Flood Risk Products

Created as part of FEMA’s Risk Mapping, Assessment, and Planning (Risk MAP) program, FEMA’s Flood Risk Database, Flood Risk Report, and Flood Risk Map strengthen communities’ ability to see and explain flood risk and to use this data in development and planning. These products work with regulatory products, like Flood Insurance Rate Maps (FIRMs) and Flood Insurance Studies, to improve how communities:

- Visualize where flooding is likely to occur
- Make informed decisions about reducing the impacts of flooding
- Protect lives, houses, businesses, and critical facilities from future flood damage

The Flood Risk Database supports all other Flood Risk Products created through the Risk MAP program. It houses datasets that you can view and analyze through ArcGIS, including:

- Changes Since Last FIRM: Shows how updates to an existing FIRM change a floodplain
- Water Surface Elevation Grids: Provide varying flood heights across a floodplain, enabling point-and-click comparisons of specific home, business, roadway, and structure elevations
- Flood Depth Grids: Display varying flood depths across a floodplain to guide development and road construction away from areas with deeper flooding
- Percent-Annual-Chance/Percent 30-Year-Chance Grids: Indicates the likelihood that a given location will flood in any single year and/or over a period of 30 years—and shows how this likelihood varies across the floodplain
- Flood Risk Assessment: Estimates flood damage to residential and commercial buildings, summarized at the Census block level or the structure-specific level, where data is available
- Area of Mitigation Interest: Identifies vulnerable areas throughout the watershed and factors that may contribute to flooding. This helps communities decide where to focus their efforts to protect against future flood events.

The Flood Risk Report is an optional product for explaining flood risk studies, methods, and results in plain language.

The Flood Risk Map, another optional product, provides a color-coded view of a community’s flood risk at a watershed level. You’ll see at a glance constricted stream flows, at-risk facilities, and more.
PUT FEMA’S FLOOD RISK PRODUCTS TO WORK FOR YOU

Use the Flood Risk Database to:
• See where flood risk has changed (even outside a Special Flood Hazard Area) and why
• Estimate the possible damage to homes and businesses
• Target outreach to newly impacted property owners and businesses
• Prioritize levees, flood walls, culverts, and other upgrades
• Protect critical facilities like hospitals and residential areas

Use the Flood Risk Report to:
• Understand and communicate an area’s flood risk
• Update Community Comprehensive Plans
• Plan for land use
• Protect buildings and people from flood hazards
• Improve emergency responses

Use the Flood Risk Map to:
• See flood risk across a watershed
• Estimate potential losses to structures, business disruption, and social impacts (through FEMA’s Hazus program, for instance) and pinpoint areas in need of repair
• View flooding issues across jurisdictions

What Flood Risk Products are available for my community?
To learn more, visit the FEMA Flood Map Service Center (msc.fema.gov). To check product availability in your area, select “Search All Products” and filter your selection by State, county, and/or community.