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Wednesday, May 6, 2015

Federal Emergency Management Agency
500 C Street SW
Washington, DC 20472

RE: Docket ID FEMA-2015-0006

Comments on the Revised Guidelines (Guidelines) for Implementing Executive Order 11988, Floodplain Management.

The Natural Hazards Mitigation Association, Inc. (NHMA) represents State and local officials and other practitioners who are engaged in all aspects of Hazard Mitigation.

For information on NHMA, our website home page is:
<http://nhma.info/>

The Natural Hazard Mitigation Association (NHMA) applauds all involved in the long and arduous process of updating Executive Order 11988 and the leadership demonstrated by issuing Executive Order 13690. The approach taken by the Executive Order and the new National Flood Risk management Standards has the potential to significantly reduce the risk of flooding to federally owned and financed buildings. We would also like to take this opportunity to express our sincere and heartfelt appreciation to the agency representatives who drafted the FFRMS and implementing guidelines for a job well done.

While we strongly support EO 13690, we think that the Draft Flood Risk Management Standards should be strengthened and the coverage of those standards should be broadened to include all forms of federal investment, including federally insured, regulated or supervised mortgages, through Agency implementation of existing Executive Orders by adopting upgraded minimum property and underwriting standards.

NHMA would also like to make the following comments regarding flood risk management through the National Flood Insurance Program (NFIP) and existing FEMA programs:

1. We believe that stronger floodway standards are required, including strong discouragement of fill in the floodplain.

2. NFIP mapping and regulatory standards should be revised to take life safety, evacuation and warning into account.
3. The methodology utilized to calculate the BFE, should be revised given its applications beyond insurance risk rating, to ensure a confidence interval of no less than 95/5.
4. We recommend requiring consideration of sea level rise and climate variability over the expected life of the structure, as calculated by a reputable and generally accepted source.
5. We hope that all federal agencies will push for education on “Standard of Care” for Engineers and Architects which are based on disaster risk reduction and public safety, neither of which are fully taken into account by current codes.
6. We suggest that a review of the efficacy of the Community Rating System in reducing the risks and consequences of flooding be conducted with an eye towards simplifying participation and evaluating the success of the components which go into CRS community ratings.
- 7.) We suggest that, in general, four feet of freeboard be required unless it can be shown by an H&H study that such an amount of freeboard is not needed. If this is the case, then require a .2% standard plus freeboard which takes into account uncertainty, climate variability, and upstream development.
- 8.) In view of the repetitive flood loss problems as well as the issues with respect to Threatened and Endangered Species which take place in very small drainage areas, we recommend reconsideration of the FEMA policy of not closely evaluating flood risks in less than one square mile drainage areas,

We have the following more specific suggestions:

- a.) The FFRMS states, on Page 3, that “...Federal departments and agencies may extend the determination of substantial improvement, or the repair of substantial damage, or both, to include a cumulative determination in which Federal investments are tracked over time.” We encourage you to make this provision mandatory, not optional. Further, this provision needs to be incorporated into the implementing guidelines.
- b.) Most hydraulic models used for Flood Insurance Studies (FIS) calculate both a water surface (WS) profile and the energy grade line (EGL) for the 10-year, 50-year, 100-year and 500-year flood events. The WS is the elevation of the flood at the thalweg or centerline of the river. The EGL is the elevation of the WS plus the head loss due to velocity. The EGL is a more correct estimation of the base flood elevation (BFE) at the outer limits of the floodplain where the velocity drops to near zero and should be used to plot the flood profiles and floodplain limits, not the WS.
- c.) In those cases where a floodway is determined the flood profiles depicted in the FIS, and plotted on the FIRM for both the 100-year and 500-year flood events, should be the EGL plus the incremental difference in elevation associated with the floodway, usually 1.0 foot or less.
- d.) P. 10, Lines 375-378: Specify how will these provisions are to be enforced?
- e.) .P. 17, lines 569-570: should be amended as follows “...NFIP requirements are primarily directed towards the protection of life, health and property....”

- f.) P. 18, Lines 584-586: "...more restrictive stage rise standards that are in effect in States and Local communities take precedence over the NFIP standard..." This is a very important provision as it will support state and local land-use efforts to minimize and reduce risk.
- g.) P. 20, Lines 659-695: Require that any structure that is insurable under the NFIP that is to be leased or sold must be insured against flood damage by the lease holder or new owner as a condition of the lease or conveyance in perpetuity.
- h.) P. 22, Line 746: Modify as follows "...Unless an exception is made under paragraph (2), the floodplain shall be the higher of:"
- i.) P. 26, Lines 867-869: Consideration should be given to changing the date in the following sentence "...but agencies are allowed to operate under existing procedures until they can be revised to reflect this Order. At the latest, this revision must be accomplished by May 24, 1978. "
- j.) P. 33, Lines 1075-1076: Amend the sentence as follows "...communities may are required to adopt regulatory floodways that must be designed to carry the waters of the base flood..."
- k.) P. 39, Line 1197-1198: Revise as follows "Actions proposed in the floodway should undergo an encroachment review to determine if the action has any effect on flood flow or flood elevation the action will may cause any other problem. Once the floodway has been defined any additional obstruction within the floodway will result in some effect on flood flows or flood elevations or both. The purpose of the review should not be to determine if there is an effect, but rather the magnitude of the effect and notification of the effect to all affected property owners.
- l.) P. 40, Table 1: Suggest notation that maps depicting areas of flooding are available from USGS.

Finally, NHMA would respectfully request our organization be involved in rulemaking processes by federal agencies required by the Guidelines. Our members are subject matter experts in policy and practice in both nationally and internationally, and we collaborate continuously with our federal partners. Please let us know how our volunteers can be an asset to our partnering agencies so that we can affect much needed change in how the federal government manages its investments in areas subject to flooding.

Thank you for considering these thoughts, ideas and recommendations, and we look forward to participating in a future process that creates a Colorado that is more resilient to natural hazards.

Sincerely,

Edward A. Thomas

Edward A. Thomas Esq.

President
Natural Hazard Mitigation Association

The Natural Hazard Mitigation Association (NHMA) promotes steps to reduce the risk and consequences of natural events with a special emphasis on protecting the most vulnerable populations in our communities using a "Whole Communities" approach.

NHMA is a 501(c)(3) educational & charitable organization. Contributions are tax deductible in accordance with IRS rules and regulations.