

Appendix H: Flood Maps

I. Flood Map Service Center

The FEMA Flood Map Service Center (MSC) and its website (<http://msc.fema.gov>) serve as the official public source for flood hazard information produced in support of the NFIP.

Individuals and communities can view and download flood maps and related products free of charge through the MSC website. The integrated “Search All Products” feature allows users to find and download all products for a geographic area and, using the “Search by Address” feature, download all Flood Insurance Rate Maps (FIRMs) and Letters of Map Change directly from the search results page.

Map Specialists are available to answer questions Monday through Friday from 8:00 a.m. to 7:00 p.m. ET by calling the FEMA Mapping and Insurance eXchange (FMIX) toll-free information line at 1-877-FEMA-MAP (1-877-336-2627).

II. Flood Hazard Maps

FEMA produces two types of maps for rating flood insurance:

- Flood Hazard Boundary Map (FHBM) – Initial flood hazard identification generally used for Emergency Program communities.
- FIRM (See an example in **Figure 1** at the end of this appendix) – Generally used for Regular Program communities. Some Regular Program communities may use a map originally published as an FHBM. When a community converts to the Regular Program, FEMA sends a letter accompanying the map stating that FEMA considers the map to be a FIRM.

Countywide FIRMs supersede all previous versions of the FEMA flood hazard maps for covered communities. Countywide FIRMs show flooding information for the entire county’s geographic area, including incorporated communities.

A. Map Information

Insureds or agents may obtain the date of their current effective map version by calling their local community official or by going to the MSC. Maps provide the community name, community number, suffix, panel number, map type, and map effective date. (See FIRM panel example at the end of this section.)

- The maps may have one panel or multiple panels.
 - Flat maps generally consist of only one panel.
 - For multiple-panel maps, the community map index identifies individual panels.
 - Panel numbers for a community’s map are in numerical order.
- Each panel has a panel number and community number. When there is only one panel (i.e., a flat map), the community number will consist of only six digits.
 - Example: Monterey County, CA 060195-1025

- The first two digits of the number identify the state and the next four digits identify the community. The last four digits identify the map panel.
- FHBMs and FIRMs show:
 - Community boundaries.
 - Special Flood Hazard Areas (SFHAs).
 - Areas not included in a community's map.
 - > A community may be physically located within the overall geographical area covered by the map, but may actually be a separate community. This community would have a separate map.
- Most FIRMs also show:
 - Flood Zones,
 - Base Flood Elevations (BFEs) and/or,
 - Base Flood Depths (BFDs).

B. Communities with Unpublished Maps

Communities with unpublished maps are communities where local flooding is too small to map but that offer flood insurance coverage. The NFIP considers all areas within these communities in the Regular Program as Zone C or X.

C. Unmapped Areas in Communities with Maps

Zone D designates flood hazard areas within mapped communities that remain undetermined and unmapped. In addition, agents may use Zone D for rating when a community incorporates portions of another community's area where no map has been prepared.

III. Map Zones

A. SFHAs

1. Zone A

Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no BFEs or flood depths are shown on the map. Mandatory flood insurance purchase requirements and floodplain management standards apply.

2. Zones A1–A30

Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. The maps show the BFEs. Mandatory flood insurance purchase requirements and floodplain management standards apply.

3. Zone AE

Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. The maps show the BFEs. Mandatory flood insurance purchase requirements and floodplain management standards apply. Some maps use AE in place of A1-A30.

4. Zone AH

Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. In this zone the maps show BFEs derived from detailed hydraulic analyses. Mandatory flood insurance purchase requirements and floodplain management standards apply.

5. Zone AO

Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Maps show the average flood depths derived from detailed hydraulic analyses in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply.

6. Zone A99

The A99 zone applies to areas with sufficient progress on the construction or repair of a protective system including features such as dikes, dams, and levees, to consider it complete for insurance rating purposes. The map does not have BFEs. Treat A99 Zones as non-SFHAs when determining Community Rating System (CRS) premium discounts. Mandatory flood insurance purchase requirements and floodplain management standards apply.

7. Zone AR

The AR zone reflects the decertification of a previously accredited flood protection system that the community is in the process of restoring to provide base flood protection. Treat all AR Zones as non-SFHAs to determine CRS premium discounts. Mandatory flood insurance purchase requirements and floodplain management standards apply.

8. Zones AR/AE, AR/AH, AR/AO, AR/A1–A30, AR/A

These are dual flood zones subject to flooding from other water sources that the restored flood protection system does not contain. Treat all AR Zones as non-SFHAs when determining CRS premium discounts and determining mandatory purchase requirements.

9. Zone V

The V zones are areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves. The map does not have BFEs or flood depths because detailed hydraulic analyses were not performed. Mandatory flood insurance purchase requirements and floodplain management standards apply.

10. Zones V1–V30

Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. The maps show BFEs derived from detailed hydraulic analyses. Mandatory flood insurance purchase requirements and floodplain management standards apply.

11. Zone VE

Used in place of V1-V30 on some maps. Zone VE areas are subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. The maps show BFEs derived from detailed hydraulic analyses. Mandatory flood insurance purchase requirements and floodplain management standards apply.

B. Moderate or Minimal Hazard Areas

1. Zones B, C, and X

B, C, and X zones designate areas of moderate or minimal flooding hazard resulting from severe storm activity or local drainage problems. Zone X equals the designation for B and C zones on some maps.

2. Zone D

The D zone reflects an area where the flood hazard is undetermined and where there is sparse population. Agents may use Zone D for rating when a community incorporates portions of another community's area where no map has been prepared. Agents also use Zone D if the map shows an area as being unmapped.

IV. Locating a Property on a Map

- Check the map index to identify the correct map panel.
- Directly locate the property by the address or other information. Comparing the FHBM or FIRM to an assessor's map or a community street map helps locate properties precisely.
- Note the map color where the property is located.
 - On FHBMs and FIRMs, darkly shaded areas are the SFHAs. When viewing a map through the MSC, they are blue (or blue with a red stripe if in the regulatory floodway).
 - On an FHBM, no other zone data may be given.
- On a FIRM, zones have an alpha designation and the entire area within the boundaries indicated for the zone carries that specific zone designation.
- BFEs in SFHA zones (A1-A30 [or AE], AH, V1-V30 [or VE]) are shown within wavy lines. In some SFHA zones, the BFE is in parentheses because the BFE does not vary within the entire zone.
- An agent may interpolate a BFE for the property using the closest BFE indicators. In this case, the agent must document use of this method.

V. Changing or Correcting a Flood Map

There are three procedures that can be used to change or correct a flood map:

A. Letter of Map Amendment (LOMA)

A LOMA is a determination FEMA makes for a property and/or building as to whether it is located within the SFHA. An applicant/insured may apply for a LOMA if he or she believes the requirement to purchase flood insurance

is in error and there is evidence that the building is not in the SFHA on the effective FIRM.

In order to determine whether or not to grant a LOMA, FEMA examiners follow the following steps as necessary:

1. Compare the location of the property to the SFHA

If the FEMA examiner finds, after plotting the location on the FIRM, that the property and/or building is not located in the SFHA, then the Determination will be “Out-As-Shown” rather than “Removed.” The FEMA Out-As-Shown Determination will state that the property or building is outside the SFHA and, therefore, the mandatory flood insurance requirement does not apply.

An Out-As-Shown Determination does not require elevation information. The minimum requirements to make an Out-As-Shown Determination follow:

- A photocopy of the FIRM panel (including the title block) that shows the location of the property.
 - Section A of the MT-EZ form, found in the MT-EZ application package. It is available from FEMA at <https://www.fema.gov/media-library/assets/documents/8001>, or by calling the toll-free number 1-877-336-2627.
 - A copy of the subdivision plat map of the area, showing the recordation data (i.e., book/volume and page numbers) and the recorder’s seal.
- OR
- A copy of the property’s deed, showing the data recorded (i.e., book/volume and page numbers) and the recorder’s seal; a tax assessor’s or other suitable map showing the surveyed location of the property; and at least two street intersections shown on FEMA’s FIRM.

2. Compare the elevation of the property to the 1-percent-annual-chance flood elevation

In some cases, FEMA may require additional information to make a determination.

B. Letter of Map Revision (LOMR)

A LOMR is an official revision to the currently effective FEMA map. It changes flood zones, floodplain and floodway delineations, flood elevations, and planimetric features. An insured should make all LOMR requests to FEMA through the chief executive officer of the community, as the community must adopt any changes and revisions to the map resulting from a LOMR. A physical map revision usually follows a LOMR.

C. Physical Map Revision

A physical map revision is an official republication of a map changing flood insurance zones, floodplain delineations, flood elevations, floodways, and planimetric features.

The community’s chief executive officer can submit scientific and technical data to FEMA requesting a map revision. FEMA will analyze the data and revise the map if warranted.

NOTE: Community officials should retain old maps to verify past rating determinations and to establish floodplain management compliance requirements.

Figure 1. Example FIRM

