

# FLOOD MAPS

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## I. OVERVIEW

The Federal Emergency Management Agency (FEMA) provides all participating communities with copies of their flood maps. The maps are generally kept in community planning or building permit departments where they should be available for review.

Additional information about flood maps can be obtained at the FEMA Map Service Center web site (<http://msc.fema.gov>).

### A. Types of Flood Maps

FEMA produces two types of maps for rating flood insurance. For detailed information, refer to "Answers to Questions About the National Flood Insurance Program" (MitDiv-2) and "Guide to Flood Maps" (FEMA-258).

1. Flood Hazard Boundary Map (FHBM)-- Initial flood hazard identification generally used for Emergency Program communities.
2. Flood Insurance Rate Map (FIRM)-- Generally used for Regular Program communities. Some Regular Program communities may use a map originally published as an FHBM; however, a letter will accompany the map in conjunction with conversion to the Regular Program stating that the map is to be considered a FIRM.

Countywide FIRMs are official sources of flood risk data for several communities that supersede all previous versions of the FEMA flood hazard maps for the communities covered. Countywide FIRMs show flooding information for the entire geographic area of a county including the incorporated communities within the county.

### B. Map Information

The date of the current effective map version for a community can be obtained by calling the appropriate community official or by calling the National Flood Insurance Program office on the toll-free number. Maps provide community name, community number, suffix, panel number, map type, and the map effective date.

1. The maps may have one panel or multiple panels. Most Z-fold maps have multiple

panels. Flat maps generally consist of only one panel.

2. For multiple panel maps, individual panels are identified on a community map index.
3. Panel numbers are listed for that community's map in numerical sequence. FHBMs and FIRMs are drawn to show:

- Community boundaries
- Special Flood Hazard Areas (SFHAs)
- Area not included in a community's map. A community may be physically located within the overall geographical area, but actually stand on its own as a separate community. Therefore, this community would be shown on a separate map.

4. 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.

5. Most FIRMs also show:
  - Rate Zones
  - Base Flood Elevations, and/or
  - Base Flood Depths

### C. Communities Without a Map

These are communities without formally identified SFHAs that chose to have flood insurance coverage available even though the local flooding problems are too small to map. For any such community in the Regular Program, all areas within that community are treated as Zone C or X.

## II. MAP ZONES

### A. Special Flood Hazard Areas (SFHAs)

#### 1. Zone A

The lowest floor elevation is required and the Base Flood Elevations (BFEs) are not provided.

#### 2. Zones A1-A30

The lowest floor elevation is required and the BFEs are provided.

#### 3. Zone AE

Used in place of A1-A30 on some maps.

#### 4. Zone AH

Shallow water depths (ponding) and/or unpredictable flow paths between 1 and 3 feet occur. BFEs are provided.

#### 5. Zone AO

Shallow water paths (sheet flow) and/or unpredictable flow paths between 1 and 3 feet occur. BFEs are not provided. Base flood depths may be provided.

#### 6. Zone A99

Enough progress has been made on a protective system such as dikes, dams, and levees to consider it complete for insurance rating purposes. BFEs are not provided. For the purpose of determining Community Rating System premium discounts, all AR and A99 zones are treated as non-SFHAs.

#### 7. Zone AR

Area that results from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection. For the purpose of determining Community Rating System premium discounts, all AR and A99 zones are treated as non-SFHAs.

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

Dual flood zones that, because of flooding from other water sources that the flood protection system does not contain, will continue to be subject to flooding after the flood protection system is adequately restored. For the purpose of determining Community Rating System premium discounts, all AR and A99 zones are treated as non-SFHAs.

#### 9. Zone V

An area that is inundated by tidal floods with velocity (coastal high hazard area). BFEs are not provided.

#### 10. Zones V1-V30

Identical to V Zone, but BFEs are provided.

#### 11. Zone VE

Used in place of V1-V30 on some maps.

#### 12. Zone VO

An area having shallow water depths and/or unpredictable flow paths between 1 and 3 feet with velocity.

### B. Moderate, Minimal Hazard Areas

#### 1. Zones B, C, X

Areas of moderate or minimal hazard subject to flooding from severe storm activity or local drainage problems. These zones may be lightly shaded or unshaded on the FIRM. Zone X is the designation for B and C Zones and is used in place of these zones on some maps.

#### 2. Zone D

An area where the flood hazard is undetermined and which usually is very sparsely populated. The designation of Zone D can also be used for rating when one community incorporates portions of another community's area where no map has been prepared.

## III. LOCATING A SPECIFIC PROPERTY ON A MAP

- Check the map index to identify the correct map panel.
- Directly locate the property by the address or other information. It may help to compare the FHBM or FIRM to a more detailed map, such as an assessor's map or community street map.
- Note the map color where the property is located. On FHBM's and FIRM's, areas darkly shaded are the SFHAs. On an FHBM, no other zone data may be given. On a FIRM, the zones are also given an

alpha designation. All the area within the boundaries indicated for a zone carries that one zone designation.

- Base Flood Elevations in SFHA zones (A1-A30 [or AE], AH, V1-V30 [or VE]) are shown within wavy lines. In some SFHA zones, where the BFE does not vary within the entire zone, the BFE is indicated in parentheses. If required by terrain, a BFE for the property may be interpolated using the closest BFE indicators. In this case, it is important to document the finding.

#### **IV. CHANGING OR CORRECTING A FLOOD MAP**

There are three procedures:

##### **A. Letter of Map Amendment (LOMA)**

If the applicant/insured believes that the requirement to purchase flood insurance was made in error and there is evidence that the building is not in the Special Flood Hazard Area (SFHA) on the effective Flood Insurance Rate Map (FIRM), the applicant/insured may apply for a Letter of Map Amendment (LOMA).

A LOMA is a determination made by the Federal Emergency Management Agency (FEMA) for property and/or building as to whether it is located within the SFHA. LOMA determinations are based on the following:

- Comparing the location of the property to the SFHA.
- Comparing the elevation of the property to the 1-percent-annual-chance flood elevation.

If, after plotting the location on the FIRM, the FEMA examiner finds that the property and/or building is not shown 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 correctly shown outside the SFHA and, therefore, the mandatory flood insurance requirement does not apply.

An Out-As-Shown Determination does not require elevations. The minimum requirements to make an Out-As-Shown Determination are as follows:

- A photocopy of the FIRM panel (including the title block) that shows the area in which the property is located.

- Section A of the MT-EZ form, which is found in the MT-EZ application package and can be obtained from the FEMA web site at [www.fema.gov/plan/prevent/fhm/dl\\_mt\\_ez.shtm](http://www.fema.gov/plan/prevent/fhm/dl_mt_ez.shtm), or by calling the toll-free number listed below.

- A copy of the subdivision Plat Map of the area, showing the recordation data (i.e., Book/Volume and Page numbers) and containing the recorder's seal.

OR

- A copy of the deed for the property, showing the recordation information (i.e., Book/Volume and Page numbers) and containing the recorder's seal, accompanied by a tax assessor's or other suitable map showing the surveyed location of the property and at least two street intersections that are also shown on FEMA's FIRM.

In some cases, additional information may be required to make a determination.

Questions about LOMAs may be directed to the FEMA Map Assistance Center toll-free information line at 1-877-FEMA-MAP (1-877-336-2627).

##### **B. Letter of Map Revision (LOMR)**

A LOMR is an official revision to the currently effective FEMA map. It is used to change flood zones, floodplain and floodway delineations, flood elevations, and planimetric features. All requests for LOMRs must be made to FEMA through the chief executive officer of the community, since it is the community that must adopt any changes and revisions to the map. A LOMR is usually followed by a physical map revision.

##### **C. Physical Map Revision**

A physical map revision is an official republication of a map to effect changes to 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 to support the request for a map revision. The data will be analyzed, and the map will be revised if warranted.

**NOTE:** To verify past rating determinations and to establish floodplain management compliance requirements, old maps should be retained.

## **V. ORDERING FLOOD MAPS**

Flood maps and related products may be ordered by writing to the FEMA Map Service Center (MSC) at P.O. Box 1038, Jessup, MD 20794-1038. Orders also may be placed by calling the MSC's toll-free number, 1-800-358-9616, from 8:00 a.m. to 8:00 p.m., Monday through Friday.

Information about flood maps and other products also is available at the Map Service Center web site (<http://msc.fema.gov>). Visitors to the site now can download and print free "FIRMettes"—user-selected portions of official FEMA Flood Insurance Rate Maps. Regular visitors may set up accounts to order and pay for fee-based products online.

The MSC distributes Flood Hazard Boundary Maps (FHBM)s, Flood Insurance Rate Maps (FIRMs), and Flood Insurance Studies (FIS) in hardcopy format. Digital flood data, known as Q3, are available on CD ROM for approximately 900 counties nationwide. The Q3 data require GIS software for use. Call the MSC at 1-800-358-9616 for Q3 information for specific areas.

### **A. Ordering Instructions**

Z-fold maps may be ordered by community number and panel number. Flat map orders require a 6-digit community number. When ordering maps, be sure to identify specific map panels needed.

### **B. Prices**

There is a \$3.00 charge for each map panel, including index maps, plus shipping. Q3 data are \$50 per CD-ROM. Federal, state, and local governments are exempt from the fees for hardcopy maps. However, they must pay for Q3 CD-ROMs.

A chart showing MSC products, services, and fees is provided on pages MAP 5-6. Orders must be prepaid, and all sales are final. Overpayments of less than \$3 are not refunded.

The MSC accepts VISA, MasterCard, American Express, Discover, and Diners Club; deposit accounts (see C., following); and checks. Credit card and deposit account orders can be faxed to 1-800-358-9620. Checks should be made payable to "NFIP" and mailed to the address above.

### **C. Map Revisions**

To automatically receive map revisions, an account must be set up by either check or credit card. Accounts are established with a check of \$100 minimum. The check should be sent to the MSC at the address above, along with a list of the required map areas. As the revised maps become available, they will be sent automatically, and appropriate fees will be deducted from the deposit account.

Revised map information also may be obtained from the Flood Map Status Information Service (FMSIS) or the Community Status Book. For more information, call MSC at 1-800-358-9616.

# MSC Products, Services, and Fees

<http://msc.fema.gov>



# FEMA

## MAP SERVICE CENTER ORDER FORM

### For Flood Maps, Flood Insurance Studies, and Subscriptions

*Order online at: <http://msc.fema.gov>*

**Business Type:** Please check the title that corresponds with your business type.

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> A1 - FEMA               | <input type="checkbox"/> B - Appraiser  | <input type="checkbox"/> I - WYO                  | <input type="checkbox"/> Z2 - Title Co.               |
| <input type="checkbox"/> A2 - FEMA Contractor    | <input type="checkbox"/> C - Insurance  | <input type="checkbox"/> J - Real Estate          | <input type="checkbox"/> Z3 - Law Firm/Settlement Co. |
| <input type="checkbox"/> A3 - Federal Government | <input type="checkbox"/> D - Individual | <input type="checkbox"/> K - Builder/Developer    | <input type="checkbox"/> Z4 - Architectural Firm      |
| <input type="checkbox"/> A4 - State Government   | <input type="checkbox"/> F - Engineer   | <input type="checkbox"/> L - Surveyor             | <input type="checkbox"/> Z5 - Consulting Firm         |
| <input type="checkbox"/> A5 - Local Government   | <input type="checkbox"/> G - Lender     | <input type="checkbox"/> Z1 - Flood Determination | <input type="checkbox"/> Z6 - Other: _____            |

Name: \_\_\_\_\_ Map Service Center Account #: \_\_\_\_\_  
 Organization: \_\_\_\_\_  
 Street Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Telephone Number: (\_\_\_\_) \_\_\_\_\_ Fax Number: (\_\_\_\_) \_\_\_\_\_

**Paper Flood Maps/Conversion Letters:** Each index, map panel and conversion letter cost \$4.00. Shipping costs are \$0.41 per item for the first 10 items plus \$0.10 for additional items.

Community ID No.	Community, County/State	Qty	Price/Panel	Cost
_____	_____	_____	X \$4.00 =	_____
_____	_____	_____	X \$4.00 =	_____

**Digital Flood Maps on CD-ROM:** Each map panel cost \$4.00. Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

Community ID No.	Community, County/State	Qty	Price/Panel	Cost
_____	_____	_____	X \$4.00 =	_____
_____	_____	_____	X \$4.00 =	_____

**Paper Flood Insurance Studies (FIS)/Floodway Maps:** Each FIS cost \$9.00 per study volume plus an additional \$4.00 for each floodway map. FIS are available as sets only. Shipping costs are \$5.00 for the first FIS plus \$0.50 for each additional FIS.

Community ID No.	Community, County/State	Qty	Price/Panel	Cost
_____	_____	_____	_____ =	_____
_____	_____	_____	_____ =	_____

**Digital Flood Insurance Studies (FIS)/Floodway Maps on CD-ROM:** \$6.00 per study plus \$3.00 per floodway. Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

Community ID No.	Community, County/State	Qty	Price/Panel	Cost
_____	_____	_____	_____ =	_____
_____	_____	_____	_____ =	_____

**Q3 - Digitized Flood Data Information on CD-ROM:** Each CD-ROM is \$50.00. Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

States	Qty	Price/CD	Cost
_____	_____	X \$50.00 =	_____

**CBRA - Q3 CD-ROM:** CD-ROMs are \$50.00 each or all five (5) CD-ROMs for \$200.00. Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

States	Qty	Price/CD	Cost
_____	_____	X \$50.00 =	_____

**G&S - Guidelines and Specifications or MHIP - Multi-Hazard Implementation Plan on CD-ROM:** Each CD-ROM is \$2.60. Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

	Qty	Price/CD	Cost
Guidelines & Specifications	_____	X \$2.60 =	_____
Multi-Hazard Implementation Plan	_____	X \$2.60 =	_____

<b>DFIRM on CD-ROM*:</b>	<b>Community ID No.</b>	<b>Qty</b>	<b>Price/CD</b>	<b>Cost</b>
DFIRM Database	_____	_____	X \$10.00 =	_____
DFIRM w/Ortho	_____	_____	X \$10.00 =	_____

\*Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

<b>Flood Map Status Information Service (FMSIS):</b>	<b>Qty</b>	<b>Price/State</b>	<b>Cost</b>
FMSIS One Time State One Issue*	_____	X \$13.00 =	_____
FMSIS One Time U.S. Issue*	_____	X \$38.00 =	_____
FMSIS Monthly State Subscription	_____	X \$148.00 =	_____
FMSIS Monthly U.S. Subscription	_____	X \$419.00 =	_____

\*Shipping costs are \$1.75 for the first two (2) CD-ROMs plus \$0.25 for additional CD-ROMs.

<b>NFIP Insurance Manual:</b>	<b>Qty</b>	<b>Price Per</b>	<b>Cost</b>
Complete Manual (Paper)	_____	X \$35.00 =	_____
Complete Manual (CD-ROM)	_____	X \$25.00 =	_____
Producer's Edition	_____	X \$15.00 =	_____

<b>Letter of Map Change Subscription Service (LOMC):</b>	<b>Qty</b>	<b>Sub Price</b>	<b>Cost</b>
Single Subscription:	_____	X \$85.00 =	_____
Yearly Subscription:	_____	X \$2,000.00 =	_____

Shipping costs are included in the subscription cost.

<b>Subscription Sub Total:</b>	=	_____
<b>Order Sub Total:</b>	=	_____
<b>Shipping Cost:</b>	\$	_____
<b>Total Cost for Order:</b>	\$	_____

Orders paid by check can be mailed to: FEMA/NFIP  
 Map Service Center  
 P.O. Box 1038  
 Jessup, MD 20794-1038

All other orders can be faxed to: 1-800-358-9620

**Payment Information:**

- Check or money order payable to NFIP is enclosed for \$ \_\_\_\_\_
- Charge my deposit account number \_\_\_\_\_ \$ \_\_\_\_\_
- If paying by credit card, please provide a valid phone number and a Technical Service Representative will contact you shortly. Area Code ( ) \_\_\_\_\_ - \_\_\_\_\_

*(If you would like assistance in calculating the cost of your order or information about setting up a deposit account, call Customer Service at 1-800-358-9616.) All map sales are final - no refunds on material shipped.*

**Thank you for your order.**

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP

TOWN OF  
ANYTOWN, USA  
SOME COUNTY

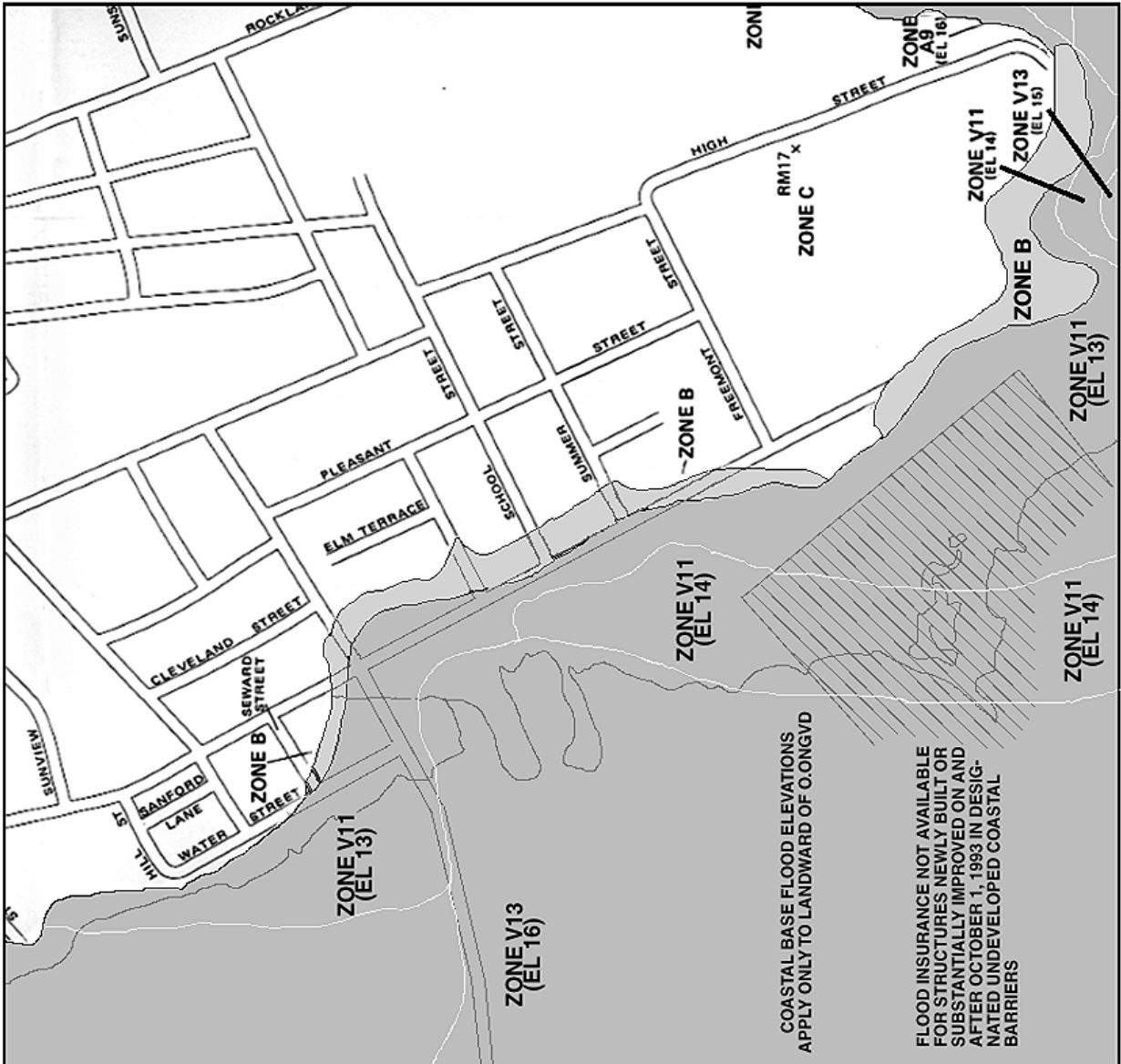
PANEL 103 OF 500  
(SEE MAP INDEX FOR PANELS NOT PRINTED)  
SAMPLE FIRM TO SHOW RIVERINE AND  
COASTAL FLOORING FOR TRAINING PURPOSES ONLY. NOT FOR OFFICIAL USE.

COMMUNITY-PANEL NUMBER  
990099 0103 C

MAP REVISED:  
JULY 1, 1989



Federal Emergency Management Agency



NATIONAL FLOOD INSURANCE PROGRAM

**FHBM**  
FLOOD HAZARD BOUNDARY MAP

Anytown, USA

Sample FHBM to Show Riverine Flooding. For Training Purposes Only.  
Not for Official Use.

**SAMPLE**

COMMUNITY-PANEL NUMBER  
990099 0101C

MAP REVISED  
JULY 1, 1989



Federal Emergency Management Agency

