




County of Fairfax, Virginia

MEMORANDUM

DATE: September 26, 2023

TO: Board of Supervisors

FROM: Bryan J. Hill
County Executive 

SUBJECT: Flood Mitigation Assistance Program

Introduction

The Department of Public Works and Environmental Services (DPWES) recommends a new grant program that would offer financial assistance through matching reimbursement funds to residents and property owners for purchasing and installing approved flood mitigation and floodproofing practices. The Flood Mitigation Assistance Program (FMAP) would be beneficial to Fairfax County (County) and its residents. The grant program would reimburse residents and Common Interest Communities (CIC) for some of the costs they incur to proactively reduce flood risk to their property and increase resiliency.

Background

In July 2022, DPWES and Land Development Services (LDS), in partnership with the Department of Planning and Development (DPD) and the Office of Environmental and Energy Coordination (OEEC), presented to the County's Board of Supervisors (Board) Environmental Committee on the [proposed the County flood mitigation strategy](#). The strategy includes a combination of projects, regulations, and programs to reduce the risk of structural flooding Countywide. As noted in the [Resilient Fairfax Plan](#), heavy rainfall events that exceed the capacity of the County's stormwater management system will occur more often with climate change. FMAP will empower residents to make improvements on their property to reduce their flood risk, while DPWES continues to prioritize, design, and construct long-term lot and neighborhood scale flood mitigation projects and work with LDS, DPD, and OEEC on potential regulatory updates.

Program Overview

Modeled after the [City of Alexandria's](#) successful flood mitigation grant program, FMAP would provide financial assistance through cost-share reimbursement grants. Upon providing the required documentation, residential or multi-family properties, common interest communities, and places of worship would be eligible to be reimbursed fifty percent of the cost of an approved flood mitigation practice up to \$5,000.

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Attachment 1 provides a one-page summary of the proposed FMAP. Attachment 2 is the draft FMAP Policies and Procedures Manual that gives a detailed outline of the program process. Attachment 3 includes a draft list of approved flood mitigation practices. FMAP would be funded through the County's Stormwater Service District as a program under the Local Stormwater Management Assistance Fund recently approved by the Board as an amendment to Appendix O of the County Code. The Northern Virginia Soil and Water Conservation District would be responsible for program administration and accountability.

DPWES intends to present the staff recommendation to establish FMAP at the upcoming Board's Environmental Committee on October 3, 2023.

Attachments:

1. Flood Mitigation Assistance Program General Information
2. Draft Flood Mitigation Assistance Program Policies and Procedures Manual
3. Draft List of Approved Flood Mitigation Practices

cc: Rachel Flynn, Deputy County Executive
Willie Woode, Executive Director, Northern Virginia Soil and Water Conservation District
Christopher Herrington, Director, Department of Public Works and Environmental Services (DPWES)
Eleanor Ku Coddling, Deputy Director, DPWES, Stormwater and Wastewater Divisions
Craig Carinci, Director, DPWES, Stormwater Planning Division

FLOOD MITIGATION ASSISTANCE PROGRAM GENERAL INFORMATION

Total funding available:	<i>Up to \$250,000 (FY 2025 Year allocation).</i>
Funding maximum per Applicant:	<i>Up to \$5,000.</i>
Funding cost share:	<i>50% County 50% Applicant</i>
Applicant:	<i>Open to residential or multi-family properties, common interest communities, and places of worship, including condominium and homeowner associations applying on behalf of more than one property, that want to take proactive measures to prevent flooding.</i>
Eligibility:	<i>Property owners and renters that provide documentation that property owners approved of the flood mitigation practice</i>
Coverage Period	<i>Approved Practices must be installed on or after July 1, 2024.</i>
Documentation required:	<i>Documentation of purchase of materials/services such as receipts, invoices, statements, etc. must be submitted.</i>
Documentation recommended:	<i>Additional documentation may include, but is not limited to, photographs of complete installation, County permits/approvals.</i>
Program administration:	<i>Northern Virginia Soil and Water Conservation District 12055 Government Center Pkwy Suite 905 Fairfax, VA 22035 703-324-1460 ConservationDistrict@fairfaxcounty.gov</i>

**FLOOD MITIGATION
ASSISTANCE PROGRAM
(FMAP)**

Policies and Procedures Manual

DRAFT

May 18, 2023

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1.0 DEFINITIONS

Clearly defining terms associated with Fairfax County’s Flood Mitigation Assistance Program (FMAP) helps to alleviate confusion. Accordingly, the process by which FMAP applications are administered, reviewed, and evaluated, and the definitions and terminology associated with these activities, should be clearly documented and accessible to Applicants and the County. Listed below are common terms and their definitions used throughout this Manual:

“**Applicant**” shall mean a resident or property owner that has applied for County Flood Mitigation Assistance.

“**Application**” shall mean the NVSWCD’s Flood Mitigation Assistance Program online application form, and all supporting documentation which must be submitted by the Applicant or added to an Applicant’s file by NVSWCD staff for review and consideration under this program.

“**Approved List of Practices**” shall mean products and services eligible for reimbursement under the County’s Flood Mitigation Pilot Assistance Program.

“**Assistance**” shall mean the financial support issued by the County to reimburse Applicants for expenses identified on the Approved List of Practices. The County will reimburse Applicants for 50% of eligible expenses, up to a maximum total of \$5,000.

“**Assistance Program**” or “**Program**” shall mean Fairfax County’s Flood Mitigation Assistance Program.

“**Basement**” shall mean any property area having its floor subgrade (below ground level on all sides).

“**CIC**” shall mean a Common Interest Community, such as a condo association or homeowners association that owns and maintains community property

“**County**” shall mean Fairfax County.

“**Coverage Period**” shall mean the period of time between July 1, 2024, and present day.

“**DPWES**” shall mean the County Department of Public Works and Environmental Services.

“**Flood Mitigation**” shall mean action(s) taken to *reduce* or *eliminate* long-term risk to life and property from a flood event.

“**Floodproofing**” shall mean any combination of structural and nonstructural additions, changes, or adjustments to properties, which reduces the risk of flood damage.

“**LDS**” shall mean the County Department of Land Development Services.

“**NVSWCD**” shall mean the Northern Virginia Soil and Water Conservation District.

“**Place of Worship**” shall mean any property where religious or spiritual services are regularly held.

“**Property Owner**” or “**Owner**” shall mean owners of 33% or more of a property identified on the Application.

“**Residents**” shall mean individuals that reside within Fairfax County limits.

“Renters” shall mean non-property owners who install or implement approved Program practices on property that they reside in with the approval of the property owner.

2.0 PROGRAM SUMMARY

Starting July 1, 2024, as part of the County's Flood Mitigation Plan, the County is offering financial assistance through matching reimbursement funds to residents and property owners for purchasing and/or installing approved flood mitigation and floodproofing practices. This assistance will be known as the County's Flood Mitigation Assistance Program (FMAP) and will be open to residential property owners and renters, CICs, and places of worship within the Fairfax County limits.

2.1 Background

There have been instances of unprecedented flash flooding in parts of Fairfax County. For example, on July 8, 2019, a thunderstorm dropped 3.5 to 5.0 inches in an hour over certain areas of the County. The storm caused over \$14.8 million dollars in damage. Given the inevitability of changing climate conditions, such heavy rainfall events are likely to occur with more frequency. The County established this Flood Mitigation Assistance Program to strengthen resiliency and minimize damage to residences and structures from storm events.

2.2 Goal

The Program's overall goal is to provide financial assistance to individuals who have made improvements to their residences/and or properties to mitigate future damage from flash flooding events. The Program is designed so that both the County and Applicant achieve outcomes beneficial to their specific goals. For the County, this means delivering Assistance to residents who took efforts to increase overall community resiliency. For the individual Applicant, this means being reimbursed for products and/or services that will reduce or eliminate the risk of flood damage to their property.

2.3 Scope

This Policies and Procedures Manual is intended to serve as a resource for Applicants to understand County policies and mechanisms related to applying for, being deemed eligible for, and ultimately receiving Assistance. It is focused on installing floodproofing products and approaches such as doorway floodgates, flood protective window wells, backup sump pump battery systems, utility covers, elevated utility modifications, exterior grading changes, exterior drains, etc.

The Fiscal Year 2025 budget includes \$250,000 for the Program and the maximum award amount is \$5,000. This Program is funded by the County's Stormwater Service District (learn more at <https://www.fairfaxcounty.gov/publicworks/stormwater/stormwater-service-district>). Applications will be reviewed for funding on a first come, first served basis. The Program budget for future years will be determined during the County's annual budget process.

2.4 Administration, Record-Keeping, and Accounting

The Northern Virginia Soil and Water Conservation District (NVSWCD) has the overall responsibility for Program administration and accountability. Administration and accountability will be possible through timely communications and accurate recordkeeping. Documentation and relevant files, including application information, electronic communications, file notes, funding decisions and other records will be maintained by NVSWCD.

3.0 GENERAL PROGRAM INFORMATION

General Program information is presented below:

Total funding available:	<i>Up to \$250,000 (FY 2025 Year allocation).</i>
Funding maximum per Applicant:	<i>Up to \$5,000.</i>
Funding cost share:	<i>50% County 50% Applicant</i>
Applicant:	<i>Open to residential or multi-family properties, CICs, and places of worship, including condominium and homeowner associations applying on behalf of more than one property, that want to take proactive measures to prevent flooding.</i>
Eligibility:	<i>Property owners and Renters that provide documentation that property owners approved of the flood mitigation practice</i>
Coverage Period	<i>Approved Practices must be installed on or after July 1, 2024.</i>
Documentation required:	<i>Documentation of purchase of materials/services such as receipts, invoices, statements, etc. must be submitted.</i>
Documentation recommended:	<i>Additional documentation may include, but is not limited to, photographs of complete installation, County permits/approvals</i> <i>.</i>
Program administration:	<i>Northern Virginia Soil and Water Conservation District 12055 Government Center Pkwy Suite 905 Fairfax, VA 22035 703-324-1460 ConservationDistrict@fairfaxcounty.gov</i>

4.0 PROGRAM PHASES

The Program's process involves an Application Phase, an Initial Completeness and Eligibility Phase, and an Approval and Funding Phase. Each Phase is further described below.

4.1 Application Phase

The Applicant must apply to the NVSWCD to receive consideration for reimbursement under the Program. Such applications may be submitted via the use of an online application on the Flood Mitigation Assistance Program website www.rockvillemd.gov/floodassistance. Assistance in submitting applications is available by contacting [240-314-8876](tel:240-314-8876). The Applicant can also consult with NVSWCD for general flood mitigation recommendations.

4.1.1 Ownership

The Program is open to residential or multi-family property owners and renters, CICs, and places of worship, as well as Condominium Associations and Homeowner Associations. If the Applicant is applying on behalf of a Condominium Association or Homeowner Association, the application shall be submitted for commonly owned property areas and not individual properties within an Association. To be reimbursed, proof of approval by the Association's Board must be included with the application. Likewise, Renters applying must also provide proof of approval from the property owners to be considered for reimbursement under this Program.

4.1.2 Approved List of Practices

The Approved List of Practices was developed by the County based on best practices for flood mitigation implemented by other jurisdictions that have developed and administered similar assistance programs. This list identifies eligible flood mitigation practices along with their descriptions and a quick snapshot of the County's permit review/application requirements for each. In total, these practices, help mitigate flooding on private property and reduce the overall damage to property from flooding through flood protection. The Approved List of Practices is included as Appendix A. Some of these Approved Practices may require review, approvals and permitting by LDS. Improvements cannot block drainage ways or create an adverse impact on neighboring properties.

Other types of flood mitigation practices outside of the Approved List of Practices may be considered on a case-by-case basis and may be incorporated into the Program if warranted.

Maintenance and retrofits associated with a regulatory requirement, such as the maintenance of an existing dry detention pond, are not eligible for reimbursement under this grant program.

4.1.3 Documentation

To be eligible for Assistance, an Applicant must submit receipts or other documentation related to the purchasing/installation of products and/or services identified within the

Approved List of Practices. Documentation includes invoices or contracts showing what was completed (itemized if possible), work completed photos, before and after photos, and proof of payment, such as credit card or bank statements, cancelled checks, or a zero balance invoices who how it was paid.

Receipts and/or additional documentation for flood mitigation practices and services must be dated on or after July 1, 2024.

4.1.4 County Approval and Permits

Before NVSWCD approves an Applicant for Assistance, NVSWCD will check to determine whether the proper permits and/or approvals, if required, were obtained. For example, many items on the Approved List of Practices, such as regrading over 2,500 square feet, require an Applicant to engage with the County’s Department of Land Development Services (LDS).

4.1.4(a) LDS

LDS enforces standards set forth in state-mandated and local codes, including the Virginia Uniform Statewide Building Code and Fairfax County ordinances, through the issuance of permits and contractor licenses, plan review, and the inspection of all phases of residential and commercial construction. LDS is responsible for the issuance of land disturbance, Resource Protection Area, floodplain, building, and/or mechanical, electrical, and plumbing permits that may be required.

The link to LDS permit and approvals can be found at:

<https://www.fairfaxcounty.gov/landdevelopment/permit-library>

Key Consideration triggering LDS Review:

- **“Will the proposed work alter, demo, renovate, and/or create a permanent addition to an existing building or structure?”**
- “Will the proposed work involve the grading or land disturbance of more than 2,500 square feet?”

Prior to applying, an Applicant should contact LDS to ensure permitting requirements, if needed, have been satisfied. If actions requiring permits were undertaken without the needed approvals, those expenses will not be eligible for Assistance reimbursement. In addition, the County may request the Applicant retroactively apply for permit(s) and cover all costs associated with compliance.

4.2 Application Review Process

Within 14 business days of receipt of the application, NVSWCD staff will review the Application and determine eligibility. If a deficiency (missing receipts or documentation) is

found during the review process, NVSWCD will notify the Applicant and the Applicant may attempt to correct the deficiency. However, it should be noted that there is no guarantee that reimbursement funds will still be available since the program is on a first come, first served basis.

NVSWCD review of an application is divided into two phases:

4.3 Initial Completeness and Eligibility and Funding Review

During the Initial Completeness and Eligibility Review Phase, NVSWCD will review the Application for initial completeness – making sure the Application is filled out correctly – and perform initial eligibility checks regarding location in Fairfax County, property ownership, property type, documentation provided, and whether County permits or reviews were required and obtained. NVSWCD will also review the Application to determine if the correct amount of funding is being requested and whether it matches what can be approved.

4.3.1 General Information Check

NVSWCD will crosscheck information provided in the Application against established County records. This will include determining if general information (name, address, etc.) is provided and accurate. If the Application contains the required general information, a Documentation Check will be conducted. If errors or omissions are identified, the Application will be returned to the Applicant for revision and resubmission.

4.3.2 Documentation Check

If the General Information Check is complete, NVSWCD will then conduct a Documentation Check. During the Documentation Check, NVSWCD will review materials in the Applicant's online submission package to confirm the goods and/or services are on the Approved List of Practices and the cost incurred to install the practice. **Documentation of costs is required to receive Assistance. All receipts and/or additional documentation for flood mitigation practices and services should be dated on or after July 1, 2024.**

During this phase, NVSWCD will review such items as:

- Receipts
- Photographs
- Designs/Drawings
- Email records
- County approvals and/or permits

If the Application contains receipts or other documentation for at least one of the Practices identified above, it will move forward in the Initial Completeness and Eligibility Review Phase.

If errors or omissions are identified, the Application will be returned to the Applicant for revision and resubmission.

4.3.3 Waiver and Hold Harmless Acknowledgement

An Applicant must agree to the following waiver and hold harmless acknowledgment to complete the Application process:

I (we), certify under penalty of law, that I (we) have paid in full for the installation of floodproofing measures at the above-named property. As a condition of accepting the reimbursement allowance, I (we), if requested by NVSWCD, will permit NVSWCD to verify said installation without delay, prior to receiving the reimbursement allowance.

Further, as a condition of accepting the reimbursement allowance, I (we) agree to accept full responsibility for operation and maintenance of floodproofing measures, funded in part by this Assistance program. I (we) agree to hold the County, NVSWCD, and its agents and employees harmless for and waive any and all damages, accidents, casualties, occurrences or claims which might arise or be asserted against the County or NVSWCD for the construction, installation, operation, presence, existence, or maintenance of the floodproofing measures.

Per Zoning Ordinance 2-602, I (we) confirm that the flood mitigation practice does not obstruct, interfere with, or change the drainage of land and impact neighboring properties.

Such waiver is applicable only to claims related to the floodproofing measures and any services provided in association with the Flood Mitigation Assistance Program.

4.4 Approval and Funding




If approved (all documentation submitted, waiver signed etc.), NVSWCD will transmit an approval letter to the Applicant. A payment request will be processed, and a check will be issued for the amount allowable by the Program. Checks will be mailed to the address contained in the application. Please allow three (3) to six (6) weeks from receipt of application approval for payment processing.

APPENDIX A



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)



Affected Property Area	Practice	Description	City Review Requirements
Windows	Install permanent glass protection materials or floodproof windows	<p>During significant flooding events, moving debris or simple pressure can break windows that are not adequately protected.</p> <p>Permanent glass protection can prevent damage from flooding and other extreme weather events. Floodproof windows or those with glass protection are passive systems that protect from rising floodwater and debris impact. They are typically hurricane impact-rated and tested to withstand more than 10' of water and large missile collision.</p> 	No reviews or permits needed.
	Install basement window protection	<p>Fixed, translucent, water-tight covers installed on near grade or below grade basement windows provide increased protection against surface flooding.</p> <p>To significantly increase effectiveness, basement window protection should be custom fitted and installed, as studies have shown inexpensive, plastic models offer minimal protection.</p> 	No reviews or permits needed.
	Install custom ground floor or basement window wells	<p>A ground floor or basement window well should have a central drain that is either connected to an interior or exterior drain tile system or to a line that runs to a stormwater drain or outside the residence. Installing a new drain requires soil excavation and either reinstalling or replacing the window well liner. Also, for the best protection against flooding, a window well should be custom fit and</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)





Affected Property Area	Practice	Description	City Review Requirements
		made of steel-reinforced polycarbonate plastic.	
Doorways	Install flood shields or panels, permanent doorway flood gate or panel	<p>The quickest way for surface flooding to enter a structure is through open doorways.</p> <p>Flood shields or panels are watertight structural systems that bridge the openings in walls to prevent the entry of floodwaters. Although flood shields are most often temporary measures, they can also be used as a permanent floodproofing measure (e.g. hinged plate or door). A few vendors make special doors for permanent installation and drop-in panels or barriers that are designed to be watertight and installed as needed for flood protection. Permanent floodgates can be an easier and faster alternative to sandbags; however, they require installation and, in most cases, custom fitting.</p>	No reviews or permits needed.
General Flood stoppage equipment	Purchase temporary flood barriers	<p>Temporary flood barriers are lightweight and flexible absorbent socks designed primarily for residential use. Using absorbent technology, flood socks absorb water and then bind together to create a flood protection system.</p> <p>If deployed at a basement or garage entrance, these socks can stop leaks and water seeps.</p>	No reviews or permits needed.





Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)



Affected Property Area	Practice	Description	City Review Requirements
	Purchase sandless sandbags	<p>Sandless sandbags are compact, lightweight bags that expand when filled with water. Once filled, they act as a flood wall barrier. Since water is used as the main barrier, once the bags are no longer needed, the water can be let out and the bags stored until the next event.</p> 	No reviews or permits needed.
Basement	Purchase and connect battery-backups for sump pumps	<p>Many basement areas are equipped with sump pumps to divert groundwater away from basement areas. These pumps almost always run on electricity. Unfortunately, during extreme weather events, electricity can go out, leaving a basement unprotected against flooding just at the time it is needed most.</p> <p>A sump pump battery backup provides protection against power outages and ensures a sump pump will continue to work regardless of electric status.</p> 	No reviews or permits needed.



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)



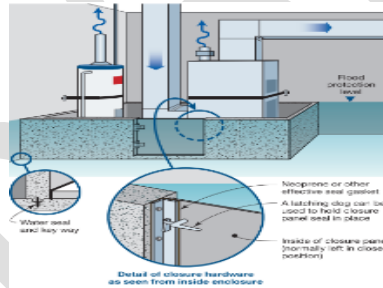
Affected Property Area	Practice	Description	City Review Requirements
	Install flood vents	<p>Flood vents are small openings that allow floodwater to pass through and drain out of an enclosed area of the home (e.g. garage, crawlspace, etc.) reducing the risk of damage to the structure by releasing water pressure.</p> <p>In a flood situation, the water pressure inside and outside a residence may not be able to equalize quickly, resulting in the foundation of a home becoming compromised. If this occurs, a residence could quickly become unsafe.</p> <p>And while at first glance, allowing floodwater into a home seems counterproductive to mitigating damage, the purpose of flood vents is to reduce expensive structural damage. These vents accomplish this objective by allowing water to pass into or out of a building's exterior foundation walls unobstructed.</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>
	Disconnect or plug internal floor drains	<p>Most internal stairwell drains are connected to either sanitary or storm sewer laterals external to the residence.</p> <p>If these lines get clogged or back up, water flows backwards and discharges through the floor drain. Disconnecting or plugging these drains can reduce the chance of sewer backups occurring.</p> 	<p>No reviews or permits needed.</p>



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)



Affected Property Area	Practice	Description	City Review Requirements
Utility Protection	Purchase utility flood covers	<p>Fast-installing, plastic utility flood covers are designed to protect utilities from flood and water damage. Utility flood covers look like plastic protective sleeves that are pulled up and fastened above a utility if flooding is forecasted. These covers, which can be installed and pulled up in minutes, can also protect the surrounding area if a water heater malfunctions or leaks.</p> <p>By installing a waterproof flood cover underneath a furnace, boiler and/or hot water heater, a homeowner can quickly provide up to six feet of floodwater protection.</p>	<p>No reviews or permits needed.</p>
	Install interior concrete or masonry walls	<p>Elevating or enclosing large appliances in a basement or other areas vulnerable to flooding using concrete blocks, walls or other masonry products can reduce the risk of water damage in a flood event.</p> <p>These interior floodwalls can provide utilities or other key areas with up to four feet of flood protection.</p>	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>







Fairfax County Flood Mitigation Assistance Program

Approved List of Practices (FY2025)






Affected Property Area	Practice	Description	City Review Requirements
	Elevate electrical outlets, switches, sockets, and circuit breakers	<p>When floodwater gets into electrical systems, they are either ruined or at the very least, cannot be used again until they have been dried out and inspected by an electrician. Therefore, having a licensed and qualified electrician elevate outlets, switches, sockets, and circuit breakers to be at least one foot above expected flood levels is a way to avoid significant electrical damage during flood events.</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>
	Elevate utilities and service equipment	<p>Elevating key components associated with a residence's heating, ventilation, and air conditioning (HVAC) system, along with other major appliances such as washers, dryers, and hot water heaters from basement areas to a higher floor or the attic is the best way to mitigate against future flood damage.</p> <p>If elevation through relocation is not possible, homeowners can protect HVAC and appliances by elevating them in place. For external utilities such as heat pumps that lie within potential flood prone areas, consider elevating using riders and cement blocks.</p>  	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)





Affected Property Area	Practice	Description	City Review Requirements
General Protective equipment	Install a flood alert system	<p>Flood alert systems can notify a homeowner when water first enters an area, enabling them to take immediate response actions to avoid more extensive flood damage.</p> <p>Current flood alert systems utilize existing home Wi-Fi networks, coupled with 20 to 30-foot water-sensing flood cables, to monitor for water intrusion. If water is detected, the flood alert system can notify a homeowner via text, call, or email.</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>
	Purchase portable submersible water pumps and hoses	<p>Once flooding occurs, it can be difficult to clean up. Without working floor drains, water can remain in low lying areas until removed manually.</p> <p>A submersible water pump and hose can be used to prevent accumulation of floodwater entering a building, or remove water after a flood event, mitigating damage to the building or supplies and expediting the recovery process.</p> 	<p>No reviews or permits needed.</p>
	Incorporate flood-resistant building materials	<p>After a flood event, replacing damaged building materials with flood resistant building materials, including cement board, vinyl and rubber flooring, concrete, lime plaster and decay-resistant wood can increase a home's resilience to flood events.</p> <p>Flood Resistant building materials are defined by FEMA as any building product [material, component, or system] capable of withstanding direct and prolonged contact with floodwaters</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)





Affected Property Area	Practice	Description	City Review Requirements
	<p>Apply interior concrete sealers and waterproof paints</p>	<p>without sustaining significant damage. The term “prolonged contact” means at least 72 hours, and the term “significant damage” means any damage requiring more than cosmetic repair.</p> <p>Water seepage through concrete basement walls is a common problem. Because of this, many companies have developed waterproofing sealers and paints. These products may be oil- or water-based, and they are heavier than conventional sealers and paints because they contain additives developed to create impermeable water barriers.</p> <p>Waterproofing compounds such as polyurethane and thick rubberized liquids one can brush, roll, dip and pour and can be applied to interior concrete surfaces to decrease their water absorbency. This can prevent serious damage in flood events.</p> 	<p>No reviews or permits needed.</p>
<p>Exterior</p>	<p>Perform surface grading</p>	<p>Surface grading can prevent floodwater from reaching a home by redirecting storm water away from a residence. This is typically done by grading a slope away from a residential structure at a grade of at least 0.5 inch per foot for at least 10 feet.</p> <p>For surface grading to be effective, the graded soil must be mechanically compacted to prevent settling.</p> <p>Surface grading should aim to reestablish the approved site plan grades (for the approved site plan, see the LDS Site</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>



Fairfax County Flood Mitigation Assistance Program Approved List of Practices (FY2025)



Affected Property Area	Practice	Description	City Review Requirements
		<p>Records Viewer). Note that Zoning Ordinance 2-602 states “no change shall be made in the existing contours of any land, including any change in the course, width, or elevation of any natural or other drainage channel, in any manner that will obstruct, interfere with, or change the drainage of such land...”</p>	
	Construct an earthen berm	<p>An earthen berm is a small hill covered with grass or other plants that is built to divert runoff so that it will not affect a certain area. As opposed surface grading, this involves building “up” instead of grading “down.”</p> <p>Note that Zoning Ordinance 2-602 states “no change shall be made in the existing contours of any land, including any change in the course, width, or elevation of any natural or other drainage channel, in any manner that will obstruct, interfere with, or change the drainage of such land...”</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>
	Install a French drain system around basement	<p>The purpose of a French drain is to direct surface runoff water and groundwater away from the home’s foundation. These types of drains are ideal because they reduce pressure and remove excess moisture from the soil by collecting surface water and groundwater.</p> <p>French drains are normally installed below areas prone to flooding to serve as a channel for water to flow away from a home. French drains can be installed to</p> 	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>



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Affected Property Area	Practice	Description	City Review Requirements
		<p>alleviate water from pooling in low-lying areas such as a ditch or basement.</p> 	
	Modification of Overland Flow Obstructions	<p>An improperly installed fence can block cross property overland storm flow and cause water to pond in your yard or your neighbor's yard. Modify yard obstructions, like fences, so they do not inhibit or alter surface flow (i.e., water must be able to flow under and through the fence unimpeded). For fences that cross swales, or water flow paths, the bottom of the fence should be raised at least six inches above the bottom of the swale.</p> 	No reviews or permits needed.
Other	Other	<p>Other types of flood mitigation practices outside of the Approved List of Practices may be considered on a case-by-case basis and may be incorporated into the Program if warranted.</p>	<p>Land Development Services (LDS)</p> <p>Approved practices may require applying for and the issuance by LDS of building and/or mechanical, electrical, and plumbing permits.</p> <p>https://www.fairfaxcounty.gov/landdevelopment/permit-library</p> <p>Contact number: 703-222-0801</p>