October 21, 2016

Via electronic submission at www.regulations.gov

Regulatory Affairs Division
Office of Chief Counsel
Federal Emergency Management Agency, 8NE-1064
500 C Street, SW
Washington, DC  20472-3100

Docket ID FEMA-2015-0006

Updates to Floodplain Management and Protection of Wetlands Regulations to Implement Executive Order 13690 and the Federal Flood Risk Management Standard; Proposed Rule

Guidance for Implementing the Federal Flood Risk Management Standard; Notice of Availability; request for comments

Proposed Rule; notice of data availability

Dear Sir or Madam,


We appreciate the opportunity to provide these comments and look forward to continued involvement in the discussion to address critical flood hazard reduction measures nationwide. We acknowledge the need to continually develop and advance cost-effective, fact-based approaches to improve flood hazard reduction and natural resource protection. However, we have significant concerns about the proposed rule and its far-reaching outcomes for a diverse mix of water resources, transportation, and energy infrastructure needs across the United States.

Generally, this FEMA notice of proposed rulemaking is the first agency action government-wide to implement the FFRMS. As such, great care must be taken to ensure that any final rules are clear and consistent, and safeguard the due process protections provided by the Administrative Procedure Act. More specifically, we are concerned about FEMA FFRMS implementation-related compliance costs, regulatory precedent, regulatory uncertainty and conflict, reporting requirements, and project delivery delays. We are particularly concerned with the cumulative impact of these consequences on disaster recovery and the long-term success and vitality of coastal and riverine communities across America.

I. **Description of Undersigned Organizations**

FAIR is a nonprofit, nonpartisan coalition organized by local communities, flood control practitioners, and businesses within coastal and riverine areas to promote consensus, practicable and fact-based flood hazard reduction policies for the betterment of public safety, economic development, and natural resource preservation.

NWC, established in 1960, is dedicated to a greater understanding of the widespread public benefits of our nation’s water resources infrastructure. Our mission is to effect common sense policies and programs, recognizing the public value of our nation’s water resources and their contribution to public safety, a competitive economy, national security, environmental quality and energy conservation. Conference membership is comprised of the full spectrum of water resources stakeholders, including flood control associations, levee boards, waterways shippers and carriers, industry and regional associations, port authorities, shipyards, dredging contractors, regional water supply districts, hydropower producers, engineering consultants, and state and local governments.

EEI is the association of U.S. investor-owned electric companies. EEI members represent approximately 70 percent of the U.S. electric power industry, provide electricity for 220 million Americans, operate in all 50 states and the District of Columbia, and directly employ more than 500,000 workers.

II. **Background**

Executive Order (EO) 13690 was issued by President Obama on January 30, 2015, to amend the 1977 EO 11988 issued by President Carter. EO 13690 requires federal agencies to update their policies related to federal actions in floodplains. It also established the FFRMS and a new floodplain definition for determining the new increased vertical flood elevation and
corresponding, expanded horizontal floodplain for proposed federally funded projects. The President’s stated objective in issuing EO 13690 was to “improve the Nation’s resilience to current and future flood risk.” EO 13690 further states that “it is the policy of the United States to improve the resilience of communities and Federal assets against the impact of flooding.”

To achieve that goal, EO 13690 sets forth four new approaches for federal agencies to use in establishing the “FFRMS floodplain,” within which proposed federally funded structures and facilities must utilize structural or non-structural methods to be resilient to higher vertical flood elevations that are anticipated in the future as a potential consequence of climate change. These four approaches replace the preexisting 100-year base flood elevation (BFE) standard, with one or more of the following elevation and flood hazard area determination approaches: (1) Climate-informed Science (CISA) that “uses the best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science” 81 Fed. Reg. 57433; (2) Freeboard Value (FVA) that is reached “by adding an additional 2 feet to the base flood elevation for non-critical actions and by adding an additional 3 feet to the base flood elevation for critical actions” 81 Fed. Reg. 57433; (3) 0.2 Percent Annual Chance Flood (0.2PFA) that is “the area subject to flooding by the 0.2 percent annual chance flood” 81 Fed. Reg. 57433; and (4) “an elevation and flood hazard area using any other method identified in an update to the FFRMS.” 81 Fed. Reg. 57433.

As noted in the NWC et al., comments submitted on May 5, 2015, in response to the February 5, 2015, notice by FEMA seeking comments on the proposed “Revised Guidelines for Implementing Executive Order 11988, Floodplain Management,” 80 Fed. Reg. 6530 (hereinafter referred to as the May 5 comments), it would be entirely appropriate, and good policy, to examine the 100-year BFE to ascertain whether that standard continues to provide the level of safety and protection that is needed to maximize cost-effective flood protection for communities and federal assets. We further noted that if it is determined, after a careful review, that the 100-year BFE standard does not now, nor will it in the future, provide cost-effective protection levels, then the determination of a new standard ought to include an open and transparent dialogue with state and local officials and all impacted stakeholders.

In the current proposed rule, in discussing the release of EO 13690 and the FFRMS, FEMA asserts that the Mitigation Framework Leadership Group (MitFLG) developed the FFRMS “reflecting the best available science, lessons learned, and input and recommendations gathered from the [Superstorm] Sandy Task Force, the Climate Action Plan, and the Climate Task Force.” 81 Fed. Reg. 57406.

However, as discussed in more detail in the May 5th comments, critical features of the FFRMS were established behind closed doors with no public input. The decision by the federal government to seek comment only on implementation of the FFRMS was simply an after-the-fact exercise with no opportunity for the public to weigh in on the underlying regulatory approaches. No actionable scientific information or practicable engineering approaches -- at that time or now with this proposed rulemaking -- have been provided to explain the process for selection of the increased vertical elevations and corresponding, expanded horizontal floodplain alternatives in EO 13690 or the Standard. Moreover, there has been no disclosure within EO 13690, the Standard, the final Implementing Guidelines (October 8, 2015), or this proposed
rulemaking, of comprehensive cost-benefit analyses to inform the public or quantify FFRMS effects on flood hazard reduction and floodplains and the distribution across stakeholders of costs and benefits in the near and long term.

To the contrary, as a part of the proposed rulemaking, FEMA solicited the public in at least two separate instances for information, strategies, and studies to help the government justify estimated costs of the proposed rule. In doing so, FEMA has recognized that “elevating buildings as a flood damage mitigation strategy will likely have a negative impact on affected communities’ disabled and elderly populations” and present challenges meeting the requirements under the Fair Housing Act, the Americans with Disabilities Act, the Architectural Barriers Act, and §504 of the Rehabilitation Act of 1973. The agency then seeks to overcome those deficiencies and invites comments “on strategies it could employ to increase the accessibility of properties so affected” and on the “costs and benefits of such strategies, including data that supports the costs and benefits.” 81 Fed. Reg. 57412. In addition, in discussing speculative economic benefits associated with use of freeboard for diverse categories of projects, including non-residential structures, retrofitting substantial improvement projects [in coastal floodplains and non-coastal floodplains], and new construction projects in non-coastal floodplains, FEMA writes that “if [it] receives additional information that informs an estimate of the monetized benefits of freeboard to a broad range of structures, [it] may provide a monetized estimate of benefits in the final rule.” 81 Fed. Reg. 57426.

FEMA’s description of the FFRMS as a “flexible framework” does not overcome these deficiencies. Regulatory benefits associated with “flexibility” in this context would appear to be reserved solely for federal agencies and future government-wide generation of ever-evolving flood “resilience” and land management requirements that may not be based on relevant, unbiased or reliable data, and thus are not transparent, intelligible or predictable for the regulated public. For the reasons explained below in more detail, these failures result in a proposed rule that is vague and speculative, as well as arbitrary and capricious, and therefore fails to comply with the requirements of the Administrative Procedure Act.

III. Specific Concerns with Proposed Rule

Scope and Applicability

The final guidelines to implement EO 13690 and the FFRMS purportedly make a distinction between federal agency actions and proposed federally funded projects. Actions are defined as “any of the following Federal activities: (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.” Federally funded projects are defined as “actions where Federal funds are used for new construction, substantial improvement, or to address substantial damage to structures and facilities.” The final guidelines further state that the “minimum standard for Federal actions that are not federally funded projects is the 1-percent-annual-chance flood elevation and corresponding horizontal floodplain for noncritical actions. Agencies should continue to use the
0.2-percent-annual-chance flood elevation and corresponding horizontal floodplain for critical actions.” Federally funded projects will utilize the approaches for determining the vertical flood elevation and corresponding horizontal floodplain described in the FFRMS.

Despite this apparent distinction between federally funded projects subject to EO 13690 and the FFRMS, and actions which would continue to be subject to the elevations in Executive Order 11988, concerns remain about applicability and scope of the FFRMS. First, throughout the notice of proposed rulemaking, FEMA uses “projects” and “actions” interchangeably in numerous instances. This could lead to ambiguity, conflict, confusion, and uncertainty as to when the FFRMS should apply and when the EO 11988 standard should apply. We urge FEMA to ensure the final rule makes explicitly clear which standard applies and in what instances. That is, the FFRMS applies only to federally funded projects as defined in the proposed rule, consistent with the definition in the FFRMS.

This inconsistency stems from the language in the final implementing guidelines themselves (p. 3), which provides that “The minimum standard for Federal actions that are not federally funded projects is the 1-percent-annual-chance flood elevation and corresponding horizontal floodplain for noncritical actions.” (emphasis added). That qualifier – the minimum standard – does not require adherence to the EO 11988 standard for actions that do not fall within the proposed rule’s definition of federally funded projects. Rather, this language leaves the door wide open for application of the FFRMS-increased elevation and corresponding, expanded horizontal floodplain to any action. As a consequence, neither FEMA nor any other federal agency is constrained by the claimed limitation and distinction between “federally funded projects” and “actions.” In practical application then, this means that any agency is free to apply the FFRMS to paragraph (3) of the definition of action: “conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities.” This result would subject wholly private activities to new, additional and burdensome federal reviews of proposed activities and siting alternatives.

Such an outcome would be contrary to FEMA’s public assurances regarding the FFRMS in the context of this proposed rule, and during the numerous nationwide listening sessions conducted by FEMA in 2015, that application of the FFRMS would be limited to federally funded projects. These casual references to “projects” and “actions” and “minimum” standards must be corrected in the final rule to avoid the new higher flood elevations being misapplied to non-federally funded activities.

Assertion that FFRMS Implementing Guidelines Are Advisory

The final Implementing Guidelines state that the guidelines are advisory, and that they do not create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States. As explained in our May 5th comments, these characterizations notwithstanding, the EO, FFRMS, and now this proposed rulemaking, impose new substantive requirements on the American public. Moreover, FEMA seeks to essentially codify the guidelines through this rulemaking process, thereby giving them the force of law. It is similarly problematic that the FFRMS, which is intended to be updated periodically, could be updated
without FEMA, or any other agency, being required to update its rules or procedures through a lawful process under the APA. This approach would violate the APA and we urge FEMA to remove the definition of “FFRMS” from the final rule.

Requirement to use nature based solutions

The discrepancies and inconsistencies concerning the scope of the FFRMS are further exacerbated by the treatment of the usage of “nature-based solutions.” Step 3 of the 8-step process utilized to determine whether EO 11988 applies requires the identification and evaluation of “practicable” alternatives. “Practicable” is defined in the current regulations as “capable of being done within existing constraints. The test of what is practicable depends on the situation and includes consideration of all pertinent factors, such as environment, cost and technology.” 44 CFR § 9.4.

EO 13690 and the proposed rule require agencies to use nature-based approaches where possible. 81 Fed. Reg. 57414. EO 13690 requires that “agencies use, where possible, natural systems, ecosystems processes, and nature-based approaches in the development of alternatives for Federal actions in the floodplain.” 81 Fed. Reg. 57414. The proposed rule defines “nature-based approaches” as the “features (sometimes referred to as ’green infrastructure’) designed to mimic natural processes and provide specific services such as reducing flood risk and/or improving water quality. Nature-based approaches 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.” 81 Fed. Reg. 57416.

The mandate to use nature-based solutions whenever possible presents fundamental problems. First, this requirement discards the long-standing and pragmatic approach of evaluating alternatives that are practicable – that is, those that are achievable, feasible and possible. In stark contrast, this new requirement to use such approaches whenever possible sets up an unworkable construct, not guided by relevant factors such as cost, environment and technology. The logical effect would be to cease any needed development.

In addition, FEMA proposes to add the requirement to use natural systems, ecosystem processes, and nature-based approaches in the development of alternatives for all federal actions. 81 Fed. Reg.5 7418, 57435. (emphasis added) This broad approach goes well beyond the assertion that EO 13690 and the FFRMS apply only to federally funded projects. Instead, this requirement to use nature-based solutions whenever possible applies to paragraph (3) of the definition of action: “conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities” regardless of cost, feasibility, and capability. In the final rule, FEMA must amend the application of nature-based solutions to situations where it would be practicable, in accordance with sound economic principles and consistent with the Federal government’s assurances that the FFRMS applies only to federally funded projects.
Lack of Data to Support Proposed Rule

The newly expanded floodplain determination approaches of EO 13690, the FFRMS, Implementing Guidelines, and proposed rule are being promulgated without comprehensive cost-benefit analysis. 81 Fed. Reg. 57426. This is a profound failure given the sweeping applicability to newly increased numbers of Federal, state, local and some wholly non-federal actions. Establishment of an unjustified, arbitrary Standard is in direct conflict with Executive Order 13563, Improving Regulation and Regulatory Review, which specifies the need for our regulatory system to:

- Allow for public participation and an open exchange of ideas;
- Promote predictability and reduce uncertainty;
- Identify and use the best, most innovative, and least burdensome tools;
- Take into account benefits and costs, both quantitative and qualitative; and
- Ensure that regulations are accessible, consistent, written in plain language, and easy to understand.

Numerous critical data and information gaps raise questions about the fundamental practicability of the EO and Standard. Reliable compliance cost estimates and other traditional regulatory impact information are absent from this proceeding. No existing mapping sources are suitable to form the basis of the FFRMS floodplain as a consequence of: (a) the degree of uncertainty in the underlying data (e.g., FEMA 500-year floodplain boundaries); (b) the lack of sufficient geographic coverage; and (c) the lack of ability to predict at the local level with any certainty the effects of climate change on flood hazards.

In discussing determination of the corresponding horizontal extent of the FFRMS floodplain, FEMA acknowledges that “there are no federally produced maps depicting the boundary of the FFRMS-floodplain established by the FVA or CISA, and FEMA maps depicting the 0.2 percent annual floodplain are only available in some areas.” 81 Fed. Reg. 57412. Nevertheless, the agency attempts to provide an estimate of FFRMS-expanded floodplain areas nationwide using the FVA relative to the 100-year floodplain: “FEMA has estimated that the freeboard requirements would expand the floodplain by 16.8 percent based on studies conducted in 24 U.S. counties with varied topography.” 81 Fed. Reg. 57428. This appears to be a misleading statement. A review of the Regulatory Evaluation for Notice of Proposed Rulemaking that accompanies the proposal reveals that the agency’s 16.8 percent estimate is based on only 20 counties for which FEMA had data, not 24 counties. Further, the counties included in the assessment are not of “varied topography,” but rather, they all are coastal counties from only 6 states. No similar estimates are provided for riverine area floodplain expansion and there are no equivalent estimates for inland states. The Regulatory Evaluation data and methods used to produce the estimate are insufficient and significantly underestimate anticipated nationwide FFRMS floodplain area increases as the county sample size is neither

---

adequate nor representative of the variability found nationwide in 3,144 counties and county equivalents across the U.S.²

This is a fundamental flaw given the importance of topography for flooding and floodplain area determinations. FEMA recognizes this reality in the proposed rule: “the amount of the increase in the horizontal extent of the…floodplains will depend upon the topography of the area surrounding [a given] location.” Areas with “relatively flat topography on either side of the flooding source . . . channel” have different flooding dynamics and floodplain characteristics relative to “areas with steep topography on either side of the flooding source channel.” Because of this, “the horizontal increase to the floodplain will not be uniform when applying the same increase [in elevation] to establish the FVA and will vary depending on local topography.” ⁸¹ Fed. Reg. 57407-57408, Illustrations A and B.

We recommend that FEMA address these critical data issues before making the rule final in order to inform the public about the anticipated geographic scope of the new requirements. Reliable estimates of FFRMS floodplain expansion can only be formulated by using an appropriate (larger) sample size that captures the variability of floodplain topographies nationwide. Currently, the FEMA estimates are unsupported and unreliable.

Moreover, available and actionable science does not support the development of a single, nationwide, riverine flood risk management standard that incorporates climate change. The inability to consistently estimate future climate-impacted riverine flooding and the difficulty associated with accounting for future uncertainties in coastal flood modeling are significant impediments for effective implementation of the FFRMS, with or without the alternate FVA and 0.2PFA approaches.

While the usefulness of effective flood hazard reduction is readily acknowledged, it is not cost-free for local communities, the federal government, or economic development activities occurring within floodplain areas. FEMA’s failure to substantiate the proposed rule with a thorough evaluation of its costs and benefits is a violation of the Administrative Procedure Act. As a consequence, the proposed rule must be set aside until such time that it can be supported by a valid cost-benefit analysis.

Definition of Critical Action

The definition of “critical action” is unclear. We recommend that additional clarity be provided by production of a list of activities that will typically be considered critical in nature. Further, it is not clear which federal agency will be responsible for determining what a “critical action” is, which can lead to inconsistent critical action criteria for projects.

IV. Anticipated Impacts

The proposed rule will require expanded project scope with additional developmental processes that can be expected to significantly increase initial and long-term project costs with negative impact on the delivery of necessary water control facilities, including levees and floodwalls, drainage channels, storm water retention and detention basins, coastal shoreline protective devices, and interior drainage pumping facilities, as well as other facilities located in floodplain areas. The proposed rule will add costs to and delay project development, for example, in the form of additional labor costs by requiring additional processes for determining water surface elevations, analyzing alternatives, and fulfilling the requirement to consider nature-based approaches for all Federal actions. The proposed rule will increase construction costs and long term inspection and maintenance costs. It will also increase workloads by increasing the number of floodplain areas needing mitigation and permit requirements and environmental review processes. There will also be an increase in reporting related to the studies that show the nature-based approaches or CISA processes that practitioners will need to develop and submit to FEMA for approval.

Affected stakeholders will also incur significantly higher project costs because the proposed rule’s process for meeting the new elevation standards will in many cases require larger structures, footprints, increased construction material quantities, and expanded rights of way. Additionally, CISA is an emerging concept that cannot now be consistently or uniformly implemented. 81 Fed. Reg. 57411. State and local practitioners do not have uniform or consistent methodologies for use of CISA in the design of water control and other facilities and structures.

The economic consequences of increased project costs will restrict the number of projects that can be implemented. Moreover, compliance with overly conservative FFRMS designs will require funds that could otherwise be used on other much needed projects, putting additional burdens on local communities with already constrained budgets. These concerns would be compounded by the increased compliance costs associated with the EPA-Corps Clean Water Act jurisdictional “Waters of the United States” rule currently under judicial review.

V. Water Resources Council

In the notice of proposed rulemaking, FEMA states that EO 11988 requires agencies to consult with the Water Resources Council in the preparation of procedures to implement the FFRMS and EO 13690. 81 Fed. Reg. 57404. As explained at length in our comments in response to the draft implementing guidelines, the Water Resources Council (Council) may not lawfully conduct federal business because Congress took purposeful action to defund this body, and it is not lawful to use the funds or resources of other agencies to conduct Council business. In addition, there are specific procedural and public participation requirements in both the Council’s organic statute and regulations and in other laws of general applicability. The
Administration has effectively ignored those requirements and, in so doing, has violated federal law and the rights of water resources stakeholders.


Thank you for the opportunity to provide comments. For further information, please contact Dan Delich at FAIR at (214) 707-8772 or dan.delich@sbcglobal.net.

Sincerely,

Dan Delich

Dan Delich
Floodplain Alliance for Insurance Reform