



# How to Read a Flood Map

**January 2022**

# Contents

- ▶ [What is a Flood Insurance Rate Map \(FIRM\) or Flood Map?](#)
- ▶ [What are Flood Zone Designations?](#)
- ▶ [Terms Summary](#)
- ▶ [Where and How Do I Find My Flood Map?](#)
- ▶ [Read Your Flood Map](#)
- ▶ [Using the National Flood Hazard Layer \(NFHL\) Viewer](#)
- ▶ [Download Your Flood Map](#)
- ▶ [More Information](#)

# What is a Flood Map?

A Flood Insurance Rate Map (FIRM, or flood map) is the official map of a community on which defines both the special flood hazard areas and the flood zones applicable to the community. This map is used by the National Flood Insurance Program (NFIP) for floodplain management, mitigation, and insurance purposes. The flood map is the official source for determining flood risk within a community.

Commonly depicted on flood maps:

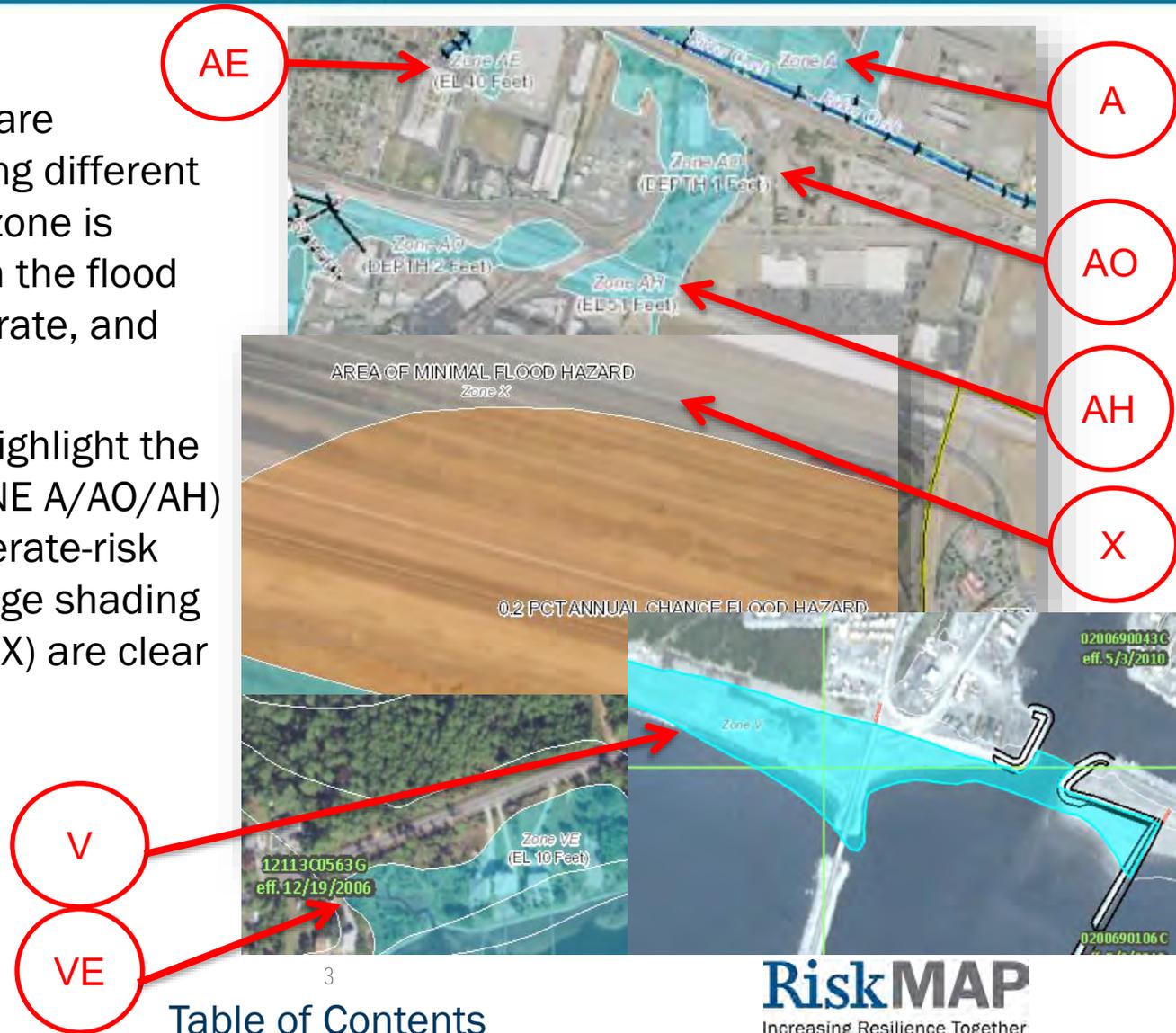
- ▶ Flood Zone Designations
- ▶ Base Flood Elevations (BFE)
- ▶ Floodplain Boundaries
- ▶ Roads and Landmarks



# What are Flood Zone Designations?

Flood Zone Designations are geographic areas as having different levels of flood risk. Each zone is represented differently on the flood map to convey low, moderate, and high-risk flood zones.

The images on the right highlight the high-risk flood zones (ZONE A/AO/AH) in a blue shade; the moderate-risk areas (ZONE X) have orange shading and low risk areas (ZONE X) are clear or unshaded.



# What are Flood Zone Designations (cont'd)?

- ▶ **Special Flood Hazard Areas (SFHAs)** are high-risk areas shown on the flood map as shaded zones beginning with the letters A or V
  - The SFHA is defined as the land area covered by the floodwaters of a base flood
  - In communities that participate in the NFIP, all home and business owners with structures in high-risk areas who hold mortgages from federally regulated or insured lenders are required to buy flood insurance and adhere to floodplain management regulations
- ▶ **Non-Special Flood Hazard Areas** are moderate- to low-risk areas shown on the flood map as zones beginning with the letters B, C, or X (including shaded & unshaded)
  - The risk of flooding is lower, but risk still exists In communities that participate in the NFIP, flood insurance is available, but not mandatory, for all property owners and renters in these zones typically at a lower rate
- ▶ Some flood maps also include areas where there are possible, but undetermined, flood hazards or unstudied areas
  - These areas are shown on flood maps as “Zone D”

# Terms Summary

## ▶ Flood Map

- The official FEMA-generated flood map that shows a community's different flood hazard areas. Flood maps are utilized by the NFIP for floodplain management, mitigation, and insurance purposes

## ▶ Flood Zones

- Defined geographic areas of varying flood hazard risk. The mandatory flood insurance purchase requirement applies in Special Flood Hazard Areas

## ▶ Special Flood Hazard Area (SFHA)

- High-risk areas shown on the flood map as zones beginning with A or V

## ▶ Non-Special Flood Hazard Areas

- Moderate- to low-risk areas shown on the flood map as zones beginning with the letters B, C, or X

## ▶ Base Flood Elevation (BFE)

- The computed elevation to which floodwater is anticipated to rise during the base (1-percent-annual-chance) flood event

# Terms Summary (cont'd)

## ▶ Letter of Map Change (LOMC)

- A document issued by FEMA that revises or amends the flood hazard information shown on the flood map. Types of LOMCs include Letters of Map Revision (LOMRs), Letters of Map Revision Based on Fill (LOMR-Fs), and Letters of Map Amendment (LOMAs)

## ▶ Letter of Map Revision (LOMR)

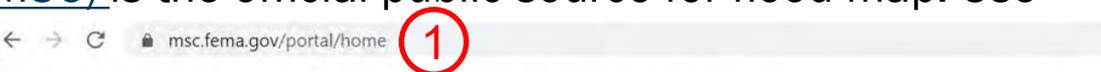
- A document that officially revises a community's effective flood map based on technical data or other information provided by the community. Developers, engineering firms, and a community's Chief Executive Officer (CEO) may apply for a LOMR with acknowledgement from the community

## ▶ Letter of Map Amendment /Letter of Map Revision Based on Fill (LOMA/LOMR-F)

- An official amendment made to an effective flood map determining whether a building, lot, or portion of a property is inadvertently included in the Special Flood Hazard Area (SFHA)
- Property owners may apply for a LOMA or LOMR-F

# Where and How Do I Find my Flood Map?

The [FEMA Map Service Center \(MSC\)](https://www.fema.gov/map-service-center) is the official public source for flood map. Use the MSC to find your flood map.



FEMA Flood Map Service Center: Welcome!

## Navigate to:

1. [msc.fema.gov](https://www.msc.fema.gov)

2. Insert the address into the “Enter an address...” bar

3. Select the “Search” button

The page will populate the search results for your location

Looking for a Flood Map? 

Enter an address, a place, or longitude/latitude coordinates:



Looking for more than just a current flood map?

Visit [Search All Products](#) to access the full range of flood risk products for your community.

## About Flood Map Service Center

The FEMA Flood Map Service Center (MSC) is the official public source for flood hazard information produced in support of the National Flood Insurance Program (NFIP). Use the MSC to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk.

FEMA flood maps are continually updated through a variety of processes. Effective information that you download or print from this site may change or become superseded by new maps over time. For additional information, please see the [Flood Hazard Mapping Updates Overview Fact Sheet](#)

# Read Your Flood Map

## Results Page Includes:

1. Map number and the map effective date
2. Link to download/print a miniature flood map (known as a FIRMette)
3. Link to download all flood map information and data

Search Results—Products for **PITTSBURGH, CITY OF** [Show ALL Products »](#)

The flood map for the selected area is number **42003C0334H**, effective on **09/26/2014**

**DYNAMIC MAP** **MAP IMAGE** **Changes to this FIRM**

- Revisions (1)
- Amendments (1)
- Revaluations (1)

You can choose a new flood map or move the location pin by selecting a different location on the location map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIRMette. [Go To NPH Viewer »](#)

Map viewer showing flood zones and street names in Pittsburgh, PA. The map includes a red location pin and various flood zone overlays. Labels on the map include "PITTSBURGH, CITY OF", "AREA WITH FLOOD HAZARD", and "esri".

# Read Your Flood Map

## Results Page Includes:

4. All changes to the flood map since its effective date
5. Locator map with [National Flood Hazard Layer \(NFHL\)](#) data
6. Link to open the location in the NFHL Viewer

Search Results—Products for **PITTSBURGH, CITY OF** [Show ALL Products](#)

The flood map for the selected area is number **42003C0334H**, effective on **09/26/2014**

**DYNAMIC MAP** **MAP IMAGE** **Changes to this FIRM**

- Revisions (1)
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- Revolutions (1)

You can choose a new flood map or move the location pin by selecting a different location on the locator map below or by entering a new location in the search field above. It may take a minute or more during peak hours to generate a dynamic FIR/ette.

[Go To NFHL Viewer](#)

5

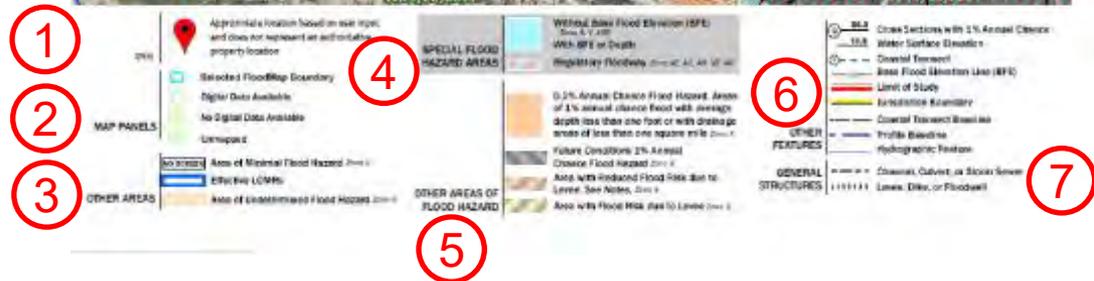
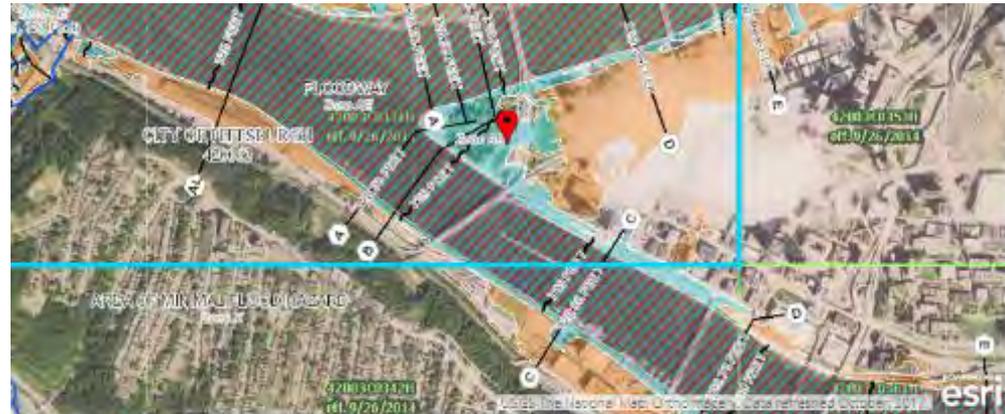
4

6

# Read Your Flood Map (cont'd)

## Legend Includes:

1. Pin showing approximate location (can be adjusted)
2. Map panels
3. Other areas
4. SFHAs
5. Other Areas of Flood Hazard
6. Other Features such as profile baseline, limit of study, etc.
7. General Structures such as levee, dike, etc.



# Read Your Flood Map (cont'd)

## Zoomed-in View of Specified Location Shows:

1. Pin at approximate location
2. Map Number and Effective Date
3. Flood Zone Designation (In this case, Zone AE)



\*As indicated previously: Zone AE is a high-risk area. Mandatory flood insurance purchase requirements and floodplain management standards apply.



# Using the National Flood Hazard Layer (NFHL) Viewer

## Navigate to:

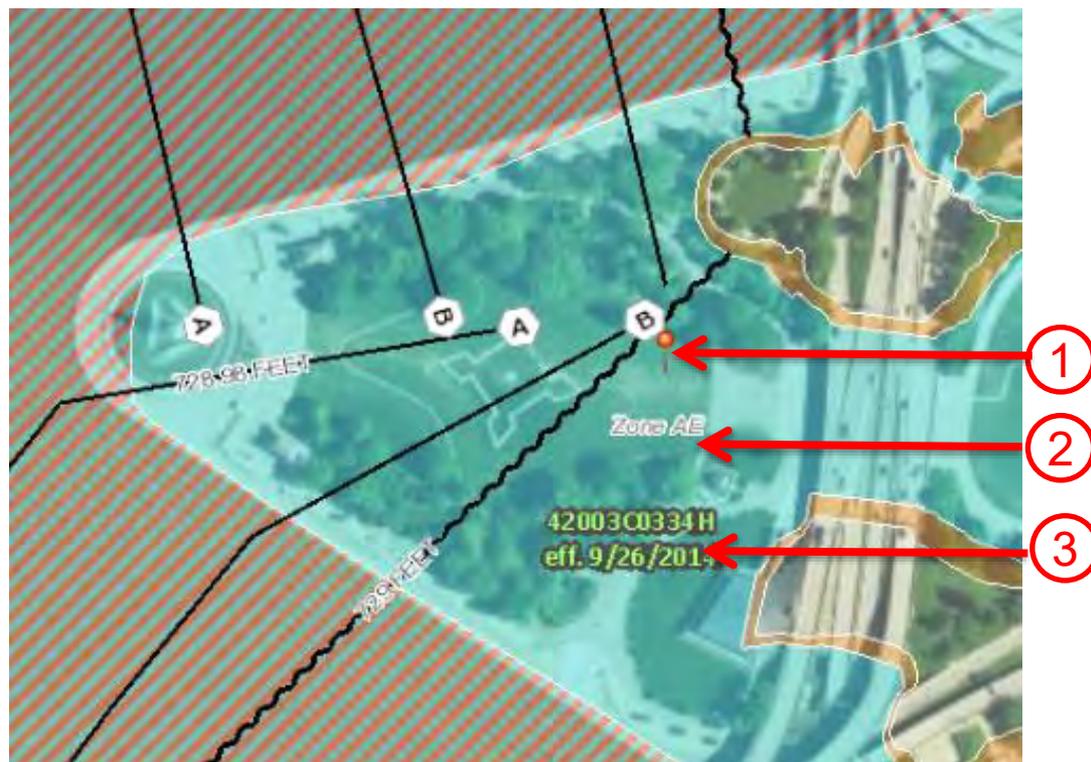
1. The middle right corner of the MSC results page (above the locator map) and click [“Go to NFHL Viewer”](#).
2. The map will open in new browser tab/window using the NFHL Viewer



# Using the NFHL Viewer (cont'd)

## Zoomed-In View of Specified Location Shows:

1. Pin at approximate location
2. Flood Zone Designation (In this case, Zone AE)
3. Map Number and Effective Date



\*As indicated previously: Zone AE is a high-risk area. Mandatory flood insurance purchase requirements and floodplain management standards apply.

# Using the NFHL Viewer (cont'd)

## Locate the Legend:

1. The NFHL Viewer legend can be found by clicking  in top right corner of Viewer window



# Download Your Flood Map

## Locate the Map Icon:

1. Click “Map Image” icon
2. The file will download as a “.zip”
3. A zip file is a collection of 1 or more files in a single location. Double click on the file to open

## FEMA Flood Map Service Center: Search By Address

Enter an address, place, or coordinates:

Whether you are in a high-risk area or not, you may need flood insurance because most homeowners' insurance doesn't cover flood damage. Flood risk can seem low, but it's possible to have a serious loss. Make sure you experience flood protection by joining a private flood risk pool. For the full details, visit [FloodSmart.gov](#) or call 1-800-358-7473. For more information, visit [www.floodsmart.gov](#).

Learn more about disaster loss reduction and mitigation.

Search Results — Products for **DISTRICT OF COLUMBIA** [Show ALL Products >](#)

The flood map for the selected area is number **1100010019C**, effective on **09/27/2010**.

**DYNAMIC MAP** **MAP IMAGE** **Changes to this FIRM**

**Revisions (1)**  
**Amendments (1)**  
**Revalidations (1)**

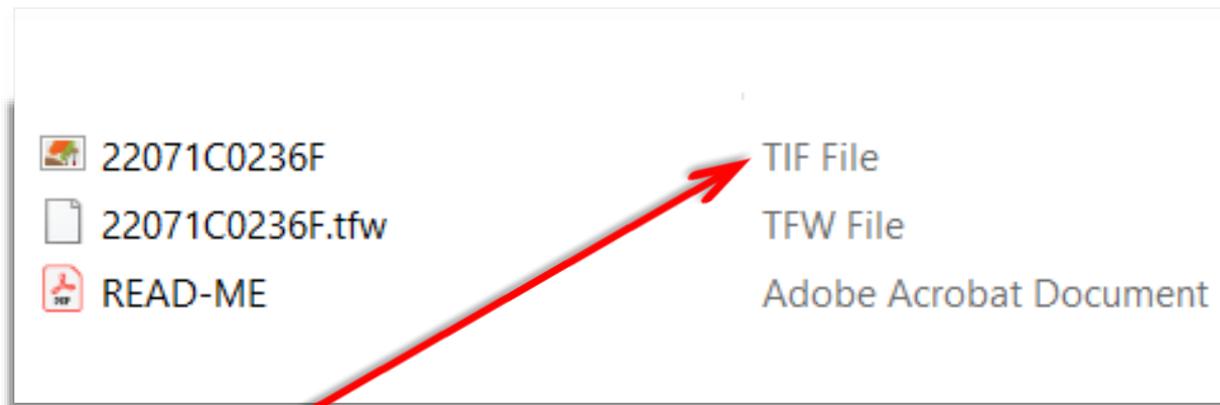
You can choose a new flood map at a new location or, by selecting a different location on the map, you can choose a new location in the same flood zone. It may take a minute or more during peak hours to generate a dynamic flood map. If you are a person with a disability, visit [www.floodsmart.gov](#) and use the [FloodSmart.gov](#) website to request a map.

[Go To NFHL Viewer >](#)

# Download Your Flood Map

## Locate the Map Icon:

4. Three files will be present, including the flood map file, a PDF file with information, and a PGW or TFW file that can be used with Geographic Information System (GIS) applications



5. Select the TIF or PNG file

# Download Your Flood Map (cont'd)

## Open File:

- ▶ The file will open in the default program for viewing pictures or files, usually these files are PNG or TIF files
- ▶ Using the features in the default program, users can zoom and pan as needed to view details
- ▶ A Legend is available for reference



# More Information

## Flood Preparation

- ▶ [How Do I Buy Flood Insurance?](#)
- ▶ [Hazard Mitigation Assistance Grants](#)
- ▶ [FloodSmart](#)
- ▶ [The National Flood Insurance Program](#)
- ▶ [Financial Assistance](#)

## Flood Resources

- ▶ [Special Flood Hazard Area](#)
- ▶ [Know Your Flood Risk](#)
- ▶ [Flood Insurance Rate Map \(FIRM\)](#)
- ▶ [Flood Insurance Rules and Legislation](#)
- ▶ [National Risk Index for Natural Hazards](#)
- ▶ [Glossary \(PDF\)](#)
- ▶ [Contact Us](#)



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