



# ACHIEVEMENT AWARDS



## SUBMISSION FORM

All submission forms must include the following information. Separate submission forms must be turned in for each eligible program. **Deadline: Friday, April 3, 2026.** Please include this submission form as the first page of your electronic entry. Contact [Gage Harter](#) with any questions.

### PROGRAM INFORMATION

County: Fairfax County

Program Title: Fairfax County's Flood Mitigation Assistance Program(FMAP)

Program Category: Community Development, Economic Development, & Land Use

### CONTACT INFORMATION

Name: Eleanor Ku Coddling, P.E

Title: Deputy Director, Water Resources Infrastructure

Department: Public Works and Environmental Services

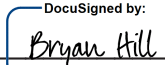
Telephone: (703) 324-4185 Website: fairfaxcounty.gov/soil-water-conservation/fmap

Email: Eleanor.Coddling@Fairfaxcounty.gov

### SIGNATURE OF COUNTY ADMINISTRATOR OR DEPUTY/ASSISTANT COUNTY ADMINISTRATOR

Name: Bryan J. Hill

Title: County Executive

Signature: 

**Fairfax County's Flood Mitigation Assistance Program**  
<https://www.fairfaxcounty.gov/soil-water-conservation/fmap>

**Executive Summary**

Fairfax County established a new grant program called the Flood Mitigation Assistance Program (FMAP), incentivizing residents to reduce their flood risk. Historic land use and increases in impervious cover, in combination with changing rainfall patterns, have contributed to generating more runoff and flooding potential in Fairfax County. There are over 11,000 Fairfax County residential homes that have either been reported to have flooded or exist in an area that is considered a high risk for flooding.

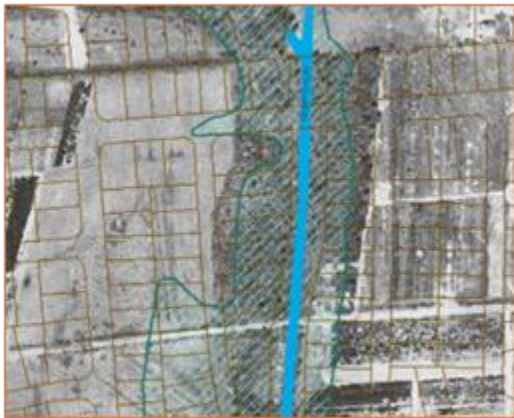
Fairfax County's Department of Public Works and Environmental Services (DPWES) developed FMAP in partnership with the Northern Virginia Soil and Water Conservation District (NVSWCD). FMAP provides residents with financial assistance to proactively reduce flood risk on their property by reimbursing 50% of the costs of approved flood mitigation projects up to a maximum reimbursement of \$5,000. FMAP is administered by the NVSWCD and funded by Fairfax County's Stormwater Service District.

This innovative partnership has enabled DPWES to focus its limited staff on large-scale flood mitigation projects while leveraging NVSWCD's technical expertise to work with individual property owners to address localized flooding issues on their own residential lots. The program became operational on July 1, 2024, and over \$223,000 in FMAP grant funds for 74 flood risk reduction projects on private properties in the County have been awarded through December 2025.

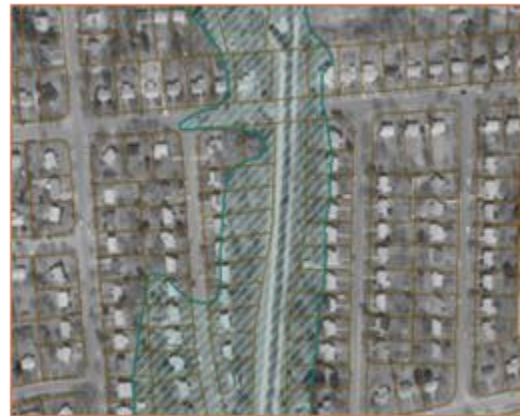
### **Need for the Program**

Fairfax County wants to reduce flood risk for residents and business owners. Much of the county developed before current floodplain restrictions and stormwater requirements. Historic land use often filled in the existing floodplains and eliminated natural buffers next to streams. This has resulted in many homes located in high-risk flood areas.

**Figure. Development near Tripps Run stream near Falls Church in 1937 and 1960.**



**1937**



**1960**

Increases in impervious cover, loss of trees, changes in slope, and soil compaction all have contributed to generating more runoff and flooding potential. Development of green space into impervious areas such as buildings, roadways, and parking lots has also resulted in greater quantities and velocity of stormwater runoff that can exceed existing stormwater management systems' capacity.

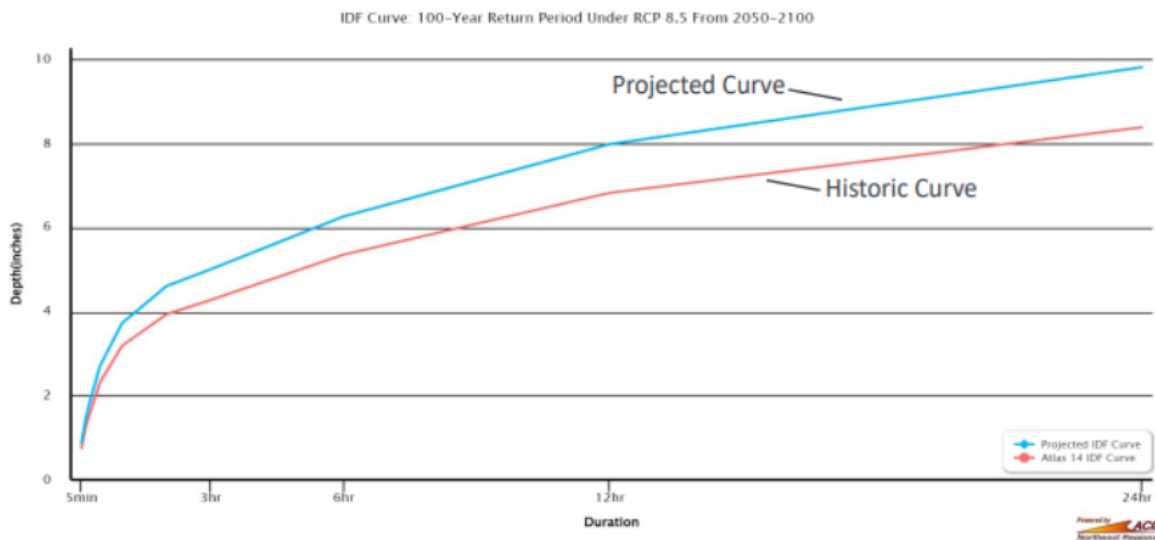
Using GIS, the County determined that there are over 11,000 residential homes in Fairfax County that have either been reported to have been flooded or exist in an area that

is considered a high risk for flooding, such as a sump condition (i.e., low area where water ponds) or a floodplain.

Fairfax County’s October 2022 “Resilient Fairfax, Climate Adaptation and Resilience Plan” reports that “inland flooding due to climate change and the projected number of heavy precipitation days is expected to increase flood risk in the County.”

More significantly, individual precipitation events are becoming more intense. Precipitation is measured by intensity, duration, and frequency, or “IDF” curves. IDF curves are used by engineers to design Fairfax County’s stormwater management systems. Analysis from Mid-Atlantic Regional Integrated Sciences and Assessments (MARISA) shows how these IDF curves are changing (blue) relative to historic standards (red line) used for stormwater design.

Figure. IDF Curve for 100-Year Return Period, Vienna Station (Source: MARISA, [Mid-Atlantic IDF Curve Tool](#))



When too much rain falls too quickly, stormwater management systems become overwhelmed, resulting in flooding. An example of this occurred on July 8, 2019, when

portions of the County received 3.5 to 5 inches of rain within a one-hour timeframe, resulting in extensive flooding and damage to many residential properties.

Figure. Photos of damage to residential property from flooding in July 2019



Consistent with the County’s adopted Flood Risk Reduction Policy, managing flood risk is a shared responsibility between the County and private landowners. Comprehensive flood risk reduction programs, like FMAP, include cost-share programs for property owners to take individual action. These programs empower property owners and residents to take proactive, preventive measures to reduce property damage and the overall capital costs of flooding. Providing financial assistance through a grant program for residents to implement improvements to reduce the risk of structural flooding and minimize property damage is an economical solution that contributes to a safer community.

### **Description of the Program**

In 2024, amendments to the Virginia Code were passed that enabled localities to create a Stormwater Management Fund for the purpose of granting funds to owners of private property or common interest communities for stormwater management and flood mitigation.

FMAP provides financial assistance through matching reimbursement funds to County residents, property owners, common interest communities, and places of worship for purchasing and installing approved flood mitigation and floodproofing practices. FMAP reimburses successful applicants 50% of their costs for installing approved mitigation practices to proactively reduce flood risk up to a maximum of \$5,000 per property. Applicants can be reimbursed for multiple projects on their property until they reach the \$5,000 limit. Applicants who own multiple properties can apply for up to \$5,000 in reimbursements for each property. A list of 27 approved practices or those approved on a case-by-case basis by the NVSWCD are eligible for reimbursement.

The Fairfax County FMAP was modeled after the City of Alexandria's Flood Mitigation Grant Program. Unlike Alexandria's program, FMAP was created as a collaborative partnership between DPWES and the NVSWCD. Another difference between the two programs is that FMAP is administered by the NVSWCD but funded by Fairfax County's Stormwater Service District. The innovative development and implementation of the program leveraging the extensive expertise and knowledge of both DPWES and NVSWCD. This partnership has enabled DPWES to focus its staff and resources on large-scale flood mitigation and water quality improvement projects while leveraging NVSWCD's technical expertise to work with residents to address flooding issues on individual residential properties and grant administration. As part of the program, NVSWCD staff offers technical consultation to every potential FMAP applicant to educate them about the causes of their property's flooding and help them choose the mitigation project that is most likely to be successful.

A brief Program Overview, Eligibility Criteria, Eligible Flood Proofing Practices, Frequently Asked Questions, Policy and Procedures, Application Steps, and a link to the online applications can be found at: <https://www.fairfaxcounty.gov/soil-water-conservation/fmap>.

To improve equity of services, in 2025, DPWES staff mailed information about FMAP to over 1,500 residents and owners of residential properties with an assessed value of less than or equal to \$500,000 that exist within a flood-prone area and are ranked as high or very high on the county's social vulnerability index.

### **Results/Success of the Program**

The FMAP provides technical and financial resources empowering private property owners and residents to implement measures to reduce flood risk, improve resiliency, and better protect homes and families from flooding and damage. These investments represent continued progress in implementing small-scale, site-specific mitigation measures that cumulatively contribute to reducing localized flooding, lowering damage during storm events, and increasing resilience across the community.

The program became operational on July 1, 2024. From July 1, 2024, through December 31, 2025, NVSWCD awarded over \$223,000 in FMAP grant funds that directly supported 74 flood risk reduction projects on private properties throughout the county.

### **Community Engagement and Outreach**

Community engagement remains a core component of FMAP. NVSWCD conducted approximately 25 FMAP-specific site visits, providing guidance, onsite assessments, and

tailored recommendations to residents seeking to understand and reduce their flood vulnerability. NVSWCD continues to receive inquiries from residents about how to apply for FMAP grants, indicating ongoing interest in the program. These activities strengthen community awareness of flood risk, improve understanding of mitigation options, and help residents navigate the technical and administrative aspects of applying for FMAP funding.

This program has been running successfully for the past year and a half and can be easily replicated by other jurisdictions. The FMAP documents and application can be retrieved from the website or by contacting either DPWES or NVSWCD. Partnering with a local Soil and Water Conservation District, or public entity, is an excellent technique to leverage each other's strengths while reducing the community's risk of flooding.

### **Cost of the Program**

Funding of \$250,000 was provided to NVSWCD in both fiscal years 2025 and 2026 to administer and implement FMAP. In addition to providing grant awards to FMAP applicants, these amounts also provide funding for NVSWCD's staff and operational costs to administer FMAP.