

Q&A Resource

Flood Resilience Data

This resource provides information on data resources maintained by the Virginia Department of Conservation and Recreation (DCR) that communities can use to better understand and plan for riverine, rainfall, and coastal flood risk.

In addition to regulatory flood data, DCR requires incorporating non-regulatory flood resilience data to develop flood resilience plans for the Community Flood Preparedness Fund. A Resilience Plan must identify and include all flooding occurring in all areas of the community, not just within the Special Flood Hazard Areas (SFHAs), and incorporate climate change, sea level rise, and storm surge (where appropriate).

Where is flooding likely to happen in my community today?

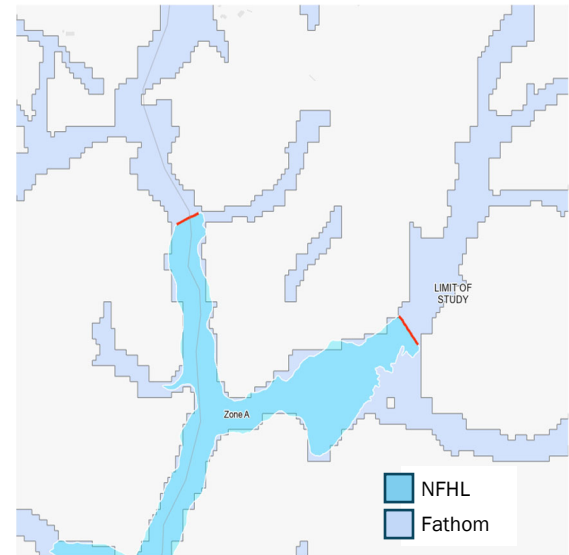
The [Virginia Flood Risk Information System \(VFRIS\)](#) includes FEMA flood hazard data which illustrates where coastal and riverine flooding could occur during a major flood event. The Special Flood Hazard Area (SFHA) developed by FEMA and adopted by localities is the area where the National Flood Insurance Programs (NFIP's) floodplain management regulations must be enforced.

However, floods do not stop at mapped regulatory boundaries. Consistent with the Code of Virginia §10.1-658, statewide resilience planning efforts must consider flooding across the entire community, not solely within SFHAs.

To support this broader approach, VFRIS also includes non-regulatory flood hazard area in the Fathom Flood Hazard Extent and the Coastal Resilience Master Plan Combined Flood Extent, which are available for local planning needs. These datasets present a comprehensive view of flood exposure by incorporating additional variables beyond what is used in the standard regulatory data, rain-driven flooding in particular.

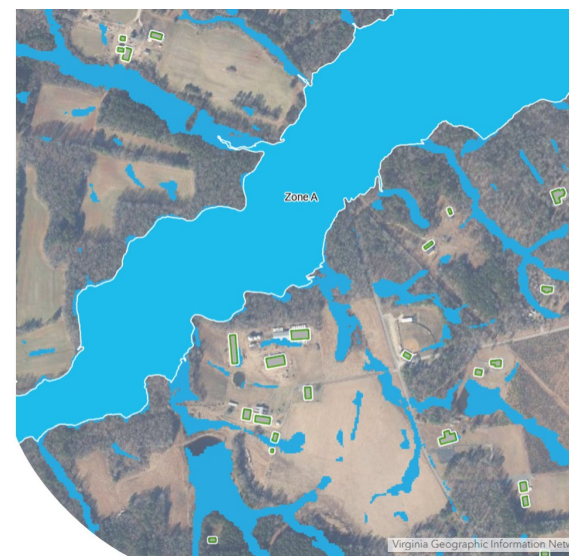
How will flood conditions change in the future?

In the future, flood areas are projected to increase due to more severe rainfall events and rising sea levels. The Commonwealth's resilience planning principles require consideration of climate change and its impacts on flood risk. DCR's flood resilience data resources include forward looking flood hazard data.



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, DCR's Coastal Resilience Master Plan Combined Flood Extent layers include multiple future flood scenarios that account for sea level rise and increased precipitation.

For areas outside coastal Virginia, DCR maintains access to Fathom Flood Hazard future-condition datasets that incorporate climate change across multiple planning scenarios.

What homes or infrastructure could be impacted?

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

In addition, DCR completed a statewide non-regulatory flood hazard impact analysis. 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 non-regulatory flood impacts through interactive maps and summary graphics by asset type and future scenario.

For communities outside coastal areas, DCR can provide tailored non-regulatory flood hazard data, impact analysis, and map packages to support local resilience planning.

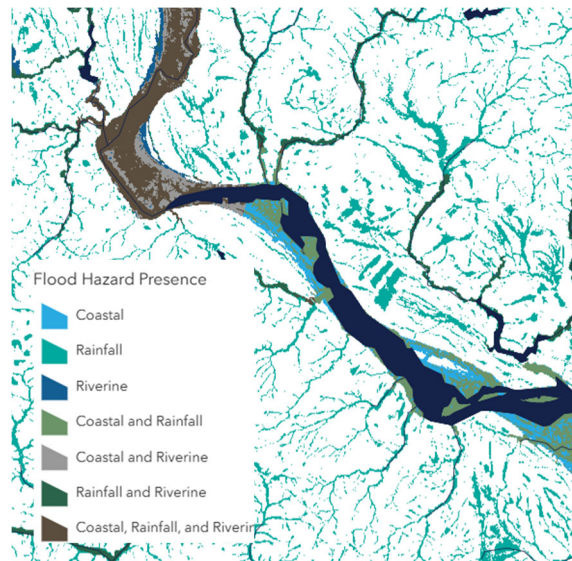
Can I access data to use on my own?

Yes! A wide range of flood resilience resources are available through DCR's Flood Resilience Open Data Portal, including downloadable datasets and resource materials.

Communities are strongly encouraged to incorporate these resources into their 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 data assistance, please reach out to:
flood.resilience@dcr.virginia.gov

For assistance regarding your CFPF grant or resilience plan, please contact: **cfpf@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.

