

# Federal Flood Risk Management Standard (FFRMS)

May 25, 2016 (IN10434)

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## A Flood Resilience Standard for Federally Funded Projects

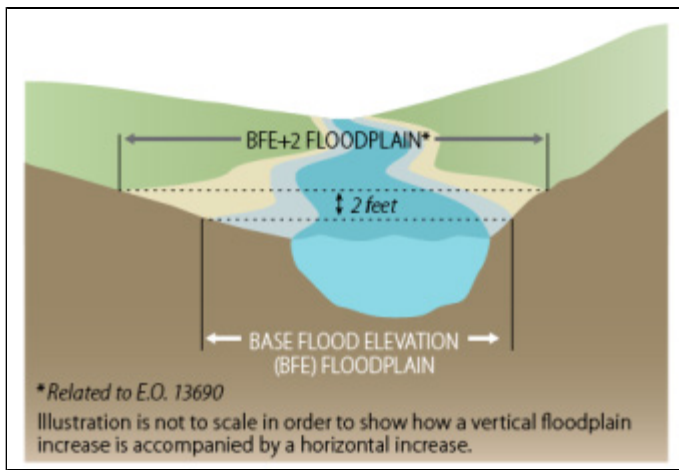
The Federal Flood Risk Management Standard (FFRMS) is the principal mechanism for accomplishing the flood risk management policies established by President Obama in [Executive Order \(E.O.\) 13690](#). E.O. 13690 aims to improve the resilience of communities and federal assets against the impacts of flooding. The FFRMS is a flood resilience standard that is required for "federally funded projects." The [October 2015 FFRMS](#) defines federally funded projects as "actions where Federal funds are used for new construction, substantial improvement, or to address substantial damage to a structure or facility." A structure is defined as a walled or roofed building; a facility is a man-made or man-placed item other than a structure.

## FFRMS Floodplain Determination

For FFRMS compliance, the floodplain for federally funded projects is determined using one of three currently available approaches: freeboard value (i.e., 2 feet above Base Flood Elevation [BFE], where BFE is the 1% annual chance floodplain [BFE+2]); 500-year floodplain; or climate-informed science. Collectively, these approaches are referred to herein as the "FFRMS floodplain." The FFRMS floodplain in most cases will be wider than the BFE floodplain. The BFE and the freeboard value approach are illustrated in [Figure 1](#). For "critical actions," the freeboard value approach is BFE+3. A critical action is an activity for which even a slight chance of flooding would be unacceptable (e.g., prisons).

## Figure 1. Illustration of FFRMS Floodplain Determination

Using 2-Foot Vertical Increase Above Base Flood Elevation



**Source:** CRS.

**Notes:** Topography will largely determine the difference in the horizontal width of the BFE floodplain and the FFRMS floodplain.

### FFRMS Requirements

The FFRMS requires the following for federally funded projects:

- identification of the FFRMS floodplain and
- design and construction of structures and facilities located in the FFRMS floodplain to be flood resilient.

The FFRMS does not include a requirement to elevate a structure or facility. Instead, the required resilience can be achieved by a variety of means including, but not limited to, structural elevation.

The FFRMS also requires, consistent with E.O. 13690, that federally funded projects use where possible natural systems, ecosystem processes, or nature-based approaches (i.e., designs that mimic natural processes) during development of project alternatives.

Consistent with E.O. 13690, the FFRMS provides that an agency or department may exempt particular activities and facilities from the FFRMS requirements for national security, emergency actions, and federal facilities for which the requirements are demonstrably inappropriate.

### Public Comments and Agency Clarifications

A FFRMS was first published with E.O. 13690 in January 2015; it was superseded by the [October 2015 version](#).

[Public comments](#) collected in early 2015 on the implementing guidelines for E.O. 13690, which reflected the [January 2015 version of the FFRMS](#), included concerns regarding the potential impact on the National Flood Insurance Program (NFIP) of the Federal Emergency Management Agency (FEMA) and the regulatory programs of the U.S. Army Corps of Engineers (USACE), including its Clean Water Act permits.

FEMA released a [fact sheet](#) stating that "The FFRMS will not change the minimum floodplain management criteria ... that communities must adopt in order to participate in the NFIP for flood prone areas, FEMA's flood mapping standards, or the rating and claims practices of the NFIP." However, other aspects of the NFIP or other FEMA programs, such as public assistance and hazard mitigation grants that may qualify as federally funded projects under the FFRMS, will be altered to comply with E.O. 13690 and the FFRMS.

USACE clarified the applicability of E.O. 13690 and the FFRMS in a [fact sheet](#) by stating that regulatory program

activities "are not subject to Section 2(i) of E.O. 13690" and that USACE will "continue to review applications by applying the area subject to the 'base flood' as the relevant 'floodplain.'"

## FFRMS Implementation

While broad [federal implementing guidelines](#) were finalized in October 2015, individual agencies must develop or update procedures and regulations tailored to their programs before the FFRMS would affect federally funded projects. Although no general benefit-cost analysis of the FFRMS was released, benefit-cost analyses generally are part of the development of agency-specific regulations. (See CRS Report R41974, [Cost-Benefit and Other Analysis Requirements in the Rulemaking Process](#), coordinated by Maeve P. Carey.) Given the FFRMS definition of federally funded projects, numerous agencies may have to update their procedures and regulations to reflect new FFRMS requirements. These include the activities of the Departments of Agriculture, Defense, Energy, Health and Human Services, Homeland Security, Housing and Urban Development, the Interior, and Transportation; the Environmental Protection Agency; and the General Services Administration.

Congress has provided direction on the implementation and development of the FFRMS through provisions in appropriations acts. Section 749, Division E, of [P.L. 113-235](#), prohibited the expenditure of FY2015 funds to implement the FFRMS until input was solicited and considered from stakeholders.

In the [explanatory statement](#) accompanying FY2016 appropriations legislation ([P.L. 114-113](#)), Congress mentioned concerns over the development process for the FFRMS; it identified both a "lack of clarity as to which specific programs and activities will be affected, and the uncertainty related to how each agency will implement the new standard." For FY2016, Section 750, Division E, of [P.L. 114-113](#) prohibits, among other activities, the implementation or enforcement of E.O. 13690 and the FFRMS on nongrant components of the NFIP, and any changes in the "floodplain" considered for USACE regulatory programs. Except for the activities prohibited, such as making any changes to flood insurance purchase requirements, agencies could proceed with FFRMS implementation in FY2016.

Provisions related to FFRMS implementation are being debated as part of the FY2017 appropriations process. The discussion has included whether to congressionally mandate additional agency actions before implementation of E.O. 13690 and before the FFRMS could proceed (e.g., analyses of costs and benefits and public hearings). Congressional direction in appropriations acts or other legislation may affect the requirements for, pace of, and cost of FFRMS implementation during FY2017 and beyond.