

FEMA's New Digital Flood Hazard Mapping Tools June 19, 2018



Agenda

- Introductions
- Risk MAP Vision
- FEMA Initiatives
- Flood Hazard Data Life Stages
- FEMA's Flood Map Service Center
- National Flood Hazard Layer (NFHL)
- Draft NFHL and Changes Since Last FIRM (CSLF)
- Flood Map Changes Viewer and Preliminary Map Comparison Tool
- Available Flood Hazard Information (AFHI) Viewer
- Resources
- Q&A





Introductions

Eliza Ledwell, CFM – IBM

Deputy Program Manager for FEMA Risk MAP Customer and Data Services



Dan Horner, CFM - NiyamIT

Business Operations Architect for FEMA Risk MAP Customer and Data Services







Risk MAP Vision

- In support of the National Flood Insurance Program (NFIP) Risk MAP delivers quality data that increases public awareness and leads to action that reduces risk to life and property.
- We want to achieve this by:
 - Providing access to a wealth of consolidated flood hazard and risk data from a variety of sources and partnerships
 - Empowering mitigation actions by providing timely, relevant, and intuitive risk communications





FEMA Initiatives

- Over the past few months, in support FIMA's Moonshots and FEMA's Strategic Plan, FEMA has enhanced and updated, in a number of ways, how the Agency delivers information about flood risk.
- These improvements will eliminate much of the manual data exchange and coordination needed to get information to stakeholders, saving work for FEMA and our partners and increasing the reliability/integrity of our data.
- Going forward, FEMA will continue to streamline its information delivery processes, thus enabling people across the country to make better-informed decisions about reducing their risk.
- Users can now rely exclusively on dynamic products, based on the National Flood Hazard Layer, rather than on static legacy maps, throughout the mapping lifecycle.
 - This authoritative, consolidated, interactive, customer friendly product reduces the complexity for users.
- FEMA is providing public access to our engineering models and other backup data, where appropriate, for completed projects and work in progress.
- FEMA has strengthened our systems to handle this huge additional demand for dynamic products.





Alphabet Soup

- FIRM (Flood Insurance Rate Map) is the official map of a community on which FEMA has delineated both the special hazard areas and the risk premium zones
- MSC (Flood Map Service Center)
 is the official source for publicly
 available flood hazard data
- NFHL (National Flood Hazard Layer) is a national geospatial database of digital FIRMs and LOMC (Letters of Map Change)







FEMA's Flood Hazard Lifecycle

FEMA's data can go through several stages before becoming effective for regulatory use in floodplain management and flood insurance. These stages are intended to make sure communities and homeowners are aware of changes that may impact them

draft flood hazard data

 Made available for early communication with communities and residents

preliminary flood hazard data

 Issued for public review and awareness of proposed change(s)

pending flood hazard data

 Data is finalized, assigned an effective date, and delivered to communities five to six months prior to effective date

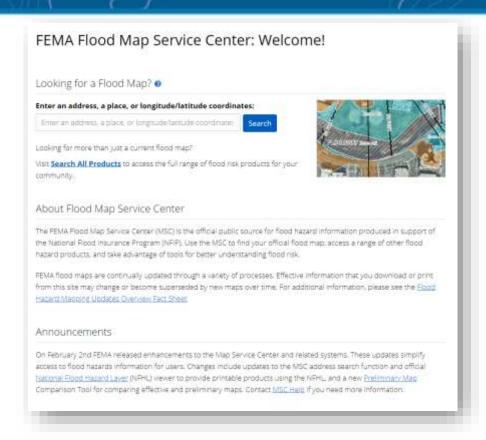
effective flood hazard data

- Reached its effective date and can be used for official, regulatory purposes
- May be affected by Letters of Map Change (LOMC)





FEMA's Flood Map Service Center (MSC)



Go to: msc.fema.gov

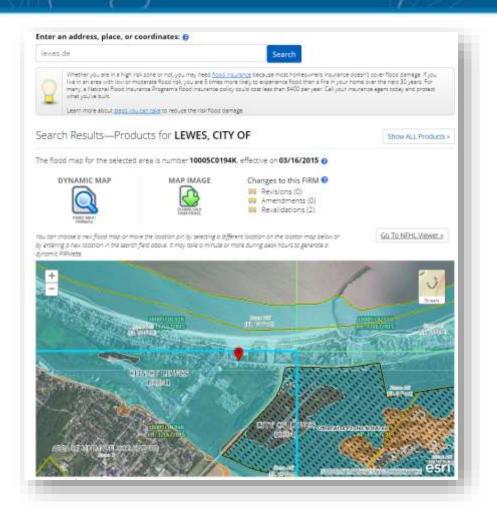
Your authoritative source for:

- NFHL or legacy official flood maps
- Search by community for Preliminary, pending, and historic flood maps
- Letters of Map Change (LOMC)
- And other products and tools
- Provides a simple path to find the basic information you need and access to flood hazard data
- Create a free subscription and get emails when new products are published!





FEMA's Flood Map Service Center (MSC) Enhancements



Now you can:

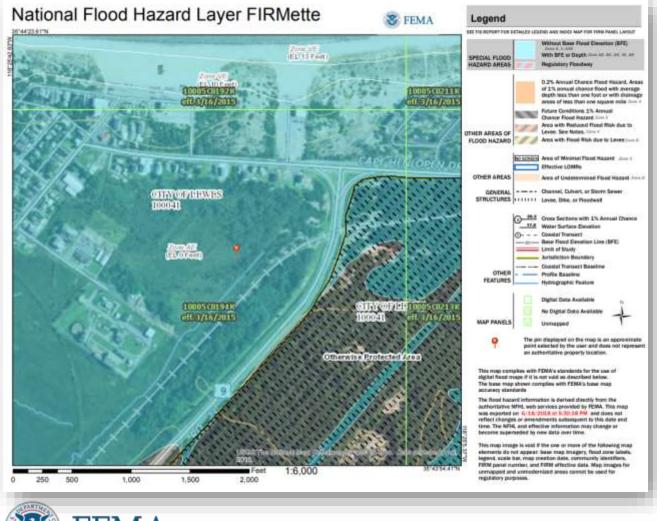
- View the NFHL in Address Search
- Create a FIRMette from the NFHL
- Advance to the NFHL
 Viewer to access
 additional options (Coming June 29!)

Simplest way to access the NFHL and create print-size flood maps - FIRMettes





FEMA's Flood Map Service Center (MSC) Enhancements cont'd

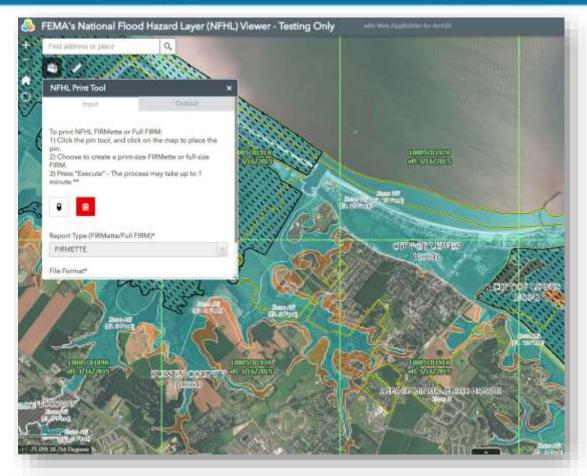


Simplest way to access the NFHL and create printsize flood maps - FIRMettes





FEMA's National Flood Hazard Layer (NFHL) Viewer



Go to: msc.fema.gov/nfhl Now you can:

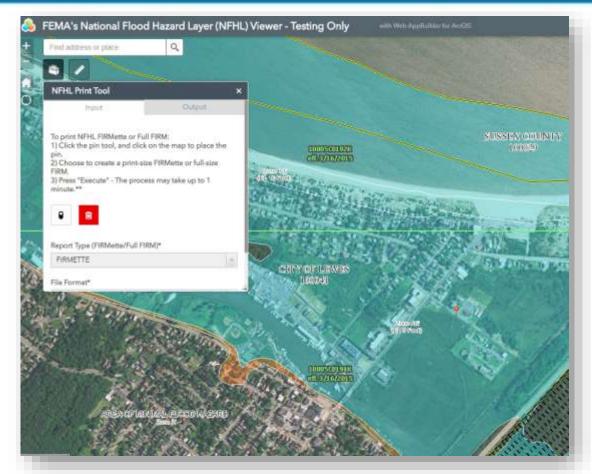
- Create a FIRMette after selecting a point of interest
- Create a Full-size FIRM
- View all features found on FIRM with standardized symbology
- View LOMA and Revalidation Statuses
- All with LOMRs already in place

Powerful tool for viewing flood hazards and creating mapping products for official purposes





FEMA's National Flood Hazard Layer (NFHL) Viewer cont'd



Go to: msc.fema.gov/nfhl Now you can:

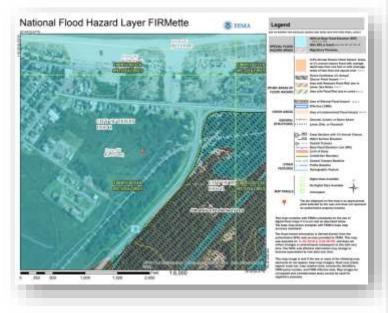
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FEMA's National Flood Hazard Layer (NFHL) - Exports





Increasing Resilience Together



Draft NFHL Viewer

Go to: msc.fema.gov/draft

- Coming June 29, 2018!
- Draft National Flood Hazard Layer, shown with the effective NFHL data

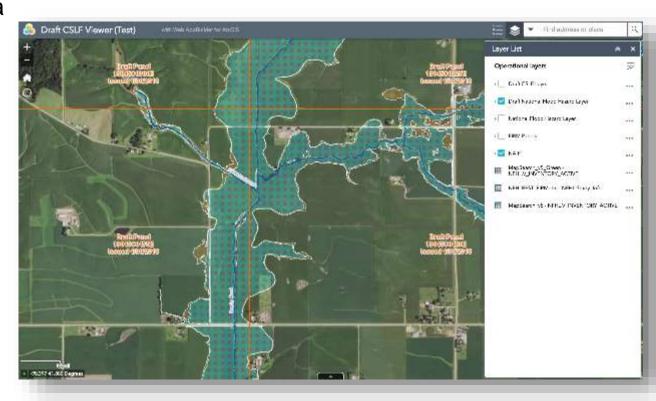






Draft NFHL Viewer - CSLF

- Draft Changes Since Last FIRM (CSLF) data
- As Letters of Map Revision (LOMR) update the NFHL, the draft CSLF is also updated
- Valuable Tool for Community Meetings

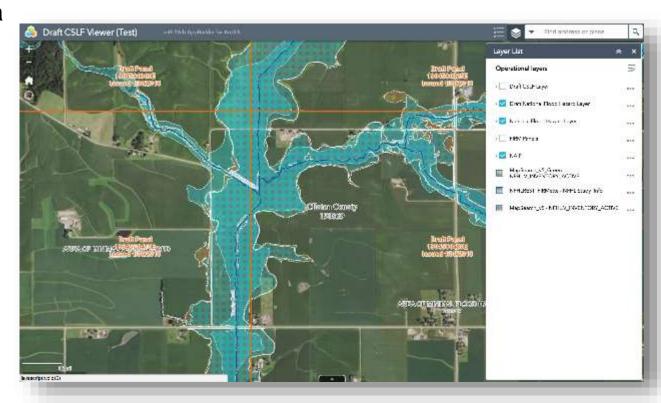






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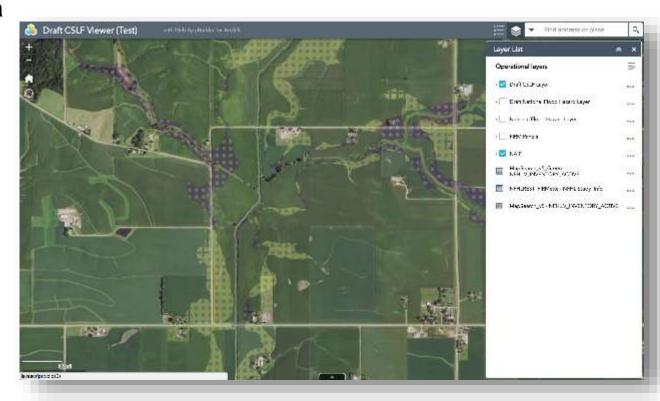






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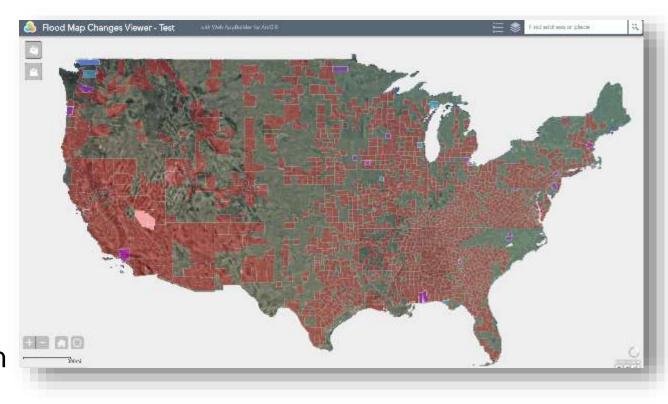




Flood Map Changes Viewer

Go to: msc.fema.gov/fmcv (Coming June 29!)

This viewer is intended to show users proposed changes to the flood hazard mapping through the issuance of Preliminary flood hazard data shown in a national layer

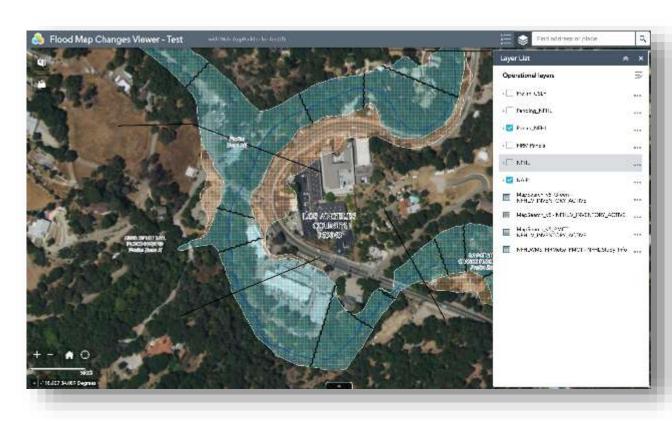






Flood Map Changes Viewer – CSLF

- Preliminary Changes Since Last FIRM
- LOMR and Revised Preliminary auto-updates
- Preliminary
 CSLF data can be exported as shapefiles

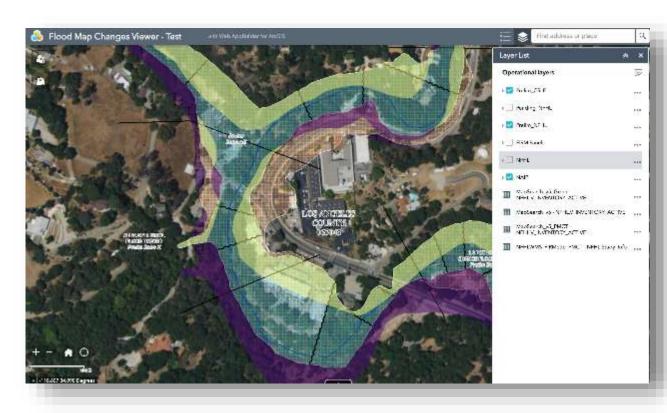






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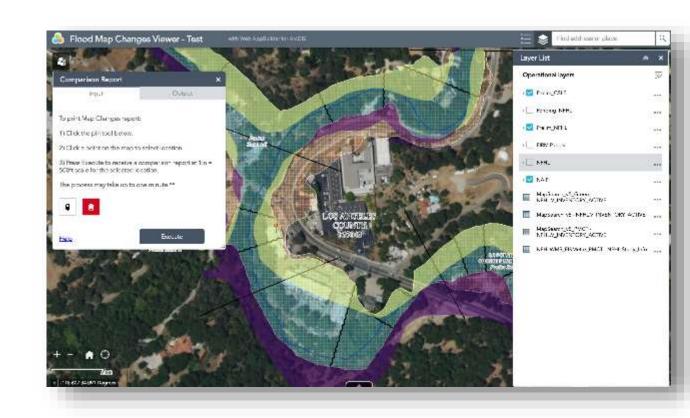






Flood Map Changes Viewer – Preliminary Map Comparison Tool

- Create side-byside report of Preliminary and Effective data in the Preliminary Map Comparison Tool
- Provides MSC links to unmodernized maps

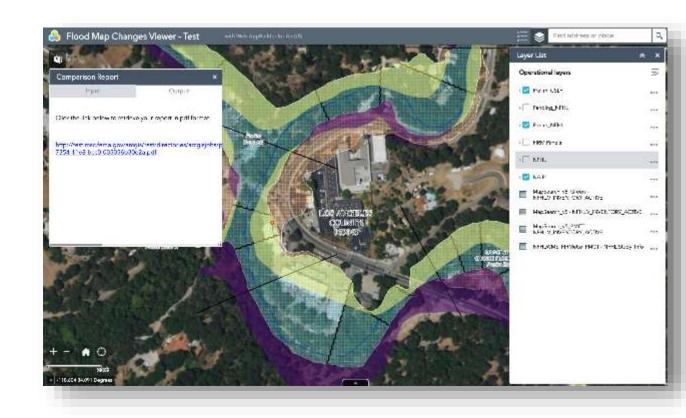






Flood Map Changes Viewer – Preliminary Map Comparison Tool

- Create side-byside report of Preliminary and Effective data in the Preliminary Map Comparison Tool
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Flood Map Changes Viewer – Preliminary Map Comparison Tool

- Create side-byside report of **Preliminary** and Effective data in the **Preliminary** Map Comparison Tool
- Provides MSC links to unmodernized maps



Comparison of Flood Hazard

Effective & Preliminary Flood Hazards





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Effective								
POI Longitude/Latitude	-118.6045, 34.0893							
Effective FIRM Panel	06037C1553F							
Effective Date	9/26/2008							
Flood Zone	D							
Static BFE*	Not Available							
Flood Depth	Not Available							
Vertical Datum	Not Available							



POI Longitude/Latitude	-118.6045, 34.0893
Preliminary FIRM Panel	06037C1553G
Preliminary Issue Date	3/16/2018
Flood Zone	AE
Estimated Static BFE*	Not Available
Estimated Flood Depth	Not Available
Vertical Datum	Not Available

* A Base Flood Elevation is the expected elevation of flood water during the 1% annual chance storm event. Structures below the estimated water surface elevation may experience flooding during a

Hazard Level High Flood Hazard

occuring each year. Moderate flood risk indicates an area that may be provided flood risk reduction due to a flood control system or an area that is

Unshaded Zone X. Properties on higher ground and away from local flooding sources have a reduced flood risk when compared to the Moderate and High Flood Risk categories. Structures in these areas may be affected by larger storm events, in excess of the 0.2% annual chance storm event. Properties in Moderate and Low Flood Risk areas may purchase flood insurance at a lower-cost rate, known as Preferred Risk Policies. See your local

Low Flood Hazard Insurance Note: High Risk Areas are called 'Special Flood Hazard Areas' and flood insurance is mandatory for federally backed mortgage holders.

insurance agent or visit https://www.fema.gov/national-flood-insurance-program for more information Disclaimer: This report is for informational purposes only and is not authorized for official use. The positional accuracy may be compromised

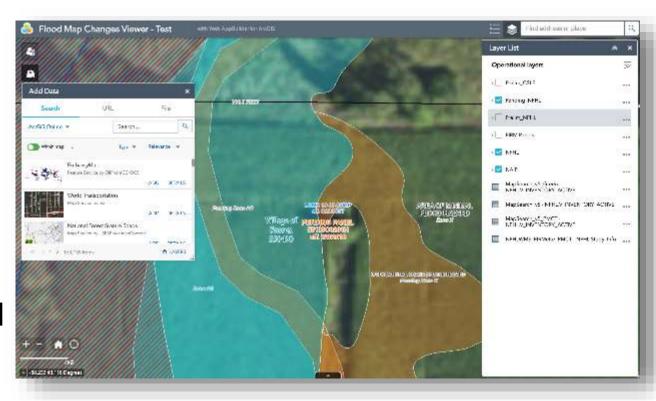
local floodplain administrator for more information or go to msc.fema.gov to view an official copy of the Flood Insurance Rate Maps

ervice Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Flood Map Changes Viewer – Pending NFHL & Add Data

- Pending NFHL also included
- Users can add their own data to their map/session
- Valuable tool for Appeal and Comment Periods



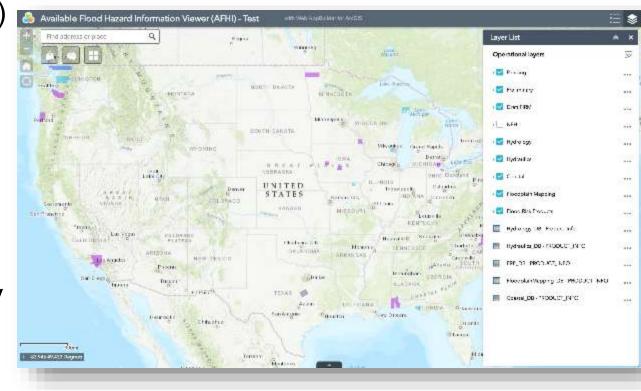




Available Flood Hazard Information (AFHI) Viewer

- Go to: msc.fema.gov/afhi (under construction!)
- Shows the best available flood hazard data for a location
- Data Development footprints
- Data availability report by community
- Valuable tool for Joint Field Offices







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Valuable tool for Joint Field Offices





Resources

- Check the MSC home page for updates!
 - msc.fema.gov
- Links to know:
 - msc.fema.gov/nfhl
 - msc.fema.gov/draft
 - msc.fema.gov/fmcv
 - msc.fema.gov/afhi
- Other tools:
 - MSC Products and Tools page (in MSC navigation)
 MIP GIS Services Web Page (MIP Tools and Links)
- Stop by the BM booth for demos and more discussion!





Questions?

Thanks for Attending!



