



Federal Emergency Management Agency

Washington, D.C. 20472

APR 12 2011

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

IN REPLY REFER TO:
101/155

Mr. David A. Dodies
Upper Moreland Township Manager
117 Park Avenue
Willow Grove, Pennsylvania 19090

Community: Township of Upper Moreland,
Montgomery County,
Pennsylvania
Community No.: 421909

Dear Mr. Dodies:

On July 31, 2010, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) provided your community with Preliminary copies of the revised Flood Insurance Study (FIS) report and Flood Insurance Rate Map (FIRM). This information makes it appropriate to modify the elevations of the flood having 1-percent chance of being equaled or exceeded in any given year (base flood) for certain locations in the Township of Upper Moreland. Public notification by way of a Standard Newspaper Notice that the proposed modifications in Base Flood Elevations (BFEs) are posted in the BFE Notice for Studies on the FEMA Website <http://www.fema.gov/plan/prevent/fhm/bfe> will be given in *The Intelligencer* on or about April 20, 2011 and April 27, 2011. The BFEs for the flooding sources are listed in the table at the end of the BFE Notice for Studies. Also, the proposed BFE determinations can be obtained by calling the FEMA Map Information eXchange (FMIX) toll free at 1-877-FEMA MAP (1-877-336-2627). A copy of the Standard Newspaper Notice and a copy of the Notice of Proposed Flood Elevation Determinations published in the *Federal Register*, on February 16, 2011 at Volume 76, Number 32, pages 8982-8984 are enclosed for your information.

These proposed BFEs, if finalized, will become the basis for the floodplain management measures that your community must adopt or show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). However, before any revised BFEs are effective for floodplain management purposes, you will be provided an opportunity to appeal the proposed BFEs.

Section 110 of the Flood Disaster Protection Act of 1973 (Public Law 93-234) is intended to ensure an equitable balancing of all interests involved in the setting of BFE determinations. The legislation provides for an explicit process of notification and appeals for your community and for private persons prior to this office making the BFE determinations final. The appeal procedure is outlined below for your information. The regulations FEMA developed to implement Section 110 are listed in Title 44, Chapter I, Part 67, Code of Federal Regulations. We have outlined the appeal procedure below for your information and enclosed an excerpt from the document titled Appeals and Protests to National Flood Insurance Program Maps that documents the appeal and protest procedures and data requirements in further detail.

During the 90-day appeal period following the second publication in the referenced newspaper, any owner or lessee of real property in your community who believes his or her property rights will be adversely affected by the BFE determinations may appeal to you, or to an agency that you publicly designate. You must send copies of the individual appeals to the FEMA Region as soon

as you receive them. Note that the 90-day appeal period is statutory and cannot be extended or shortened for any reason. It is important to know, however, that the sole basis for the appeals is having knowledge or information indicating that the proposed BFE determinations are scientifically or technically incorrect. However, inquiries regarding data other than the proposed BFE determinations (e.g., incorrect street names, typographical errors, omissions) will be considered as comments and not appeals. Any applicable changes will be made before the revised FIS report and FIRM become effective.

During the appeal period, private citizens who want to appeal should present to you the scientific or technical data intended to negate or contradict FEMA's findings in any form, as you specify. FEMA requests that you review and consolidate all appeals by private persons, and issue a written opinion stating whether the evidence presented is sufficient to justify an official appeal by your community on behalf of such persons. Your decision on whether an appeal by the community in its own name will be made must be sent to this office within the 90-day appeal period and at the same time a copy must be sent to Jon Janowicz, FEMA Region III, 615 Chestnut Street, 6th Floor, Philadelphia, Pennsylvania, 19106.

Any documents submitted to you without evidence that they were sent within 90 days of the second publication in the local newspaper will be considered comments. Your community may find it appropriate to call further attention to the proposed BFE determinations and to the appeal procedure by using a press release or other public notice.

If the FEMA Region does not receive an appeal from your community on behalf of individuals within the 90 days provided, FEMA shall consolidate and review on their own merits the individual appeals, which you have on file and forwarded to us. FEMA's final decision will be in writing, and copies will be sent to each individual appellant and the State coordinating agency.

The appeal resolution process will consider any scientific or technical data submitted by your community intended to negate or contradict the information upon which the proposed BFE determinations are based. The appeal will be resolved by consultation with officials of the local government involved, an administrative hearing, or submission of the conflicting data to an independent scientific body or appropriate Federal agency for a determination. FEMA will determine the method for resolution.

If your community cannot submit scientific or technical data before the end of the 90-day appeal period, you may nevertheless submit data at any time as specified in Part 65 of the NFIP Regulations. If warranted, FEMA will revise the FIRM again after the effective date.

The reports and other information used for the final determination will be made available for public inspection. Until the conflict of data is resolved and the revised FIRM becomes effective, flood insurance available within your community shall continue to be available in accordance with the effective FIRM dated October 19, 2001.

If warranted by substantive changes, during the appeal period, FEMA will send to you revised copies of the FIS report and FIRM. At the end of the 90-day appeal period and following the resolution of any appeals, FEMA will send you a letter of final BFE determinations.

If you have any questions regarding the proposed BFE determinations, revised FIS report, or revised DFIRM for your community, please contact the FMIX at the toll free number provided above.

Sincerely,

A handwritten signature in black ink, appearing to read 'Luis Rodriguez', written in a cursive style.

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Enclosures:

- 1) Newspaper Notice
- 2) Proposed Flood Elevations from *Federal Register*
- 3) *Appeals and Protests to National Flood Insurance Program Maps*

cc Community Map Repository

Mr. Paul Purtell, Director of Code Enforcement

DEPARTMENT OF HOMELAND SECURITY

FEDERAL EMERGENCY MANAGEMENT AGENCY

Proposed Base Flood Elevation Determinations for the Boroughs of Bryn Athyn and Hatboro, and the Townships of Abington, Horsham, Lower Moreland, Springfield, Upper Dublin, Upper Moreland, and Whitemarsh, Montgomery County, Pennsylvania. The Department of Homeland Security's Federal Emergency Management Agency solicits technical information or comments on the proposed Base (1-percent-annual-chance) Flood Elevations (BFEs) shown in the Preliminary Flood Insurance Study (FIS) and on the Preliminary Flood Insurance Rate Map (FIRM) for the above-named communities. These proposed BFEs are the basis for the floodplain management measures that your community is required to either adopt or show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). For a detailed listing of the proposed BFEs and information on the statutory period provided for appeals, please visit FEMA's website at https://www.floodmaps.fema.gov/fhm/Scripts/bfe_main.asp, or call the FEMA Map Information eXchange (FMIX) toll free at 1-877-FEMA MAP.

Flooding source(s)	Location of referenced elevation**	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground ^ Elevation in meters (MSL)		Communities affected
		Effective	Modified	

Maps are available for inspection at City Hall, 109 North Sycamore Street, Dalton, MO 65246.

Taney County, Missouri, and Incorporated Areas

Beaver Creek (backwater effects from White River).	From the White River confluence to approximately 685 feet upstream of the White River confluence.	+692	+698	Unincorporated Areas of Taney County.
Bee Creek (backwater effects from White River).	From the White River confluence to approximately 1,700 feet upstream of the White River confluence.	None	+698	Unincorporated Areas of Taney County.
Bull Creek (backwater effects from White River).	From the White River confluence to approximately 0.5 mile upstream of the White River confluence.	None	+716	Town of Rockaway Beach, Unincorporated Areas of Taney County.
Bull Shoals Lake	Entire shoreline	None	+724	Unincorporated Areas of Taney County.
Cooper Creek (backwater effects from White River).	From the White River confluence to approximately 685 feet upstream of the White River confluence.	None	+724	City of Branson, Unincorporated Areas of Taney County.
Silver Creek (backwater effects from White River).	From the White River confluence to approximately 0.8 mile upstream of the White River confluence.	+695	+698	Unincorporated Areas of Taney County.
Swan Creek (backwater effects from White River).	From the White River confluence to approximately 1,290 feet upstream of Strawberry Road.	+694	+698	City of Forsyth, Unincorporated Areas of Taney County.
White River	At the downstream side of Powersite Dam	+695	+698	City of Forsyth, Unincorporated Areas of Taney County.
White River Tributary 16 (backwater effects from White River).	At the White County, Arkansas boundary	None	+698	Unincorporated Areas of Taney County.
	From the White River confluence to approximately 1.5 miles upstream of the White River confluence.	+692	+698	
White River Tributary 24 (backwater effects from White River).	From the White River confluence to approximately 430 feet downstream of Frisco Hills Road.	+693	+698	Unincorporated Areas of Taney County.
White River Tributary 30 (backwater effects from White River).	From the White River confluence to approximately 0.5 mile upstream of the White River confluence.	+693	+698	City of Forsyth, Unincorporated Areas of Taney County.

* National Geodetic Vertical Datum.

+ North American Vertical Datum.

Depth in feet above ground.

^ Mean Sea Level, rounded to the nearest 0.1 meter.

** BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

City of Branson

Maps are available for inspection at City Hall, 110 West Maddux Street, Suite 210, Branson, MO 65616.

City of Forsyth

Maps are available for inspection at City Hall, 15405 U.S. Highway 160, Forsyth, MO 65653.

Town of Rockaway Beach

Maps are available for inspection at Town Hall, 2764 State Highway 176, Rockaway Beach, MO 65740.

Unincorporated Areas of Taney County

Maps are available for inspection at the Taney County Courthouse, 132 David Street, Forsyth, MO 65653.

Montgomery County, Pennsylvania all Jurisdictions

Blair Mill Run	At the Pennypack Creek confluence	+212	+211	Borough of Hatboro, Township of Horsham, Township of Upper Moreland.
Blair Mill Run Tributary	At the downstream side of County Line Road	+259	+261	Borough of Hatboro.
	At the upstream side of West Monument Avenue	+227	+228	
	At the downstream side of East County Line Road	+247	+252	

Flooding source(s)	Location of referenced elevation**	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground ^ Elevation in meters (MSL)		Communities affected
		Effective	Modified	
Huntingdon Valley Creek	Approximately 800 feet downstream of Red Lion Road.	+119	+120	Borough of Bryn Athyn, Township of Lower Moreland.
Meadow Brook	Approximately 0.9 mile upstream of Byberry Road	+264	+267	Township of Abington, Township of Lower Moreland.
	At the Pennypack Creek confluence	+115	+118	
Pennypack Creek	Approximately 1,000 feet upstream of the most upstream State Highway 2017 crossing.	None	+287	Borough of Bryn Athyn, Borough of Hatboro, Township of Abington, Township of Horsham, Township of Lower Moreland, Township of Upper Dublin, Township of Upper Moreland.
	Approximately 1,200 feet downstream of Moredon Road.	+99	+100	
Pennypack Creek Branch	Approximately 1.0 mile upstream of Mann Road	None	+359	Township of Horsham.
	Approximately 400 feet downstream of Witmer Road	+299	+298	
Pennypack Creek Tributary No. 1.	Approximately 0.7 mile upstream of Witmer Road	None	+362	Borough of Hatboro, Township of Horsham, Township of Upper Moreland.
	At the Pennypack Creek confluence	+198	+204	
Pine Run	Approximately 0.7 mile upstream of Dresher Road	None	+341	Township of Upper Dublin.
	At the upstream side of State Highway 309	+171	+176	
	Approximately 800 feet upstream of Dreshertown Road.	+231	+239	
Rapp Run	At the Pine Run confluence	+177	+183	Township of Upper Dublin.
	Approximately 0.5 mile upstream of the most upstream Lexington Drive crossing.	+351	+355	
Sandy Run	Approximately 300 feet downstream of Bethlehem Pike.	None	+160	Township of Abington, Township of Springfield, Township of Upper Dublin, Township of Whitmarsh.
	Approximately 1,400 feet upstream of Roberta Avenue.	None	+339	
Sandy Run Tributary No. 1 ...	Approximately 150 feet upstream of Johnston Avenue	+237	+238	Township of Abington.
	Approximately 2,000 feet upstream of Johnston Avenue.	None	+258	
Sandy Run Tributary No. 1a (downstream).	Approximately 250 feet upstream of Fernwood Avenue.	+238	+239	Township of Abington.
	Approximately 1,100 feet upstream of Fernwood Avenue.	None	+244	
Sandy Run Tributary No. 1a (upstream).	Approximately 600 feet downstream of Miriam Avenue.	None	+277	Township of Abington.
Southampton Creek	Approximately 550 feet upstream of Miriam Avenue ...	None	+296	Borough of Bryn Athyn, Township of Lower Moreland, Township of Upper Moreland.
	At the Pennypack Creek confluence	+176	+177	
Tributary No. 2 to Pine Run ..	At the downstream side of County Line Road	+184	+187	Township of Upper Dublin.
	At the Pine Run confluence	None	+202	
	Approximately 1.1 miles upstream of the Pine Run confluence.	None	+232	
War Memorial Creek	At the Pennypack Creek confluence	+189	+190	Township of Upper Moreland.
	Approximately 700 feet upstream of Mineral Avenue ..	+265	+267	

* National Geodetic Vertical Datum.

+ North American Vertical Datum.

Depth in feet above ground.

^ Mean Sea Level, rounded to the nearest 0.1 meter.

Flooding source(s)	Location of referenced elevation**	* Elevation in feet (NGVD) + Elevation in feet (NAVD) # Depth in feet above ground ^ Elevation in meters (MSL)		Communities affected
		Effective	Modified	

**BFEs to be changed include the listed downstream and upstream BFEs, and include BFEs located on the stream reach between the referenced locations above. Please refer to the revised Flood Insurance Rate Map located at the community map repository (see below) for exact locations of all BFEs to be changed.

Send comments to Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472.

ADDRESSES

Borough of Bryn Athyn

Maps are available for inspection at the Borough Building, 2835 Buck Road, Bryn Athyn, PA 19009.

Borough of Hatboro

Maps are available for inspection at the Borough Hall, 414 South York Road, Hatboro, PA 19040.

Township of Abington

Maps are available for inspection at the Township Building, Engineer's Office, 1176 Old York Road, Abington, PA 19001.

Township of Horsham

Maps are available for inspection at the Township Municipal Building, 1025 Horsham Road, Horsham, PA 19044.

Township of Lower Moreland

Maps are available for inspection at the Lower Moreland Township Municipal Building, 640 Red Lion Road, Huntingdon Valley, PA 19006.

Township of Springfield

Maps are available for inspection at the Springfield Township Administration Building, 1510 Paper Mill Road, Wyndmoor, PA 19038.

Township of Upper Dublin

Maps are available for inspection at the Upper Dublin Township Building, 801 Loch Alsh Avenue, Fort Washington, PA 19034.

Township of Upper Moreland

Maps are available for inspection at the Upper Moreland Township Building, 117 Park Avenue, Willow Grove, PA 19090.

Township of Whitmarsh

Maps are available for inspection at the Whitmarsh Township Administrative Building, 616 Germantown Pike, Lafayette Hills, PA 19444.

(Catalog of Federal Domestic Assistance No. 97.022, "Flood Insurance.")

Dated: February 1, 2011.

Edward L. Connor,

Acting Federal Insurance and Mitigation Administrator, Department of Homeland Security, Federal Emergency Management Agency.

[FR Doc. 2011-3420 Filed 2-15-11; 8:45 am]

BILLING CODE 9110-12-P

DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

44 CFR Part 67

[Docket ID FEMA-2011-0002; Internal Agency Docket No. FEMA-B-1182]

Proposed Flood Elevation Determinations

AGENCY: Federal Emergency Management Agency, DHS.

ACTION: Proposed rule.

SUMMARY: Comments are requested on the proposed Base (1% annual-chance) Flood Elevations (BFEs) and proposed BFE modifications for the communities

listed in the table below. The purpose of this proposed rule is to seek general information and comment regarding the proposed regulatory flood elevations for the reach described by the downstream and upstream locations in the table below. The BFEs and modified BFEs are a part of the floodplain management measures that the community is required either to adopt or to show evidence of having in effect in order to qualify or remain qualified for participation in the National Flood Insurance Program (NFIP). In addition, these elevations, once finalized, will be used by insurance agents and others to calculate appropriate flood insurance premium rates for new buildings and the contents in those buildings.

DATES: Comments are to be submitted on or before May 17, 2011.

ADDRESSES: The corresponding preliminary Flood Insurance Rate Map (FIRM) for the proposed BFEs for each community is available for inspection at the community's map repository. The respective addresses are listed in the table below.

You may submit comments, identified by Docket No. FEMA-B-1182, to Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance

and Mitigation Administration, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646-4064, or (e-mail) luis.rodriguez1@dhs.gov.

FOR FURTHER INFORMATION CONTACT: Luis Rodriguez, Chief, Engineering Management Branch, Federal Insurance and Mitigation Administration, Federal Emergency Management Agency, 500 C Street, SW., Washington, DC 20472, (202) 646-4064, or (e-mail) luis.rodriguez1@dhs.gov.

SUPPLEMENTARY INFORMATION: The Federal Emergency Management Agency (FEMA) proposes to make determinations of BFEs and modified BFEs for each community listed below, in accordance with section 110 of the Flood Disaster Protection Act of 1973, 42 U.S.C. 4104, and 44 CFR 67.4(a).

These proposed BFEs and modified BFEs, together with the floodplain management criteria required by 44 CFR 60.3, are the minimum that are required. They should not be construed to mean that the community must change any existing ordinances that are more stringent in their floodplain management requirements. The community may at any time enact stricter requirements of its own or

Federal Emergency Management Agency
Federal Insurance and Mitigation Administration

Appeals and Protests to National Flood Insurance Program Maps

an excerpt from

**A GUIDE
FOR COMMUNITY OFFICIALS**

February 2008

APPEALS AND PROTESTS TO NATIONAL FLOOD INSURANCE PROGRAM MAPS

Appeals

The Base (1% annual chance) Flood Elevations (BFEs) shown on Flood Insurance Rate Maps (FIRMs) and on the Flood Profiles in Flood Insurance Study (FIS) reports are the basis for the detailed floodplain boundaries, detailed flood insurance risk zones, and floodway boundaries shown on FIRMs. That information, including the BFEs, is used for floodplain management and insurance purposes by Federal, State, and local agencies. Because of the significance of the BFEs, FEMA is careful to ensure their accuracy. In addition to applying rigorous standards in developing and updating flood risk information, FEMA provides communities with an opportunity to review new or revised BFEs before they become final, and to appeal them if they are believed to be scientifically or technically incorrect.

Background

In preparing initial FISs and FIRMs and in processing revised FISs and FIRMs and Map Revisions, FEMA may determine new BFEs for flooding sources for which it has not previously determined BFEs or may revise previously determined BFEs shown on effective FIRMs. When it determines new or revised BFEs for a community, FEMA must, by law, provide the community with a 90-day appeal period.

FEMA starts the appeal period by publishing a notice of the proposed new or revised BFEs in a local newspaper with wide circulation and in the *Federal Register*. The notice is typically published in the legal advertisements portion of the classified advertisement section of the newspaper. Community officials are encouraged to provide an even wider distribution to ensure that residents are aware of the proposed BFEs.

The newspaper notice is published twice; the second publication usually takes place 1 week after the first. On the date of the second publication, the 90-day appeal period begins.

During the appeal period, community officials and individual property owners may appeal the proposed BFEs by submitting data to show that the BFEs are scientifically or technically incorrect. After the 90-day appeal period has elapsed and any Appeals have been resolved, FEMA issues a final BFE determination.

New BFEs and revised BFEs that result from a revised FIS are presented in a Preliminary FIS report and on a Preliminary FIRM, which are sent to the affected community before the start of the appeal period. New BFEs that result from a Map Revision are also presented in a Preliminary FIS report and on a Preliminary FIRM that are sent to the community before the start of the appeal period.

However, revised BFEs that result from a Map Revision, depending on whether they are higher or lower than those on the effective FIRM, may be presented in one of two ways. Revisions that result in higher BFEs are generally made through the PMR process, in which the FIRM and FIS report are revised and reprinted and a Preliminary FIRM and FIS report are sent to the community before the start of the appeal period. Revisions that result in lower BFEs, however, may be made by Letter of Map Revision (LOMR); therefore, no revised FIRM or FIS report would be prepared.

The LOMR, which is sent to the community, describes the revisions, including those made to the BFEs; officially revises the FIRM; and informs the community of the publication dates for the notice of the revised BFEs. As with FISs, RFISs, and PMRs, the appeal period begins on the second publication date in the local newspaper.

North American Vertical Datum of 1988

Because the National Geodetic Survey has determined that the national vertical control network needs to be readjusted, FEMA will be

converting NFIP maps gradually from the old national datum, National Geodetic Vertical Datum of 1929 (NGVD), to a new national datum, North American Vertical Datum of 1988 (NAVD 88). Therefore, when submitting an Appeal, the appellant should use the reference datum on the preliminary FIRM panel. For more information on the new datum, the reader should refer to the *Converting the National Flood Insurance Program to the North American Vertical Datum of 1988, Guidelines for Community Officials, Engineers, and Surveyors*. To obtain copies of this document, please contact the FEMA Distribution Center by telephone at (800) 480-2520.

How to Submit an Appeal

Because the CEO is responsible for ensuring that the community meets its obligations as a participant in the NFIP, FEMA consults and confers with the CEO, or with a local official designated by the CEO (such as a floodplain administrator, city planner, or city engineer), to resolve Appeals. Therefore, any individual property owner who wishes to appeal the proposed BFEs must submit the Appeal to the CEO or to the designated local official so that the community can comply with the requirements of Part 67 of the NFIP regulations.

The CEO or designated community official should review each Appeal and, when forwarding it to FEMA, should state whether the community supports the Appeal. The CEO or designee may also appeal on behalf of the community.

Appeals must be submitted during the formal 90-day appeal period. However, when the CEO receives or expects to receive numerous Appeals, they should be collected and forwarded to FEMA at the end of the appeal period. It is in the interest of the community for the CEO or designee to notify FEMA of any Appeals before the end of the appeal period; otherwise, FEMA might be unaware of legitimate Appeals and might proceed with issuing the final BFE determination without considering the Appeals.

All Appeals, with supporting data, are to be sent by the CEO to:

Engineering Management Branch
Mitigation Directorate
Federal Emergency Management Agency
500 C Street, SW.
Washington, DC 20472

In addition, it is requested that the community also send a copy of this information to the FEMA Regional Office.

Required Supporting Data

An Appeal must be based on data that show the proposed BFEs to be scientifically or technically incorrect. The distinction between “scientifically incorrect” and “technically incorrect” is important because of the differences in the types and amounts of data that an appellant must submit to demonstrate one versus the other. Definitions of those terms are provided later in this Chapter. First, however, it is appropriate to discuss the meaning of the word “correct” as it applies to the BFEs.

The BFEs presented in FIS reports and on FIRMs are the result of engineering methodologies that are used by FEMA FIS Contractors and others whose data FEMA approves and uses. Because numerous methodologies have been developed for estimating flood discharges and flood elevations under a variety of conditions, FIS Contractors and others use their professional judgment in selecting methodologies that are appropriate for the conditions in a particular community.

In general, because the methodologies are the result of attempts to reduce complex physical processes to mathematical models, the methodologies include simplifying assumptions. Usually, the methodologies are used with data developed specifically for the FIS. Therefore, the results of the methodologies are affected by the amount of data collected and the precision of any measurements made.

Because of the judgments and assumptions that must be made and the limits imposed by cost

considerations, the “correctness” of the BFEs is often a matter of degree, rather than absolute. For that reason, appellants who contend that the BFEs are incorrect because better methodologies could have been used, better assumptions could have been made, or better data could have been used must provide alternative analyses that incorporate such methodologies, assumptions, or data and that quantify their effect on the BFEs. FEMA will review the alternative analyses and determine whether they are superior to those used for the FIS.

The data that must be submitted in support of the various types of Appeals are discussed in the subsections that follow.

Scientifically Incorrect BFEs

The BFEs are said to be scientifically incorrect if the methodology used in the determination of the BFEs is inappropriate or incorrect, or if the assumptions made as part of the methodology are inappropriate or incorrect. An Appeal that is based on the BFEs being scientifically incorrect would therefore contend that the use of a different methodology or different assumptions would produce more accurate results (i.e., BFEs that are more correct).

Appeals Based on Contention That Hydrologic Methodology is Inappropriate or Incorrect

To show that an inappropriate or incorrect hydrologic methodology has been used, an appellant must submit the following data:

- New hydrologic analysis based on an alternative methodology
- Explanation for superiority of alternative methodology
- New hydraulic analysis based on flood discharge values from new hydrologic analysis
- Revised flood profiles
- Revised floodplain and floodway boundary delineations

Appeals Based on Contention That Hydraulic Methodology Is Inappropriate or Incorrect

To show that an inappropriate or incorrect hydraulic methodology has been used, an appellant must submit the following data:

- New hydraulic analysis based on alternative methodology and original flood discharge values
- Explanation for superiority of alternative methodology
- Revised flood profiles
- Revised floodplain and floodway boundary delineations

Technically Incorrect BFEs

The BFEs are said to be technically incorrect if at least one of the following is true:

- The methodology was not applied correctly.
- The methodology was based on insufficient or poor-quality data.
- The application of the methodology included indisputable mathematical or measurement errors.
- The methodology did not account for the effects of physical changes that have occurred in the floodplain.

Appeals Based on Contention That Methodology Has Not Been Applied Correctly

To show that a hydrologic methodology was not applied correctly, an appellant must submit the following data:

- New hydrologic analysis in which original methodology has been applied differently
- Explanation for superiority of new application
- New hydraulic analysis based on flood discharge values from new hydrologic analysis
- Revised flood profiles
- Revised floodplain and floodway boundary delineations

To show that a hydraulic methodology was not applied correctly, an appellant must submit the following data:

- New hydraulic analysis, based on original flood discharge values, in which original methodology has been applied differently
- Explanation for superiority of new application
- Revised flood profiles
- Revised floodplain and floodway boundary delineations

Appeals Based on Contention That Insufficient or Poor-Quality Data Were Used

To show that insufficient or poor-quality hydrologic data were used, an appellant must submit the following data:

- Data believed to be better than those used in original hydrologic analysis
- Documentation for source of data
- Explanation for improvement resulting from use of new data
- New hydrologic analysis based on better data
- New hydraulic analysis based on flood discharge values resulting from new hydrologic analysis
- Revised flood profiles
- Revised floodplain and floodway boundary delineations

To show that insufficient or poor-quality hydraulic data were used, an appellant must submit the following data:

- Data believed to be better than those used in original hydraulic analysis
- Documentation for source of new data
- Explanation for improvement resulting from use of new data
- New hydraulic analysis based on better data and original flood discharge values
- Revised floodplain and floodway boundary delineations

Appeals Based On Contention That Analysis Contains Indisputable Errors

To show that a mathematical error was made, an appellant must identify the error. FEMA will

perform any required calculations and make the necessary changes to the FIRM, FBFM, and FIS report.

To show that a measurement error (e.g., an incorrect surveyed elevation used in the FIS) was made, appellants must identify the error and provide the correct measurement. Any new survey data provided must be certified by a registered professional engineer or licensed land surveyor. FEMA will perform any required calculations and make the necessary changes to the FIRM, FBFM, and FIS report.

Appeals Based on Effects of Physical Changes That Have Occurred in Floodplain

Appellants must identify the changes that have occurred and provide the data FEMA needs to perform a reanalysis. The data may include topographic maps, grading plans, new stream channel and floodplain cross sections, and dimensions of structures.

Among the types of physical changes on which an Appeal may be based is the construction of earthfill levees and similar structures. FEMA has established minimum requirements for structural stability, maintenance, and operation that a levee must meet before it can be recognized as providing 100-year flood protection. The data that appellants must provide in support of an appeal based on the effects of a levee are described in the following section, "General Technical Guidance."

In general, Appeals based on the effects of flood-control structures must demonstrate that the structures are complete and functional. The only exception is for systems that involve Federal funds, where the construction of the system meets the requirement for "adequate progress" as defined in Section 61.12 of the NFIP regulations. The specific data that appellants must provide in support of an Appeal based on the ultimate effects of such a system are also described in "General Technical Guidance."

General Technical Guidance

When developing technical supporting data, appellants should consider the following points:

- Unless Appeals are based on indisputable mathematical or measurement errors or the effects of physical changes that have occurred in the floodplain, they must be accompanied by all data that FEMA needs to revise the FIRM, FBFM, and FIS report. Therefore, appellants should be prepared to perform hydrologic and hydraulic analyses, to plot revised flood profiles, and to delineate revised floodplain and floodway boundaries as necessary.
- New flooding information cannot be added to an NFIP map in such a way as to create mismatches with the flooding information shown for unrevised areas. Therefore, in performing new analyses and developing revised flooding information, appellants must tie the new flood elevations, floodplain boundaries, and floodway boundaries into those shown on the maps for areas not affected by the Appeal.
- For Appeals involving new flood discharge values, extensive changes in hydraulic conditions, or complex situations in which changes made to the flooding information developed for one flooding source will affect that developed for others, appellants may be required to provide new information for a large portion of the map.
- All analyses and data submitted by appellants, including those that show mathematical or measurement errors, must be certified by a registered professional engineer or licensed land surveyor, as appropriate.
- Appeals, except for those based on the effects of flood protection systems under construction that meet the previously listed requirements, cannot be based on the effects of proposed projects or future conditions. Therefore, any maps, plans, drawings, measurements, or ground elevation data submitted by appellants must be certified as representing existing, or "as-built," conditions.
- Generally, when appellants are required to submit hydrologic or hydraulic analyses, those analyses must be performed for the same recurrence interval floods studied in the FIS. For riverine, lacustrine, and coastal flooding sources studied by detailed methods, FISs include analyses of the 100-year flood and, usually, the 10-, 50-, and 500-year floods. Often, a hydraulic analysis of the 100-year floodway is performed for riverine flooding sources. On the other hand, in areas subject to shallow flooding, only 100-year flood depths are analyzed. However, in areas subject to alluvial fan flooding (a type of shallow flooding) analyzing the 100-year flood depths may require developing the entire flood discharge-frequency relationship (not just the 100-year flood discharge). Therefore, the extent of the hydrologic and hydraulic analyses appellants may be required to submit is determined not only by the basis of the Appeal, but also the type of flooding source and the scope of the FIS.
- Unless Appeals are based on the use of alternative models or methodologies, the hydrologic and hydraulic analyses that appellants submit must be performed with the models used for the FIS. For FISs, hydrologic analyses for riverine flooding sources are usually performed with standard engineering methodologies, such as flood-frequency analyses of stream gage data, or with computer models that are in the public domain, such as the U.S. Army Corps of Engineers (USACE) HEC-1 model or the U.S. Soil Conservation Service (SCS) TR-20 model. For FISs, hydraulic analyses for riverine flooding sources are usually performed with the USACE HEC-2 step-backwater model or a similar and widely accepted model, such as the SCS WSP-2 model, or the U.S. Geological Survey (USGS) WSPRO model.

For the analysis of alluvial fan flood hazards and the hazards associated with

coastal storm surge and wave action, including wave height and wave runup, FEMA has established or adopted special methodologies and computer models. For analyses of lacustrine and sheetflow flood hazards, FEMA uses a variety of standard engineering models and methodologies.

Appellants may request from FEMA copies of the input and output data from the model(s) used in a specific FIS or copies of other calculations or analyses performed for the FIS. (See http://www.fema.gov/plan/prevent/fhm/st_order.shtml)

- As required by Subparagraph 65.6(a)(6) of the NFIP regulations, when Appeals are based on the use of an alternative hydrologic or hydraulic model, appellants must show that several conditions have been met. First, the model used must have been reviewed and accepted for general use by a Federal agency responsible for floodplain identification or regulation or by a notable scientific body. Second, the model has been well documented (with a user's manual that includes source codes). Finally, the model must be available to all present and future parties affected by flood insurance mapping developed or amended through the use of the model.
- Although requests for revisions to floodways do not qualify as Appeals, the data on which successful Appeals are based often include new floodway analyses. Information concerning additional data that must be submitted in support of appeals that involve changes to floodways is provided in Chapter 9 of this Guide.
- Generally, when appellants are required to submit delineations of floodplain boundaries, both the 100- and 500-year floodplain boundaries must be submitted. However, if the FIS includes analyses of only the 100-year flood for the flooding source that is the subject of the Appeal,

only the 100-year floodplain boundaries must be submitted. The boundaries are to be shown on a topographic map whose scale and contour interval are sufficient to provide reasonable accuracy.

- To support Appeals based on the effects of earthfill levees or similar structures, appellants must submit the data below to show that the structural stability, operation, and maintenance requirements of Section 65.10 of the NFIP regulations have been met.
 1. Freeboard, Riverine Levee—Evidence that the levee provides a minimum of 3 feet of freeboard above the BFE and that within 100 feet of wherever the flow is constricted (e.g., a bridge), an additional 1 foot of freeboard is added to that minimum; moreover, evidence that the upstream end of the levee provides an additional 0.5 foot of freeboard added to the minimum.
 2. Freeboard, Coastal Levee—Evidence that the levee provides a minimum of 1 foot of freeboard above the height of the 1-percent wave or the maximum wave runup (whichever is greater) associated with the 100-year stillwater surge elevation, but in no case less than 2 feet of freeboard above the 100-year stillwater surge elevation.
 3. Closures—Evidence to show that all drainage structures that penetrate the levee are fitted with closure devices that are structural parts of the levee during operation and designed according to sound engineering practice.
 4. Erosion Protection—An engineering analysis that demonstrates that no appreciable erosion of the levee embankment can be expected during the 100-year flood.
 5. Stability—An engineering analysis that evaluates the stability of the levee embankment and foundation.
 6. Settlement—An engineering analysis that assesses the potential for, and

magnitude of, losses of freeboard that may result from settlement of the levee and that demonstrates that the minimum required freeboard will be maintained.

7. Operations—A formal levee operation plan.
8. Maintenance—A formal levee maintenance plan.

Exceptions to the minimum freeboard requirements cited in Items 1 and 2 for riverine and coastal levees may be approved under certain conditions. Any request for an exception must be supported by appropriate engineering analyses that show that, even with the lesser freeboard, a high level of certainty for 100-year flood protection exists.

For riverine levees, the supporting analyses must evaluate the uncertainty in the estimated BFE and must assess, at a minimum, the statistical confidence limits of the 100-year peak discharge; stage-discharge relationships for floods larger than the 100-year flood; and the sources, potential, and magnitude of debris, sediment, and ice accumulation that may affect those relationships. The analyses must also show that the levee will remain structurally stable during the base flood, when such additional loading conditions are imposed. Freeboards of less than 2 feet will not be accepted.

For coastal levees, the supporting analyses must evaluate the uncertainty in the estimated base flood loading conditions. Particular emphasis must be placed on the effects of wave attack and overtopping on the stability of the levee. Freeboards of less than 2 feet above the computed stillwater surge elevation will not be accepted.

In lieu of the data described in Items 1 through 6, appellants may submit certifications by a Federal agency with responsibility for levee design that the levee has been adequately designed and

constructed to provide 100-year flood protection.

- To support an Appeal based on the effects of a flood protection system that involves Federal funds and is under construction at the time of the Appeal, appellants must submit the data below to show that the requirements of Section 61.12 of the NFIP regulations have been met.

1. Evidence that adequate progress has been made on construction (i.e., evidence to show that 100 percent of the total cost of the complete system has been authorized, at least 60 percent of the total cost has been appropriated, at least 50 percent of the total cost has been expended, all critical features are under construction and each is 50 percent completed as measured by the expenditure of budget funds, and the community has not been responsible for any delay in the completion of the system).
2. A complete statement of all relevant facts concerning the flood protection system, including, but not limited to, supporting technical data, cost schedules, budget appropriation data, and extent of Federal funding of construction of system. The statement must include information that identifies all persons affected by the system or by the Appeal; a full and precise statement of the purpose of the system; and a detailed description of the system, including construction completion target dates.
3. True copies of all contracts, agreements, leases, instruments, and other documents related to system
4. An analysis that shows how the statement of facts (Item 2) and the documents (Item 3) bear on the evidence of adequate progress.
5. Statement of whether the flood protection system is the subject of litigation before any Federal, State,

or local court or administrative agency and, if so, the purpose of that litigation.

6. Statement of whether the community previously requested a determination concerning the same subject and, if so, the disposition of request.

The procedure described above does not apply when the flood protection system under construction is being financed without Federal funds.

Appeal Resolution Procedures

The procedures that are to be followed by the appellant and FEMA in handling an Appeal are summarized in Figure 4.

By a letter to the CEO, FEMA will acknowledge receipt of all Appeals submitted. Copies of the acknowledgment letter will be sent to each appellant unless the number of appellants is so great that to do so would not be practical. In such cases, the CEO is responsible for informing appellants that FEMA has received the Appeals.

FEMA will review all Appeals and the supporting data submitted with them. If any questions or problems arise, FEMA will work with the CEO, the community official designated by the CEO, or the appellants to resolve them.

If additional supporting data are required, FEMA will request those data by letter. The letter will be sent to the CEO. A copy of the letter will be sent to the community official designated by the CEO, if appropriate, and to the individual appellant, if it is practical to do so.

To avoid delaying the resolution of Appeals, FEMA will generally allow only 30 days for the CEO to provide the requested data. If the data are not provided within the allotted time, FEMA will resolve the Appeals using the data originally submitted. If the requested data are provided within the 30-day period, FEMA will consider them before resolving the Appeals.

It should be noted here that, although the appeal period is the appropriate time to submit scientific or technical data concerning the BFEs, if a community is unable to obtain and submit

such data at that time, it may pursue a Map Revision under the provisions of Part 65 of the NFIP regulations after the FIRM has become effective.

(See

<http://www.fema.gov/plan/prevent/floodplain/nfikeywords/lomr.shtml>)

If Appeals are not supported by the data that have been submitted, FEMA will inform the CEO by letter that the Appeals are denied. If Appeals are adequately supported, FEMA will revise the BFEs and any other information affected by the Appeals. If the Appeals involved the proposed BFEs shown on a new or revised FIRM, FEMA will revise the FIRM and, if necessary, the accompanying FIS report and FBFM. A letter that explains the resolution of the Appeals will be sent to the CEO. Copies of the revised reports and maps may be sent if appropriate. The community will have 30 days to review and comment on the resolution. At the end of the review period, after all comments on the Appeal resolution have been addressed, FEMA will issue a final BFE determination letter and publish the BFEs in the *Federal Register*.

If the Appeals involve BFEs proposed in a LOMR, FEMA will explain the resolution of the Appeals in a letter to the CEO. The community will have 30 days to review and comment on the resolution, after which FEMA will issue a final BFE determination letter and publish the BFEs in the *Federal Register*.

Appeals to District Court

Under the provisions of Section 67.12 of the NFIP regulations, an appellant who is aggrieved by the final determination may, within 60 days of receipt of the final determination letter, appeal the determination to the U.S. District Court for the district in which the community is located. While the Appeal is being reviewed by the U.S. District Court, the final determination will be effective, unless it is stayed by the Court for good cause shown.

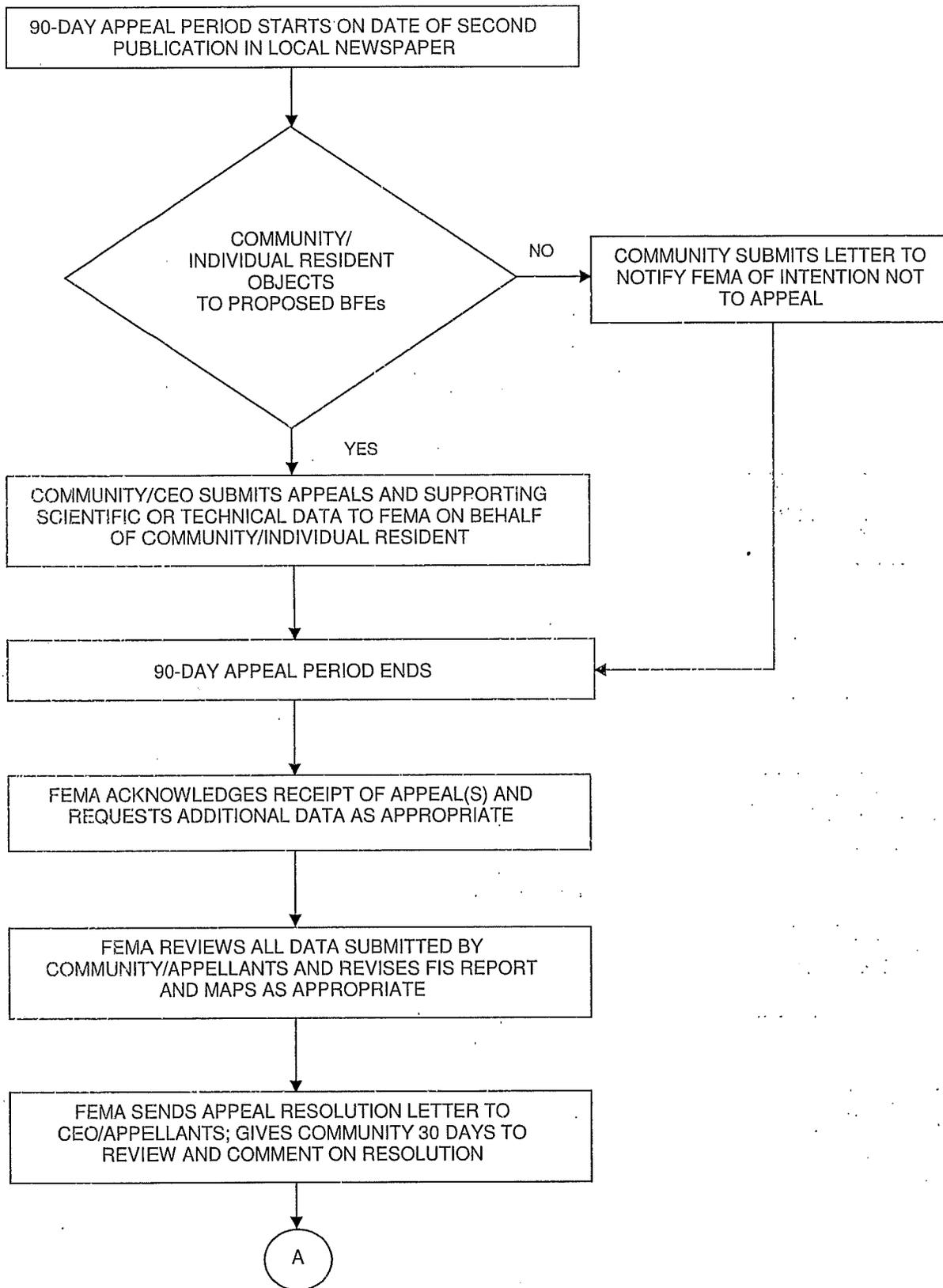


Figure 4. Procedure for Processing Appeals

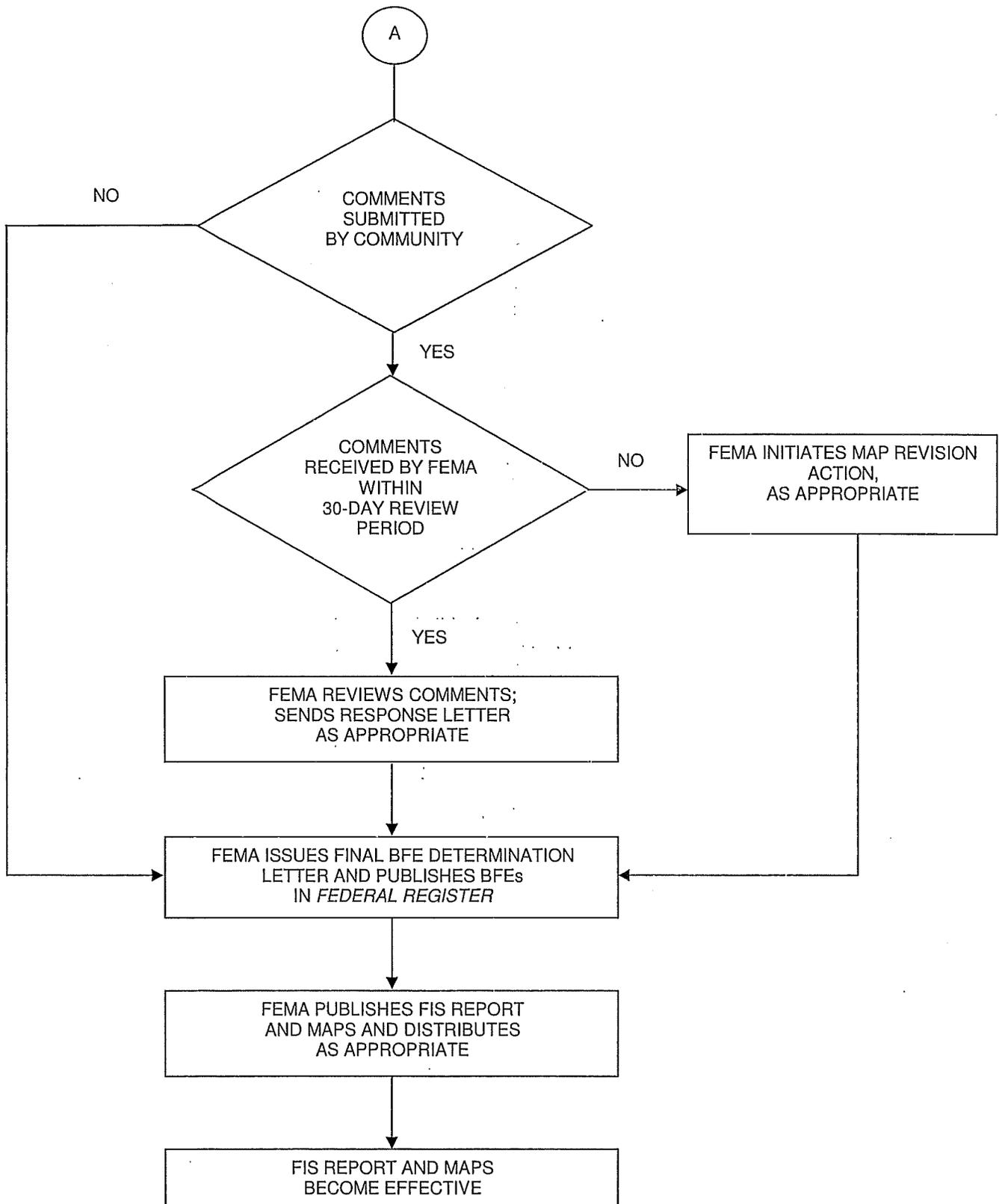


Figure 4. Procedure for Processing Appeals (Cont'd)

Protests

During the formal 90-day appeal period, a community official or an individual property owner may wish to object to information shown on the FIRM, FBFM, or FIS report. If the objection does not involve the proposed BFEs, it does not, according to Part 67 of the NFIP regulations, constitute an Appeal. Such objections are called Protests.

Like Appeals, Protests should not be submitted directly to FEMA by individual property owners. They are to be submitted to the CEO or a community official designated by the CEO. The CEO or designated community official should review the Protests and, when forwarding them to FEMA, should state whether the community supports them. Protests should be sent to the FEMA Headquarters office at the following address:

Engineering Management Branch
Mitigation Directorate
Federal Emergency Management Agency
500 C Street, SW.
Washington, DC 20472

Protests will generally involve changes to one of the following:

- Floodplain boundary delineations
- Corporate limits
- Roads and road name

The various types of Protests and the data that must be submitted to support them are discussed in the following paragraphs.

Changes to Floodplain Boundaries

Flooding Sources Studied by Detailed Methods

Usually, detailed floodplain boundaries are delineated using topographic maps and the BFEs resulting from the hydraulic analysis performed for the FIS. If topographic maps or other ground elevation data are submitted that are of greater detail than those used by FEMA or that show more recent topographic conditions, FEMA will use them to revise the floodplain boundaries shown on the FIRM and FBFM.

All maps and other supporting data submitted must be certified by a registered professional engineer or a licensed land surveyor and must reflect existing conditions. Maps prepared by an authoritative source, such as the USACE, USGS, U.S. Bureau of Reclamation, or a State department of highways and transportation, are acceptable without certification as long as the sources and dates of the maps are identified.

Flooding Sources Studied by Approximate Methods

Usually, approximate floodplain boundaries are delineated with the best available data, including flood maps published by other Federal agencies, information on past floods, and simplified hydrologic and hydraulic analyses. If more detailed data or analyses are submitted, FEMA will use them to revise the floodplain boundaries shown on the FIRM and FBFM. Such data and analyses would include the following:

- Published flood maps that are more recent or more detailed than those used by FEMA
- Analyses that are more detailed than those performed by FEMA or that are based on better data than those used by FEMA

All data and analyses submitted must be certified by a registered professional engineer or licensed land surveyor.

Changes to Corporate Limits

The corporate limits shown on NFIP maps are taken from community maps obtained by FEMA Contractors during the course of processing FISs, RFISs, or PMRs. When changes to the corporate limits shown on the NFIP map are necessary, an up-to-date community map should be submitted. FEMA may use the community map to revise the corporate limits shown on the FIRM and FBFM, or will explain to the CEO why no changes were made.

Changes to Roads and Road Names

In general, FEMA shows on its maps all roads that are in or adjacent to floodplains. If maps are submitted that show new or revised

information concerning the locations and names of roads in or adjacent to floodplains, FEMA will revise the FIRM and FBFM as appropriate.

Protest Resolution Procedures

The steps that are followed in processing Protests are shown in Figure 5. Changes that must be made to the FIRM, FBFM, and/or FIS report as a result of Protests are usually incorporated at the time the maps and report are printed. Generally, FEMA will explain the resolution of any Protests that have been submitted in the letter that informs the CEO of the final BFE determination. However, when necessary to clearly explain the revisions to be made, FEMA may issue a separate Protest resolution letter and/or provide the community with revised copies of the affected FIRM and FBFM panels.

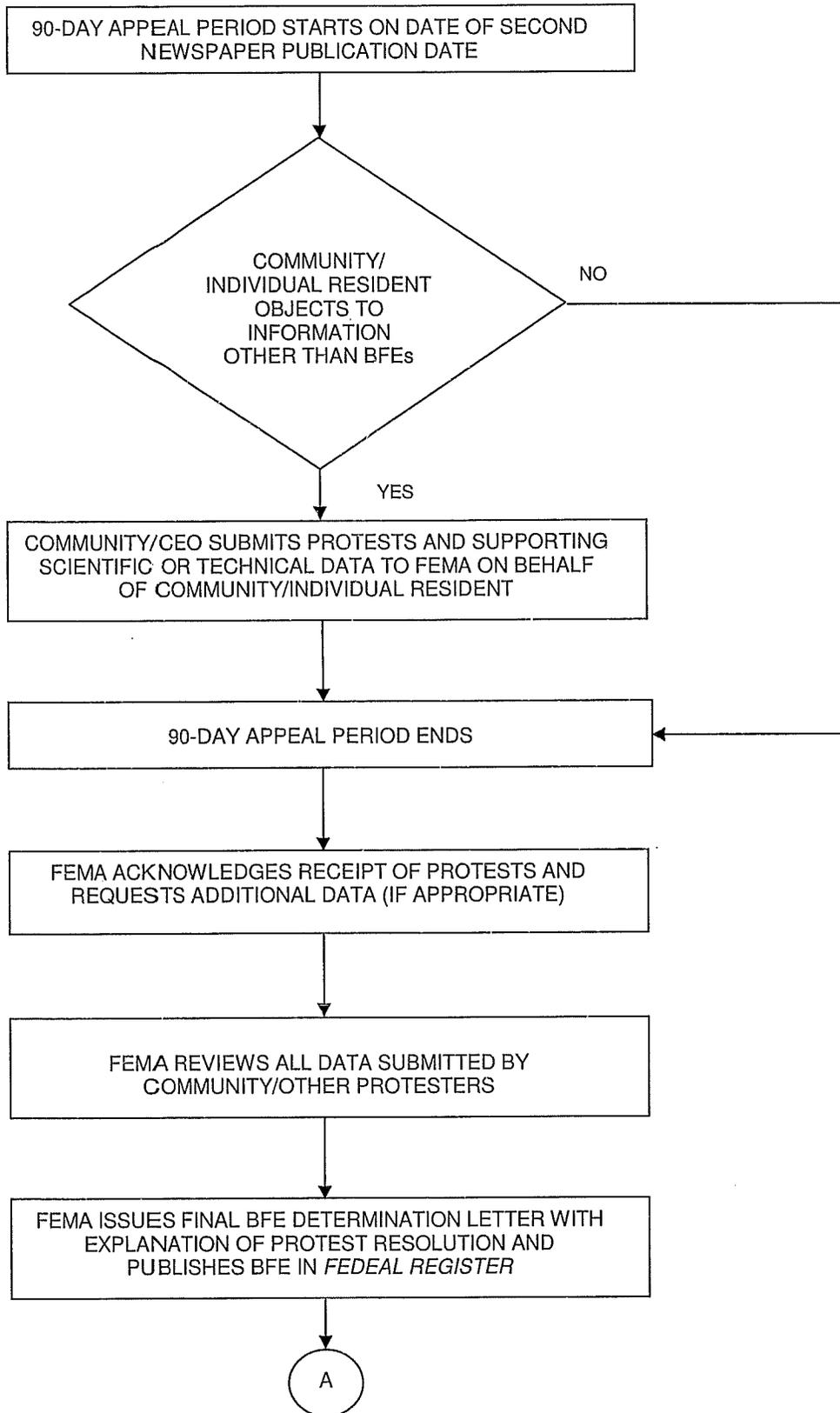


Figure 5. Procedure for Processing Protests

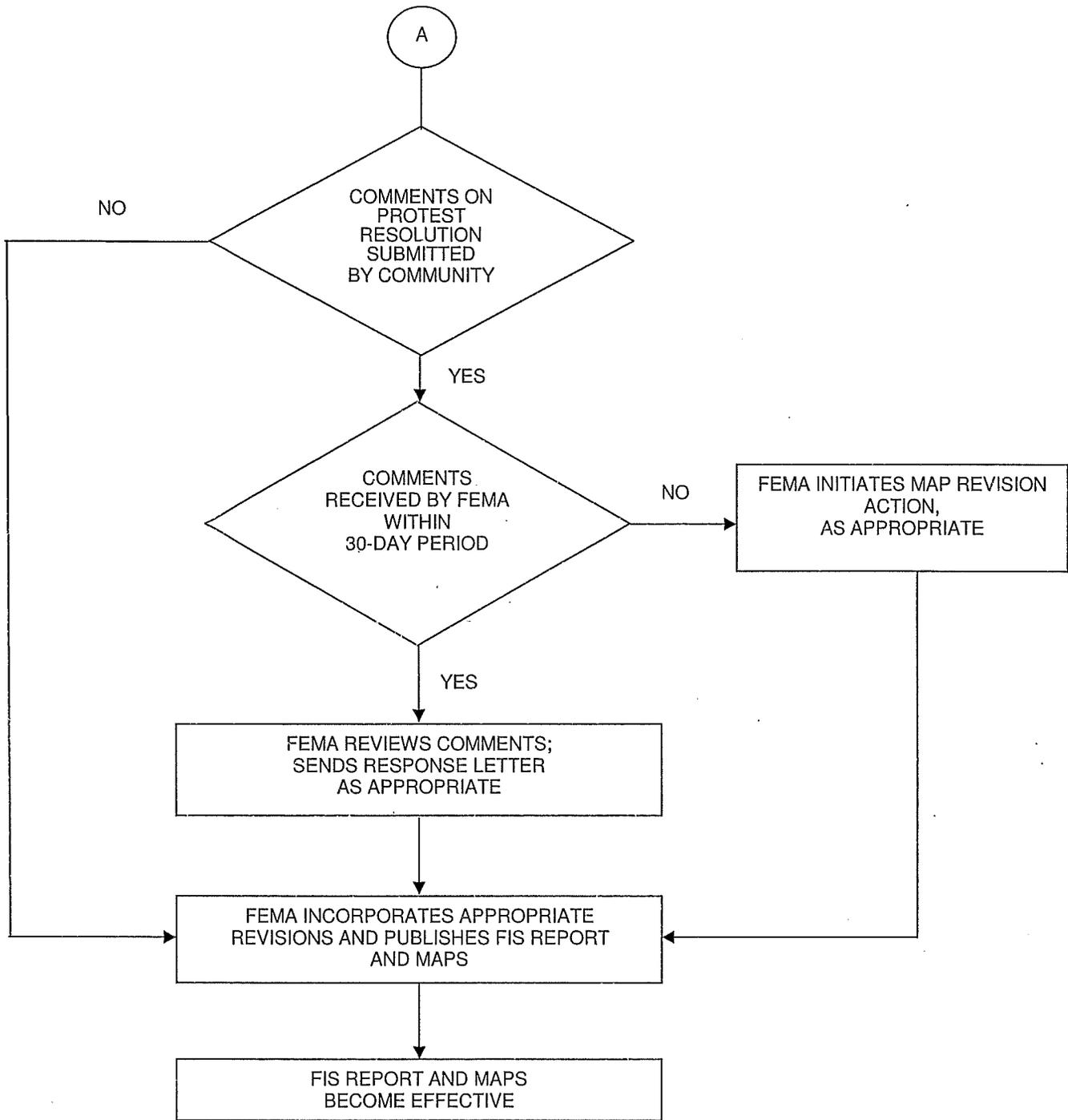


Figure 5. Procedure for Processing Protests (Cont'd)