

May 27, 2015

## E.O. 13690 and the Federal Flood Risk Management Standard

President Obama issued Executive Order (E.O.) 13690 on January 30, 2015, to improve the nation's resilience to floods and manage federal disaster recovery costs. It requires federal agencies to update their procedures and regulations related to federal investment and other actions in floodplains. E.O. 13690 amended a 1977 order on floodplain management, E.O. 11988. The amendments added a Federal Flood Risk Management Standard (FFRMS) and new approaches to use in determining the floodplain for E.O. 11988 compliance. Public comment on draft implementing guidelines for the amended E.O. 11988 ended May 6, 2015 (see FR Doc. 2015-02284). The Water Resources Council (WRC) is to issue the final guidelines. Affected agencies have until June 6, 2015, to develop plans for updating agency-specific procedures; the agency update processes are anticipated to provide additional public comment opportunities. Congress is weighing whether to influence E.O. 13690 and FFRMS implementation. It can influence implementation through oversight and authorization, appropriations, and other legislation.

### E.O. 11988

E.O. 11988 remains the framework for federal agencies to avoid or minimize actions in or impacting floodplains. E.O. 11988 defines "action" as any federal 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.

For E.O. 11988, the floodplain had been defined as the 1% annual chance floodplain (i.e., 100-year floodplain), which is known as the base flood elevation (BFE) floodplain. Implementing guidelines from 1978 had established use of the 0.2% floodplain for critical actions (i.e., the 500-year floodplain). A critical action is any activity for which even a slight chance of flooding would be too great (e.g., prisons). Section 3 of E.O. 11988 established specific requirements for federal real property and facilities. For new construction or major rehabilitations, agencies were to (1) use accepted floodproofing and other flood protection measures for structures and facilities, and, (2) wherever practicable, elevate structures above the BFE floodplain. A structure is a walled or roofed building; a facility is a man-made or man-placed item other than a structure.

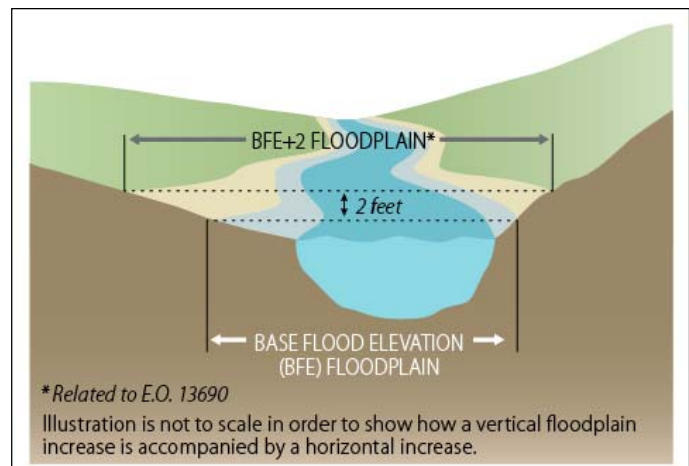
### E.O. 13690

While E.O. 13690 maintained the federal actions covered under E.O. 11988, it changed how the floodplain is

determined. The order also requires use of natural systems, ecosystem processes, or nature-based approaches (i.e., human designs that mimic natural processes) where possible during development for alternatives for federal actions in the floodplain.

E.O. 13690 requires agencies to determine the floodplain using one of three currently available approaches: freeboard value, 500-year floodplain, or climate-informed science. Collectively these approaches are referred to herein as the "E.O. 13690 floodplain." The E.O. 13690 floodplain in most cases will be wider than the BFE floodplain. The FFRMS provides details regarding how to select and apply each approach. In the near term, for many federal actions, the most common approach to determine the E.O. 13690 floodplain may be the freeboard value approach, which is 2 feet above BFE (BFE+2), as illustrated by **Figure 1**. For critical actions, the freeboard value approach is BFE+3.

**Figure 1. Illustration of E.O. 13690 Floodplain Determination Using 2 Foot Vertical Increase**



Source: CRS.

Notes: Topography will largely determine the horizontal increase.

E.O. 13690 amends Section 3 of E.O. 11988 to use the E.O. 13690 floodplain for the floodproofing and elevation requirements for federal real property and facilities. E.O. 13690 and the FFRMS indicate that a similar structural elevation requirement applies to federally funded actions. The final guidelines and updates of agency procedures are anticipated to clarify which new construction and major rehabilitations of structures are required to have their elevations in compliance with the FFRMS.

### Agency Implementation

Given the federal action definition, numerous departments, agencies, programs, and projects that are covered by E.O. 11988 also may be affected by the amendments and

requirements in E.O. 13690 and the FFRMS. These include the activities of the Departments of Agriculture, Defense, Energy, Health and Human Services, Housing and Urban Development, the Interior, and Transportation; the Environmental Protection Agency; the General Services Administration; and NASA. Under E.O. 13690, an agency or department may “except” (i.e., exempt) particular activities from the E.O. 13690 floodplain for national security, emergency actions, and federal facilities for which it is demonstrably inappropriate. What is known and what remains uncertain regarding agency-level implementation of E.O. 13690 and the FFRMS varies depending on the extent that publicly available documents address various topics. **Table 1** addresses select topics related to the Federal Emergency Management Agency (FEMA) and U.S. Army Corps of Engineers (Corps).

## Other Implementation and Policy Topics

The Administration conducted listening sessions in March and April 2015 on FFRMS implementation. Topics that may be clarified in the final guidelines or in agency procedures include “grandfathering” of ongoing projects and implementation oversight. Regarding grandfathering, many infrastructure projects take years or decades to plan and construct. For many activities, E.O. 11988 compliance has been met as part of National Environmental Policy Act (NEPA) compliance. Regarding oversight, E.O. 11988 has been policy since 1977, but the extent to which it was followed in recent decades is unclear. When E.O. 11988 was signed, the Water Resources Council was active in coordinating and overseeing executive branch water activities. With the WRC largely inactive since 1983, there has been limited oversight of E.O. 11988 implementation beyond floodplain considerations being incorporated within NEPA documents.

The Administration’s position is that E.O. 13690 and the FFRMS are in the interest of national security and consistent with the Administration’s Climate Action Plan. The Office of Management and Budget released a statement on the order’s budget impacts indicating that its implementation is anticipated to increase federal costs but that effects on federal obligations and outlays will depend on appropriations. It cited the order’s benefits as increasing resilience against flooding and helping to preserve the natural values of floodplains. No comprehensive benefit-cost analyses of E.O. 13690 and the FFRMS (e.g., analysis that evaluates anticipated effects and their distribution across stakeholders in the near term and long term) is required or has been released. Benefit-cost analyses may be part of the update processes for agency-specific regulations. Whether the ongoing development process provides sufficient opportunities to satisfy the requirement in the Consolidated and Further Continuing Appropriation Act of FY2015 (P.L. 113-235) for input by governors, mayors, and other stakeholders is a subject of debate.

Numerous states and communities have established freeboard requirements within their jurisdictions. Therefore, any structural elevation requirement emanating from the FFRMS would be part of a preexisting collage of state and

local freeboard and floodplain requirements. That is, the structural elevation for FFRMS compliance may be less, equal, or more than is required locally.

**Table 1. Select Questions Raised by E.O. 13690 and FFRMS for FEMA and Corps**

Agency/Department, Program, and Questions
<p><i>FEMA: Disaster Assistance and Mitigation Programs</i></p> <p>How does E.O. 13690 affect FEMA’s emergency response programs? The E.O. does not apply to emergency work undertaken with the authority of Stafford Act, Section 403.</p> <p>How does this affect other Stafford Act sections? FEMA’s permanent work to repair and restore facilities, Section 406 of Stafford, is covered by E.O. 13690. This would include any mitigation activities within a Section 406-funded project. FEMA regulations do not contemplate rebuilding of any facilities unless they are more than 50% damaged.</p> <p>Does the FFRMS apply to FEMA mitigation programs? As with E.O. 11988, E.O. 13690 covers Section 404, FEMA’s Hazard Mitigation Grant Program (HMGP); Section 203, the Pre-Disaster Mitigation Program (PDMP); and the Flood Mitigation Assistance (FMA) Program, which is a part of the National Flood Insurance Program (NFIP).</p>
<p><i>FEMA: National Flood Insurance Program</i></p> <p>The NFIP uses the 100-year flood to indicate Special Flood Hazard Areas (SFHA), as well as a minimum flood level to be addressed by a community’s floodplain management ordinances. FEMA stipulates that these ordinances require the first floor of newly constructed buildings in SFHA to be at least at BFE. E.O. 13690 does not trigger an update of these local ordinances. According to the Council on Environmental Quality in its fact sheet, “Taking Action to Protect Communities and Reduce the Cost of Future Flood Disasters,” E.O. 13690 and the FFRMS are not anticipated to directly affect NFIP standards or rates. One question that is anticipated to be addressed in agency-specific regulations is: could there be indirect NFIP impacts if FEMA amends FEMA regulations at 44 C.F.R. §9, Floodplain Management and Protection of Wetlands (which were developed in response to E.O. 11988) to address E.O. 13690?</p>
<p><i>U.S. Army Corps of Engineers Projects, Repairs and Permits</i></p> <p>Because Corps civil works are often in floodplains, several questions arise. For example, does E.O. 13690 create a minimum design standard for Corps coastal storm damage reduction projects? To comply with E.O. 11988, the Corps regulatory program is to avoid both significant adverse impacts associated with floodplain occupancy and floodplain development whenever practicable. Do E.O. 13690 and its floodplain determination for E.O. 11988 create new requirements for the regulatory program?</p>
<p><b>Source:</b> CRS.</p>
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