

Q&A Guide

Flood Data Resources for Hazard Mitigation Planning

This guide provides information on flood hazard data resources maintained by the Virginia Department of Conservation and Recreation (DCR) that can support local and regional Hazard Mitigation Plan updates. These resources help communities identify flood-prone areas, assess vulnerability to flooding, evaluate future flood conditions, and inform mitigation strategies for riverine, rainfall, and coastal flood hazards.

In addition to FEMA regulatory flood data, DCR recommends incorporating state-developed flood hazard and resilience datasets to support more comprehensive flood risk assessments and mitigation planning.

Where is flooding likely to happen in my community today?

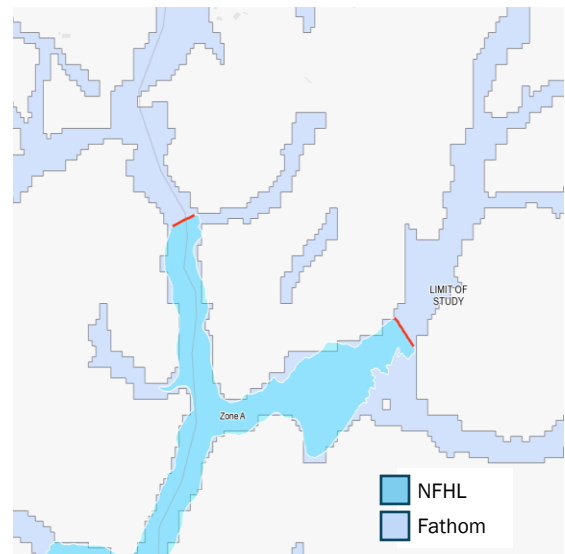
The [Virginia Flood Risk Information System \(VFRIS\)](#) includes flood hazard data that illustrates where coastal and riverine flooding could occur during a significant flood event. FEMA's Special Flood Hazard Area (SFHA) identifies areas with a higher probability of flooding and serves as the foundation for regulatory floodplain management and National Flood Insurance Program (NFIP) requirements.

While FEMA flood maps remain an important component of flood risk assessment, flooding can occur outside mapped regulatory floodplains. Analysis conducted for the Virginia Flood Protection Master Plan found that FEMA data could be underrepresenting the base flood condition by as many as 5,700 miles across the entire state. DCR flood hazard datasets help communities evaluate flood exposure beyond FEMA-mapped areas, including rainfall-driven flooding that is not always reflected in regulatory mapping.

To support a more comprehensive understanding of flood risk, the Fathom Flood Hazard Extent and the Coastal Resilience Master Plan Combined Flood Extent are available for local planning needs. These datasets incorporate multiple flood hazard types and provide additional information beyond standard regulatory flood data. Communities can use these resources to identify the location and extent of the flood hazards in the area.

How will flood conditions change in the future?

Understanding how flood risk may change over time can help communities develop more effective long-term mitigation strategies.



Above: VFRIS snapshot showing NFHL and Fathom Flood Hazard Extent data layers.

Below: VRIS snapshot showing NFHL boundaries in white and Coastal Resilience Master Plan Combined Flood Extent beyond.



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In coastal communities, the Coastal Resilience Master Plan Combined Flood Extent layers include multiple future flood scenarios that account for sea level rise and increased precipitation. These datasets allow communities to evaluate how flood exposure may change under future conditions and can support assessments of the probability of future flood events.

For areas outside coastal Virginia, DCR maintains access to comparable future-condition datasets and can provide these data to support local and regional Hazard Mitigation Plan updates and planning efforts. Incorporating future-condition data can help communities better understand evolving flood risks and inform long-term investment and mitigation decisions.

What homes or infrastructure could be impacted?

DCR completed a statewide flood hazard impact analysis that can support the identification of vulnerable assets and impacts to those assets. Impact analyses include the number of people, buildings, critical infrastructure, miles of roadway, acres of natural infrastructure, as well as regional economic loss estimates for flood damages.

The [Coastal Resilience Web Explorer](#) enables users to visualize flood impacts through interactive maps and summary graphics by asset type and future scenario. For communities outside coastal areas, DCR can provide tailored flood hazard data, impact analyses, and map packages to support local resilience planning.

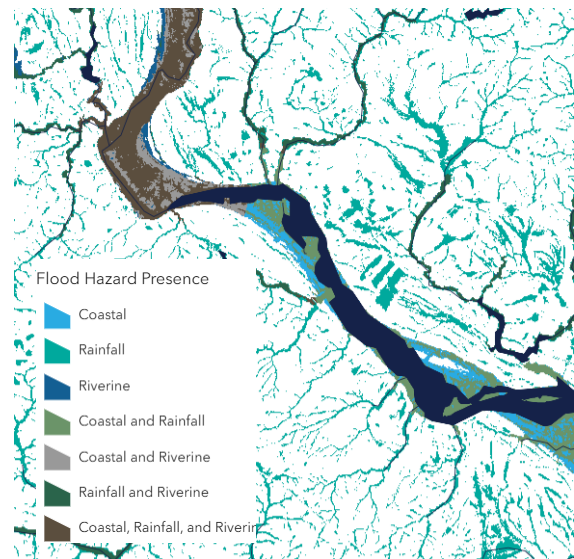
In addition, VFRIS includes color-coded building footprints that indicate exposure to regulatory flood hazard areas, allowing users to assess flood risk.

Can I access data to use on my own?

Yes! A wide range of flood resilience resources are available through DCR's [Flood Resilience Open Data Portal](#), including downloadable datasets and guidance materials.

Communities are strongly encouraged to incorporate these resources into their hazard mitigation planning efforts. DCR staff are available to provide technical assistance, help identify the most appropriate datasets, and develop customized data packages to support your analysis and decision-making.

For assistance, please contact: flood.resilience@dcr.virginia.gov



Above: Coastal Resilience Web Explorer combined flood hazard data.

Below: Flood impacts to buildings mapped and summarized in the Coastal Resilience Web Explorer.

