



Using Data from Preliminary Flood Maps

Preliminary flood hazard maps contain valuable information that can be used for floodplain management before they become effective. This fact sheet provides guidance on how these data can and should be used in accordance with the National Flood Insurance Program (NFIP) regulations, at 44 Code of Federal Regulations, Section 60.3, under specific Subparagraphs as cited throughout this document.

Background

A Flood Insurance Study (FIS) uses detailed hydrologic and hydraulic analyses to model the 1% annual chance flood event, determine Base Flood Elevations (BFEs), and designate floodways and flood risk zones (e.g., Zones AE and VE). The flood hazard data are shown in tables in a FIS Report, shown graphically as flood profiles, and portrayed planimetrically on a Flood Insurance Rate Map (FIRM).

New flood hazard information is released to the public as a preliminary FIS Report and FIRM for review and comment during a statutory 90-day appeal period. The preliminary BFE and floodway data are subject to change until a notice of final flood elevation determination is provided in a Letter of Final Determination (LFD) to the community.

Most communities participating in the NFIP have a FIRM depicting areas expected to be inundated during the 1% annual chance flood (i.e., Special Flood Hazard Areas [SFHAs]) determined by using one of two types of engineering methods: 1) detailed studies which determine BFEs, and 2) approximate studies which do not determine BFEs and are designated as Zone A.

Applicability

When land has been designated as being located in the SFHA on a community's Flood Hazard Boundary Map (FHBM) or FIRM, and no BFEs or floodway have been identified, communities are required to apply the provision contained in Subparagraph 60.3(b)(4). This provision requires that communities:

Obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source...

Communities should use preliminary flood data as criteria to require that new construction and/or substantial improvement projects are built such that the lowest floor is elevated to or above the BFE. Communities should also prohibit any encroachment in the floodway that would result in any increase in base flood levels during the occurrence of a base (1% annual chance) flood discharge event. Subparagraph 60.3(b)(4) also states that BFE or floodway data obtained should be used as long as they:

Reasonably reflect flooding conditions expected during the base flood; are not known to be scientifically or technically incorrect; and represent the best data available.
Data from a preliminary FIS constitute available data.

Use of Preliminary FIS Data

Land Currently within Zone A

For areas currently identified within a Zone A on the community's effective FHBM or FIRM, the BFE and floodway/non-encroachment data from a preliminary FIS Report constitute available data under Subparagraph 60.3(b)(4). The requirement in Subparagraph 60.3(b)(4) is an important floodplain

management tool for reducing flood damage in areas currently designated as Zone A. Communities are required to reasonably utilize the data from a preliminary FIS Report or FIRM under the section of their ordinance that applies to this Subparagraph.

When all appeals have been resolved and the LFD is issued, communities are required to use the new BFE and floodway/non-encroachment data; these data are considered to be the best data available for regulating floodplain development in accordance with Subparagraph 60.3(b)(4). This includes meeting the standards of Subparagraphs 60.3(c) and (d), such as the requirement that new construction, substantial improvements, and other development have the lowest floor elevated to or above the BFE. Communities must regulate floodplain development using the data in the preliminary FIS Report and FIRM under Subparagraph 60.3(b)(4) even before the community has officially adopted the new FIS Report and FIRM into its floodplain management ordinance.

In Zone A areas, the requirement for using BFE and floodway/non-encroachment data in a preliminary FIS Report makes sense because there is no other BFE or floodway data. Further, communities need to protect new or substantially improved structures from flood damage until the appeal period ends and the data are incorporated into local ordinances. The use of the qualifier "reasonable," contained in Subparagraph 60.3(b)(4), reflects FEMA's statutory obligation to provide the public with an opportunity to appeal proposed elevation data.

If a community decides not to use the BFE or floodway/non-encroachment data in the preliminary FIS Report and FIRM because it is questioning the data through a valid appeal, the community must continue to ensure that buildings are constructed using methods and practices that minimize flood damage in accordance with the floodplain management requirements under Subparagraphs 60.3(a)(3) and (4):

- **Review of Permit Applications:** Subparagraph 60.3(a)(3) requires communities to review permit applications to determine whether proposed building sites are reasonably safe from flooding. If a proposed building site is floodprone, communities must require that new construction and substantial improvements be adequately anchored, use flood-resistant materials, are constructed to minimize flood damages, and protect utilities during a flood.
- **Review of Proposals for New Development:** Subparagraph 60.3(a)(4) requires communities to review subdivision proposals and other proposed new development, including manufactured home parks or subdivisions, to determine whether proposed developments will be reasonably safe from flooding. Communities are required to review such proposals for floodprone areas to ensure that potential flood damage is minimized, utilities are constructed to minimize or eliminate damage, and adequate drainage is provided to reduce the exposure to flood hazards.

Land Currently within Zones AE, A1-30, VE, and V1-30

The NFIP floodplain management criteria do not require communities to use BFE and floodway data from a preliminary FIS Report or FIRM in areas designated as Zones AE, A1-30, VE, and V1-30 in lieu of using the BFE and floodway data contained in an existing effective FIS Report and FIRM. Because communities have the opportunity to appeal BFE data from a restudy, a presumption of validity is given to existing effective BFE data that have been through the formal statutory appeals process and adopted by the community. However, communities are strongly encouraged to refer to the preliminary FIS Report and FIRM and the existing effective FIS Report and FIRM when reviewing proposals for new development and permit applications, as described below, around land currently within Zones AE, A1-30, VE, or V1-30 that has been restudied.

- **Increase in BFEs/Wider Floodways:** When BFEs increase and/or floodways widen in the restudied area, communities have the responsibility of ensuring that new or substantially improved structures are protected. FEMA cannot require a community to use BFE and floodway data in a preliminary FIS Report or FIRM as available data or to use the data at the time FEMA issues the LFD. However, FEMA encourages communities to reasonably use this information in

instances where BFEs increase and floodways are revised to ensure that citizen's health, safety, and property are protected.

- **Decrease in BFEs/Narrower Floodways:** When BFEs decrease or floodways narrow, the community should not use the preliminary FIS Report or FIRM to regulate floodplain development until the LFD has been issued. If the preliminary FIS Report or FIRM provides information that BFEs are decreasing when compared with the current FIS Report or FIRM, but an appeal actually results in higher BFEs, the community could place its citizens at greater flood risk by using the preliminary FIS Report or FIRM to regulate floodplain development. Also, structures could be subject to increased flood insurance premiums if built using data from a preliminary FIS Report or FIRM that is revised to show increased BFEs or wider floodways.

In communities where floodways have not been designated for all or some of the flooding sources, but BFEs have been provided, communities are required to apply the criteria contained in Subparagraph 60.3(c)(10). This provision requires that:

Until a regulatory floodway is designated, no new construction, substantial improvements, or other development shall be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water-surface elevation of the base flood more than 1.0 foot at any point within the community.

However, if a preliminary FIS Report and FIRM have designated floodways and/or non-encroachment areas where none had previously existed, communities should reasonably use this best available data in lieu of applying the encroachment performance standard contained in Subparagraph 60.3(c)(10). By using the floodway/non-encroachment data from a preliminary FIS Report, communities avoid the expense of conducting the hydraulic analysis necessary to demonstrate compliance with Subparagraph 60.3(c)(10). In addition, communities can minimize flood damage by ensuring that the flood-carrying capacity of the floodway is preserved because obstruction of floodways can significantly increase potential for flooding upstream.

Land Currently within Zones B, C, and X

The NFIP floodplain management criteria do not require the use of BFE and floodway/non-encroachment data from a preliminary FIS Report or FIRM under Subparagraph 60.3(b)(4) for an area or areas within Zones B, C, or X on the community's FIRM that are being revised to Zone AE or VE. FEMA cannot mandate or require a community to use the information contained in the preliminary FIS Report or FIRM pertaining to areas designated as Zone B, C, or X as available data or use the data at the time FEMA issues the LFD to the community. However, FEMA encourages communities to reasonably use this information to ensure that their citizens' health, safety, and property are protected.

Ordinance Requirements — Adoption of the Data

Land Currently within Zones A, AE, A1-30, VE, V1-30, B, C, and X

Communities have several months from the date of the LFD to adopt the revised FIS Report and FIRM. FEMA is required to provide a reasonable amount of time for the community to adopt floodplain management ordinances that are consistent with the final flood elevation determinations. Subparagraph 59.24(a) provides for a 6-month compliance period in which the community must adopt the effective FIS Report and FIRM and amend existing ordinances to incorporate any additional requirements under Paragraph 60.3. Under the North Carolina Floodplain Mapping Program, this 6-month period typically starts when a preliminary FIS Report and FIRM are issued.

Floodplain management ordinances generally contain a section titled "Basis for Establishing the Areas of Special Flood Hazard" in which the current effective FIS Report and FIRM are cited. Language in the

ordinance may adopt by reference any subsequent revisions (i.e., a revised FIS Report and FIRM) without a subsequent formal adoption procedure. However, this wording should not be used as the basis for a community to use the preliminary FIS Report prior to the issuance of the LFD. If a community uses preliminary BFE and floodway/non-encroachment data, it is advised that the community formally adopt this information.

Insurance Implications

Land Currently within Zone A

For a new or substantially improved structure, communities can use information from a preliminary FIS Report to complete the Elevation Certificate in Zone A areas. When this is the case, "Other" in Block 10 of the Elevation Certificate is checked and the preliminary FIS and FIRM panel and date are noted. The flood insurance policies for new or substantially improved structures in Zone A that are rated using BFE data from a preliminary FIS Report will often qualify for significantly lower insurance rates than policies that are rated without a BFE.

Land Currently within Zones AE, A1-30, VE, and V1-30

For flood insurance rating purposes in Zones AE, A1-30, VE, or V1-30, new or substantially improved structures are rated based on the BFE and FIRM zone in effect on the date of construction until the revised FIRM becomes effective. This is the case regardless of whether the preliminary FIS Report indicates that the proposed BFEs will increase or decrease.

If a community chooses to use proposed BFEs from a preliminary FIS Report for a new or substantially improved structure, the flood insurance rate is still based on the BFE and FIRM zone in effect on the date of construction. The flood insurance rate will be based on the difference between the elevation of the lowest floor and the BFE and FIRM zone in effect. Therefore, if a new or substantially improved structure is built to the proposed BFE from a preliminary FIS Report and FIRM and this BFE is higher than the BFE in effect, the flood insurance rate may be significantly lower. However, a new or substantially improved structure built to the proposed BFE that is lower than the BFE in effect may result in a higher flood insurance rate. In this case, the insured will qualify for a premium *pro rata* refund once the revised FIRM is effective.

Land Currently within Zones B, C, and X

For flood insurance rating purposes, new or substantially improved structures are rated based on the FIRM zone in effect (i.e., Zone B, C, or X) on the date of start of construction. If a community chooses to use proposed BFEs from a preliminary FIS Report and FIRM for a new or substantially improved structure, the flood insurance rate is still based on the FIRM zone in effect (i.e., Zone B, C, or X) on the date of construction. Structures in Zones B, C, or X may be eligible for Preferred Risk Policies until the new FIRM is effective.

This document was adapted from FEMA Floodplain Management Bulletin 1-98, "Use of Flood Insurance Study (FIS) Data As Available Data," which can be ordered by calling the FEMA Distribution Facility at 1-800-480-2520, by mailing in a request to P.O. Box 2012, Jessup, MD 20794-2012, or by downloading from FEMA's website at <http://www.fema.gov/mit/fis-data.htm>.