

# FLOOD MAPS: Know Your Risk and Take Action Against Flooding

## WHAT IS A FLOOD MAP?

A Flood Map informs your community about the local flood risk. It helps set minimum floodplain standards so that your community builds safely and resiliently. It determines the cost of flood insurance, which helps property owners to financially protect themselves against flooding. The lower your degree of risk, the lower your flood insurance premium will be. In areas with a high risk of flooding, you might be required to get flood insurance.

To ensure the public knows their flood risk and insurance is priced accurately, FEMA works with communities and property owners at all steps of the process to incorporate the best available data into the nation's Flood Maps. The Flood Maps are developed using the sound science generated by engineering experts, and FEMA always accepts additional, validated flood hazard information from property owners and communities. Through this collaborative process, a community can review, appeal, and contribute to the development of a Flood Map before it is adopted by the community.

## HOW IS A FLOOD MAP MADE?

### ● Identify Area to Map or Re-Map



A watershed is reviewed for development of a new map or to update/re-map the watershed.

Federal Emergency Management Agency (FEMA), state, local and tribal officials develop local partnerships and identify available data, which are used to aid discussions of flood risk in the watershed.



### WHY WOULD A COMMUNITY NEED TO "RE-MAP"?



Population Growth & Development



Better Science



Changing Conditions

## 2 Select the Project Area

A watershed is selected for Discovery based on evaluations of risk, need, availability of elevation data, regional knowledge of issues, and input from the state, community, and other stakeholders.



### Watershed

An area or ridge of land that separates waters flowing to different rivers, basins, or seas.

**DID YOU KNOW?** Flooding occurs in all 50 states with nearly **12.5 MILLION** square miles at risk.

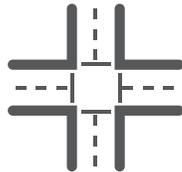


## 3 Gather Information

FEMA, state, local, and tribal officials collect current and historic flood-related data including:



Hydrology



Infrastructure



Hydraulics



Land use



Existing maps such as:

- ▶ Floodplain
- ▶ Base map
- ▶ Flood Map, if existent

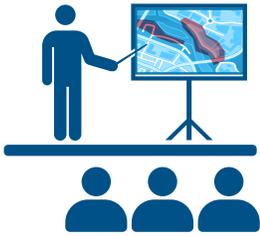
### A Flood Map:

- ▶ Also known as a Flood Insurance Rate Map (FIRM)
- ▶ Communicates flood risk to a community and its residents
- ▶ Informs local floodplain management regulations
- ▶ Identifies flood insurance risk zones called Special Flood Hazard Areas (SFHA)
- ▶ Determines insurance rates and the need to purchase insurance through the National Flood Insurance Program (NFIP)
- ▶ Sets minimum floodplain standards and building standards for the community
- ▶ Is modified when there are changes in population growth and development, and improved science including changes in climate and weather patterns



FLOOD RISKS

FEMA, state, local, and tribal officials hold a Discovery meeting with the community to review the analysis of flood risk data; identify and address concerns; and inform residents of the status of the project.



If a Flood Map is needed, a “Kick Off” meeting marks the official start of the risk identification and assessment for the project area.



FEMA, state, local, and tribal officials develop a Risk MAP Project Plan. Risk MAP is a FEMA program that provides communities with flood information and tools to enhance knowledge of local flood risk and help advance mitigation actions. Other resources such as a “Kick-off” Newsletter and Discovery Report are developed at this point in the process, to help keep stakeholders engaged.



If the data and research does not support the need for a Flood Map project, the final Discovery Report is updated to reflect that decision. In lieu of a Flood Map, state, local, and tribal officials may opt to undertake mitigation action to reduce the community’s risk of flood damage. Common types of mitigation projects include the elevation of infrastructure, construction of dams, levees or seawalls, or the control of soil erosion.

#### 4 Hold the Flood Risk Review and Resilience Meetings



If a project is required, FEMA, state, local and tribal officials meet to validate mapping data and supporting research which helps identify areas more prone to flooding and provides spatial orientation to project planners. As well, the mapping data informs Risk MAP products such as the Flood Risk Report, Flood Depth Grids, and Areas of Mitigation Interest.



During the Flood Risk Review Meeting, it may be determined that a Flood Map project is no longer required.



If Flood Maps don’t require updating, state, local, and tribal officials may consider ways to reduce flood risk using the newly acquired data.

Community leaders host events to inform residents of their community’s current risk of flooding.



The Resilience Meeting is a collaborative discussion with local residents about the risks of flooding. It provides a platform for risk communication and mitigation planning. Resources such as the Resilience Newsletter and the Digital Flood Map Database are created.



The project team reviews the Flood Maps and Flood Insurance Study (FIS), making updates where necessary.



## 5 Issue Preliminary Map

An Open House Meeting is facilitated with the help of a FEMA Consultation Coordination Officer (CCO). The CCO engages stakeholders and the public, explains the potential implications of the preliminary Flood Map, and provides information on the public appeal and comment process.



Community leaders host events to inform residents of their community's current risk of flooding.

The Preliminary Map is uploaded to the Map Service Center, making it easily accessible to the public. The Map Service Center can be found at: <http://www.fema.gov/national-flood-insurance-program/map-service-center>



OR



If new or refined data is available from FEMA, the community or other stakeholders, it can continue to be incorporated at this time.

### DID YOU KNOW?

A 6-inch deep creek in the mountains can swell to a 10-foot deep raging river in less than an hour.



## 6 Facilitate Public Comment and Appeal Period



Stakeholders have 90 days to submit comments and/or appeals.



Comments and/or appeals are reviewed and Flood Maps may be updated appropriately.



If needed, a Scientific Resolution Panel may be called upon to independently review appeals.

If a property owner thinks their property has been inadvertently mapped in a Special Flood Hazard Area, they may submit a request to FEMA for a Letter of Map Change (LOMC) which is an official revision/amendment to an effective Flood Map. If the LOMC request is granted, property owners may be eligible for lower flood insurance premiums, or the option to not purchase flood insurance.

### DID YOU KNOW?

Flood Maps are created from sound science. They inform homeowners, business, and local communities of their risk of flood—potentially saving lives and damage to personal property.



## 7 Issue Letter of Final Determination



Once a Flood Map is finalized, community leaders hold a vote to decide to adopt the map. A six month adoption and compliance period begins to allow communities time to adopt or amend its floodplain management regulations to reflect flood hazard information shown on the new Flood Map. Additional mitigations may be taken, including adopting higher floodplain management standards than the required minimum for NFIP participation.



Local insurance and lender training is held.

## DID YOU KNOW?

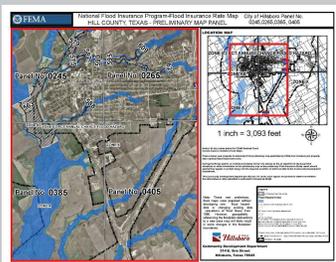


Community Rating System (CRS) is a voluntary incentive program that recognizes communities for implementing floodplain management practices that exceed the Federal minimum requirements of the National Flood Insurance Program (NFIP). Policyholders in communities that participate in the CRS program can receive reduced flood insurance premiums for their buildings within the community.

When your community participates in CRS, you can qualify for an insurance premium discount of up to 45% if you live in a high-risk area and up to 10% in moderate- to low-risk areas.

## 8 Issue Flood Map

Community leaders monitor and track local developments. Letters of Map Revision (LOMRs) are required within 6 months of project completion for projects that change flood hazards in a specific area.



## DID YOU KNOW?



People outside of mapped high-risk flood areas file nearly 25% of all National Flood Insurance Program (NFIP) flood insurance claims and receive one-third of Federal Disaster Assistance for flooding. Floods are the most common natural disaster in the U.S. and since standard homeowners insurance doesn't cover flooding, it's important to have protection.

The NFIP was created by Congress in 1968 to help provide a means for property owners to financially protect themselves against flooding. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the NFIP. Participating communities agree to adopt and enforce ordinances that meet or exceed FEMA requirements to reduce the risk of flooding. To learn more about the NFIP and flood insurance, visit [www.floodsmart.gov](http://www.floodsmart.gov).

## 9 Improve Resiliency of Watershed

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Final Flood Maps are posted to the online Map Service Center, making them easily accessible to the public. The Map Service Center can be found at: <http://www.fema.gov/national-flood-insurance-program/map-service-center>



FEMA and state leaders track and log potential future changes to Flood Maps in accordance to the Coordinated Needs Management Strategy (CNMS), which manages and standardizes mapping needs and provides a more comprehensive and efficient approach.



Community implements actions to further reduce the risk of flooding and continues participation in the NFIP.



RiskMAP

Increasing Resiliency

version: 031814



FEMA