



Changes Since Last FIRM

The Federal Emergency Management Agency (FEMA) has broadened its delivery of flood hazard data to include a number of non-regulatory datasets. These non-regulatory datasets assist users in determining locations of change in flood risk location and describe a variability of flood risk in the 1-percent annual chance floodplains designated on the Flood Insurance Rate Maps (FIRMs).

The Changes Since Last FIRM (CSLF) file is delivered to local officials during either the Flood Risk Review or Resilience Meetings as a part of the Flood Risk Database, prior to the preparation of the preliminary FIRMs. The CSLF files identify areas where the flood risk has increased or decreased in size since the printing of the last FIRM.

How do flood risks change?

Over the past century, the United States has become an increasingly urban society. The changes in land use associated with urban development affect flooding in many ways. Removing vegetation and soil, grading the land surface, and constructing drainage networks increase runoff to streams from rainfall and snowmelt.

As natural features, like open pasture or forested land is altered to subdivisions and commercial sites throughout a community the manner and timing of storm water collection is altered. As a result, the peak discharge, volume, and frequency of floods increase in nearby streams. Changes to stream channels during urban development can limit their capacity to convey floodwaters. Roads and buildings constructed in flood-prone areas are exposed to increased flood hazards, including inundation and erosion, as new development continues. Information about streamflow and how it is affected by land use can help communities reduce their current and future vulnerability to floods.

Have things changed in my community?

The Changes Since Last FIRM dataset assists in identifying areas where an updated flood risk has been determined. The CSLF dataset is depicted as red where flood risk has increased, showing the additional areas at risk within the polygon area shown. These areas may have an increased flood risk due to recent development in the surrounding or upstream areas.

Flood Risk Tools and Datasets Promote Understanding

In an effort to assist community officials in building a support base for hazard mitigation, sustainability and resiliency discussions within their communities, FEMA developed a variety of Flood Risk Tools. These tools are being prepared with the latest technology and provide a clearer picture of flood risk within a community.

These Flood Risk Tools will allow communities to better understand and plan for the natural hazard risks that they face. The information can be used to enhance mitigation plan content, increase risk communications capability and support mitigation activities to increase community resilience.

The mission of FEMA is to support communities in becoming more disaster resilient by *knowing* their risk, *planning* for that risk, *mitigating and communicating* these risks. Everyone can take steps to reduce their risk. Families, business owners and local ecomomies benefit from hazard mitigation activities and may transfer their risk by obtaining flood insurance.

For more information on the natural hazard risk in your community, visit www.riskmap6.com



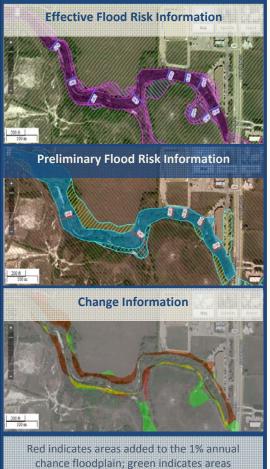
Additionally, the CSLF dataset also shows areas where local, state and federal flood mitigation projects and efforts have led to a reduction in the floodplain. Channelization, stream crossing modifications, detention ponds and other flood mitigation measures will likely result in a decrease in the flood risk within the project areas. The CSLF dataset indicates these reduced flood risk area with a green polygon, showing the areas which will be removed from the 1-percent chance floodplain during the FIRM revision.

Essential Information for Communities

Community officials and technical staff will find the Changes Since Last FIRM dataset a valuable tool to assist them in reviewing the hydraulic study results during this crucial time in the Risk MAP project lifecycle. Local community officials may also find the CSLF dataset useful for mitigation planning, floodplain management, and flood risk awareness. The dataset can assist communities in identifying the numbers of structures and people affected by the floodplain boundary updates.

Sustained development within a community over time alters the way storm water flows through a community's streams and waterways. Development generally increases the amount of stormwater that needs to be transported in a stream channel, underground storage system or drainage ditch. Review of proposed development and use of Low Impact Development best practices may assist a community in finding the balance between development and an increase in flood risk.

Visualizations created from the dataset, such as in the figures to the right, allow property owners to determine if the flood zone designation for their property is likely to change. Being aware of the potential updates allows proactive property owners to take advantage of certain discounts on flood insurance policies available through the National Flood Insurance Program.



removed.

Elected Officials and Community Staff	 Highlights where mapped floodplain boundaries, flood zones, and floodways have been altered Assists in facilitating discussions about flood hazard changes, causes, and what residents and businesses can do to protect themselves from the associated flood risks in change areas Allows communities to identify where significant number of households/businesses may be affected and lead to targeted outreach efforts in those areas to raise awareness Help identify and support plans for funding projects to reduce the flood hazards and associated flood risks in specific areas
Community/Regional	Assists in prioritizing mitigation actions
Planning Staff	• Assist sustainability planning by enabling a better understanding of how floodplain extents change over time due to environmental changes such as sea level rise, changes in precipitation patterns, changes in
	development or urbanization, and increased storm surges
Community	Captures changes in mapped flooodplain and floodway boundaries as well as flood zone designations
Techincal Staff	Helps identify reasons for changes
Insurance Agents,	Better prepares these stakeholders to discuss flood risk with clients and prospects
Lenders, Real Estate Agents	• Allows insurance professionals to target new customers (through direct mail campaign, local news etc), for those being mapped into a higher risk zone and/or lower risk zone
Agents	 Allow Real Estate professionals to have a graphic easily accessible, preventing losing a sale or delaying closing if agent or broker is unaware of changes
	• Lenders and mortgage brokers can have an easily accessible visual to assist with informing their
	prospective borrower about potential changes in flood insurance requirements
Citizens	Illustrates where flood zones have changed and why
	• Provides a starting point for discussing how they can reduce their risk through mitigating and transfer
	risk by obtaining flood insurance