans. No plan may be approved unless it:

- (a) Reflects consideration of flood hazards and floodplain management and wetlands protection; and
- (b) Prescribes planning procedures to implement the policies and requirements of the Orders and this regulation.

### § 9.16 Guidance for applicants.

- (a) The Agency shall encourage and provide adequate guidance to applicants for agency assistance to evaluate the effects of their plans and proposals in or affecting floodplains and wetlands.
- (b) This shall be accomplished primarily through amendment of all Agency instructions to applicants, e.g., program handbooks, contracts, application and agreement forms, etc., and also through contact made by agency staff during the normal course of their activities, to fully inform prospective applicants of:
  - (1) The Agency's policy on floodplain management and wetlands protection as set out in § 9.2;
  - (2) The decision-making process to be used by the Agency in making the determination of whether to provide the required assistance as set out in § 9.6;
  - (3) The nature of the Orders' practicability analysis as set out in § 9.9;
  - (4) The nature of the Orders' mitigation responsibilities as set out in § 9.11;
  - (5) The nature of the Orders' public notice and involvement process as set out in §§ 9.8 and 9.12; and
  - (6) The supplemental requirements applicable to applications for the lease or other disposal of Agency owned properties set out in § 9.14.
- (c) Guidance to applicants shall be provided where possible, prior to the time of application in order to minimize potential delays in process application due to failure of applicants to recognize and reflect the provisions of the Orders and this regulation.

### § 9.17 Instructions to applicants.

- (a) **Purpose.** In accordance with Executive Orders 11988 and 11990, the Federal executive agencies must respond to a number of floodplain management and wetland protection responsibilities before carrying out any of their activities, including the provision of Federal financial and technical assistance. The purpose of this section is to put applicants for Agency assistance on notice concerning both the criteria that it is required to follow under the Orders, and applicants' responsibilities under this regulation.



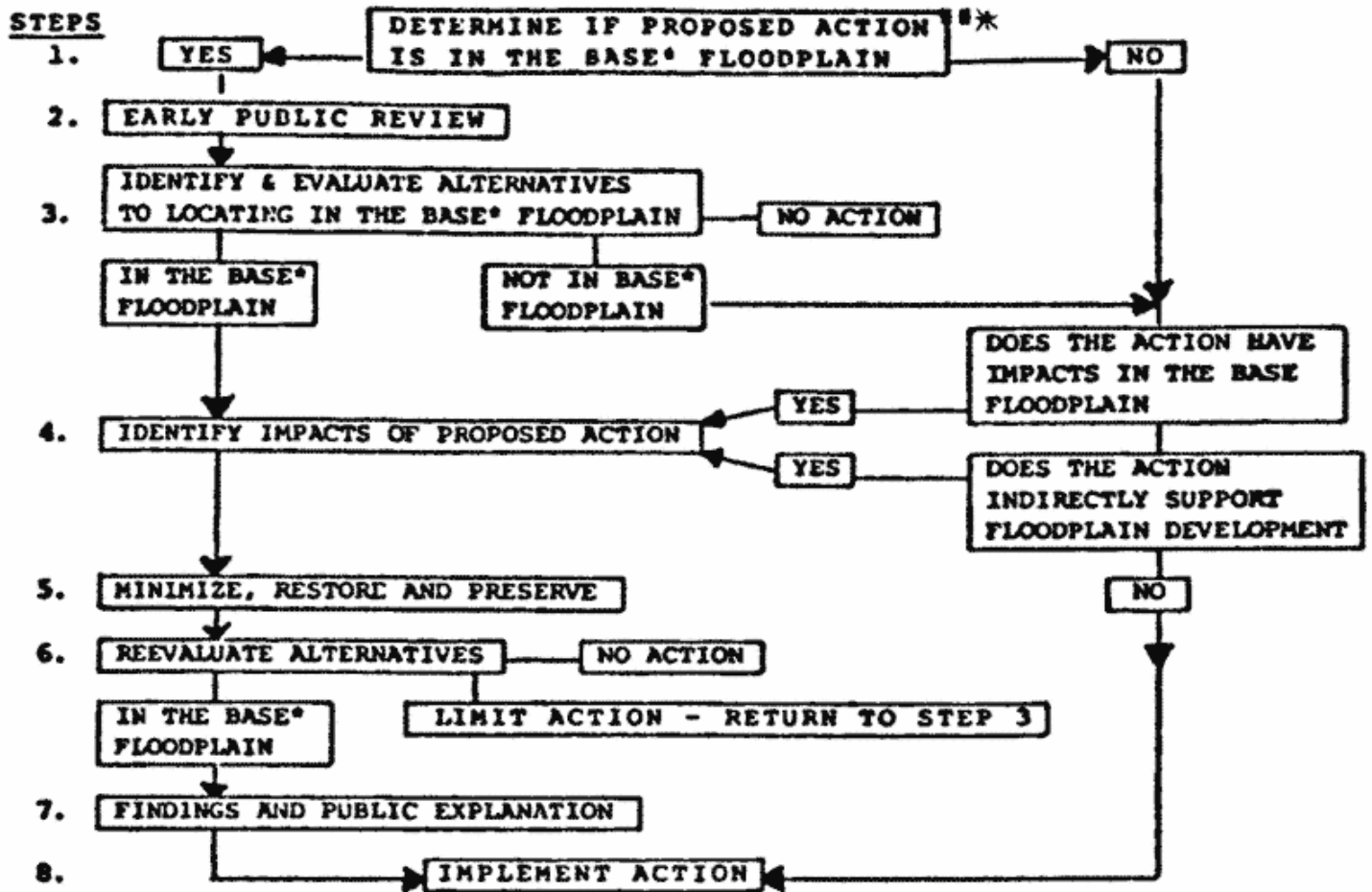
- (b) **Responsibilities of Applicants.** Based upon the guidance provided by the Agency under § 9.16, that guidance included in the U.S. Water Resources Council's *Guidance for Implementing E.O. 11988*, and based upon the provisions of the Orders and this regulation, applicants for Agency assistance shall recognize and reflect in their application:
- (1) The Agency's policy on floodplain management and wetlands protection as set out in § 9.2;
  - (2) The decision-making process to be used by the Agency in making the determination of whether to provide the requested assistance as set out in § 9.6;
  - (3) The nature of the Orders' practicability analysis as set out in § 9.9;
  - (4) The nature of the Orders' mitigation responsibilities as set out in § 9.11;
  - (5) The nature of the Orders' public and involvement process as set out in §§ 9.8 and 9.12; and
  - (6) The supplemental requirements for application for the lease or other disposal of Agency-owned properties, as set out in § 9.13.
- (c) **Provision of supporting information.** Applicants for Agency assistance may be called upon to provide supporting information relative to the various responsibilities set out in paragraph (b) of this section as a prerequisite to the approval of their applications.
- (d) **Approval of applications.** Applications for Agency assistance shall be reviewed for the recognition and reflection of the provisions of this regulation in addition to the Agency's existing approval criteria.

## § 9.18 Responsibilities.

- (a) **Regional Administrators' responsibilities.** Regional Administrators shall, for all actions falling within their respective jurisdictions:
- (1) Implement the requirements of the Orders and this regulation. Anywhere in §§ 9.2, 9.6 through 9.13, and 9.15 where a direction is given to the Agency, it is the responsibility of the Regional Administrator.
  - (2) Consult with the Chief Counsel regarding any question of interpretation concerning this regulation or the Orders.
- (b) The Heads of the Offices, Directorates and Administrations of FEMA shall:
- (1) Implement the requirements of the Orders and this regulation. When a decision of a Regional Administrator relating to disaster assistance is appealed, the Assistant Administrator for Mitigation may make determinations under these regulations on behalf of the Agency.
  - (2) Prepare and submit to the Office of Chief Counsel reports to the Office of Management and Budget in accordance with section 2(b) of E.O. 11988 and section 3 of E.O. 11990. If a proposed action is to be located in a floodplain or wetland, any requests to the Office of Management and Budget for new authorizations or appropriations shall be accompanied by a report indicating whether the proposed action is in accord with the Orders and these regulations.

[45 FR 59526, Sept. 9, 1980, as amended at 49 FR 33879, Aug. 27, 1984; 74 FR 15336, Apr. 3, 2009]

Appendix A to Part 9—Decision-making Process for E.O. 11988



\* FOR CRITICAL ACTIONS SUBSTITUTE "500 YEAR" FOR "BASE" AND FOR WETLANDS DELETE "BASE FLOODPLAIN" AND SUBSTITUTE " WETLANDS".

\*\* FOR WETLANDS "ACTION" INCLUDES "NEW CONSTRUCTION" ONLY.