



**FEMA**

**APR 30 2013**

MEMORANDUM FOR:

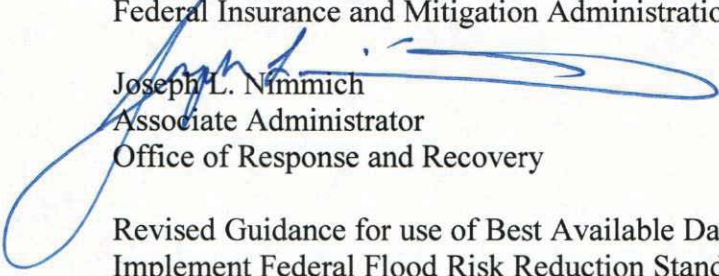
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Regional Mitigation Division Directors

Regional Recovery Division Directors

FROM:

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SUBJECT:

Revised Guidance for use of Best Available Data to  
Implement Federal Flood Risk Reduction Standards for  
Areas Impacted by Hurricane Sandy

This memorandum provides guidance on the requirement in 44 CFR 9.7(c) and Executive Order (EO) 11988 Sec. 2(a)(1) on the use of best available flood hazard information for all federally funded rebuilding undertaken as part of recovery from Sandy. This guidance supersedes the previous guidance, "Guidance for use of Best Available Data in complying with 44 CFR Part 9 and Executive Order 11988 (Floodplain Management) for Areas Impacted by Hurricane Sandy in New Jersey and New York" issued on November 16, 2012, by the Federal Insurance and Mitigation Administration and the Office of Response and Recovery. The guidance has been updated to reflect a single uniform flood risk reduction standard that will guide all federal recovery activities for Sandy-impacted areas.

On April 4, 2013, the Hurricane Sandy Rebuilding Task Force announced that the Administration has adopted a single, government-wide flood risk reduction standard for



federally-funded rebuilding undertaken as part of the recovery from Sandy. Where the elevation requirement is triggered for federal projects, the flood risk reduction standard will require that projects **elevate or otherwise flood-proof (commercial structures only) to the best available flood hazard data (e.g. FIRM, Pre-FIRM, ABFE) plus one foot of additional elevation.** All federally funded Sandy-related rebuilding projects must meet this flood risk reduction standard.

The best available data plus one standard is informed by the best science and best practices including assessments taken following Hurricane Sandy and brings the federal standard into alignment with many state and local standards already in place. It also takes into account the increased risk the region is facing from extreme weather events, sea level rise and other impacts of climate change and provides a reasonable approach for ensuring that the decision to use federal dollars for recovery should consider this increased risk.

The best available data plus one foot standard is based on the most recent available flood risk guidance FEMA has provided, whether that is the new Advisory Base Flood Elevations (ABFEs) or existing the FIRM. Recognizing that even the most recent information does not account for all possible risk, and that risk continuously changes and is expected to increase in many areas, the standard also builds in an extra buffer of one foot above the best available data to ensure long term resilience of communities. This buffer is reasonable given of the potential for larger storms than the 100-year flood, expected sea level rise, and inherent uncertainties associated with estimating flood probabilities. State and local governments are encouraged to review local conditions and needs and, where appropriate, build to an even higher standard where they are planning critical infrastructure projects and/or where flood hazards are expected to grow with time. Where state and local standards exceed this standard, Federal agencies will be guided by the higher standard.

### **Best Available Data for Affected Communities**

To ease review, a GIS data layer has been established (<http://184.72.33.183/best/>) that provides the Best Available Data for the Hurricane Sandy affected areas in New Jersey and New York. This layer will be maintained until it is superseded by new National Flood Insurance Program Flood Insurance Rate Maps adopted into local ordinances. The GIS layer will serve as FEMA's definitive depiction of the Best Available Data for the New York and New Jersey impacted areas. New data, presented after identified key decision points, will not retroactively apply. Rather, its use will be optional. As changes to the Best Available data occur, they will be archived to maintain a clear record of what information was available and when.

For areas where ABFEs are not available, FEMA must continue to ensure compliance with 44 CFR Part 9 and EO 11988 by utilizing the most recent publically available flood guidance to determine best available data.



### **NFIP Requirements for Communities on the Use of Draft or Preliminary FIS Data**

FEMA has provided guidance to communities participating in the NFIP on the use of draft or Preliminary Flood Insurance Study (FIS) data as available data for regulating floodplain development in Floodplain Management Bulletin 1-98, *Use of Flood Insurance Study Data as Available Data* (FPM 1-98). The key points for communities in using draft or Preliminary FIS data for regulating floodplain development are:

- The guidance in FPM 1-98 specifies situations in Zone A (without designated Base Flood Elevations (BFE)) where draft flood hazard data or Preliminary FISs are required to be used by communities.
- This guidance also describes how communities should use draft or Preliminary FIS data in Zones AE, A1-30, AH, AO, VE, and V1-30 (where BFEs have been identified). In these Zones, the NFIP does not require communities to use BFE data from draft data or Preliminary FIS. The reason is that the existing effective BFE data has gone through the statutory appeals process which gives the effective BFE data a presumption of validity. This is also the BFE data that has been adopted by the community. However, FEMA encourages communities to use the draft flood hazard data or Preliminary FIS if BFEs increase. In cases where BFEs decrease, communities should not use the information to regulate development until all appeals have been resolved to ensure lives and property are not placed at increased risk in case a valid appeal results in an increase in BFEs.

### **Determining Best Available Data for Recovery and Mitigation Decisions**

As recovery associated with Hurricane Sandy continues and to ensure compliance with 44 CFR Part 9 and EO 11988, it is important to understand what represents best available flood data. The best available flood risk data should be used to determine the zone, including the coastal high hazard area, and for elevation and reconstruction requirements when making recovery and mitigation decisions for FEMA grants.

What is considered best available data depends on 1) the flood hazard data adopted by the community; or 2) advisory or preliminary flood hazards data when the base flood elevation have increased or the Zone V/A line has migrated inland.

It should be expected that what constitutes best available data may change over the course of the recovery process. To be consistent with 44 CFR 9.11(d)(6), no project shall be built to a floodplain management standard that is inconsistent with the NFIP or less restrictive community floodplain management regulations. That information must be considered when making recovery decisions. In all cases, if Best Available Data is not clear, any facility or structure damaged by flooding may be considered to be in a floodplain (44 CFR 9.7(b)).



This best available data plus one standard does not retroactively affect federal aid that has previously been given to property owners and communities in the Sandy-impacted areas. It also does not impact insurance rates under the National Flood Insurance Program. Moving forward the federal standard applies to substantial rebuilding projects (e.g. when damage exceeds 50 percent of the value of the structure) that will rely on federal funding.

Use of Best Available Data for Hazard Mitigation Assistance (HMA) Projects

For HMA projects that have not been obligated as of the date of this memorandum, best available data, plus one foot, will be used as a minimum design standard unless higher elevation are required by locally adopted codes or standards.

For current HMA projects utilizing BFEs lower than was used for the BCA analysis, the BCA must be re-run to reflect the revised cost and benefits calculated for the lower elevation.

Use of Best Available Data for Recovery Projects

Per 44 CFR 9.7(c) and 9.13(d)(1) projects funded through the Recovery programs must utilize the best available flood data to guide recovery decisions. For all Public Assistance projects for which funds have not been obligated as of the date of this memo, the project must be designed using the GIS layer described above (whichever is higher or more restrictive, per 44 CFR 9.11(c)(1)) or higher elevations if they are required by locally adopted code or standards.

If you have any questions or need additional information regarding this guidance, please contact Keith Turi, Recovery Division, (202) 646-4077, or Rachel Sears, Federal Insurance and Mitigation Administration, at (202) 646-2977.

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