



County of Fairfax, Virginia

FLOODPLAIN MANAGEMENT PLAN

(Part of the Northern Virginia Regional Hazard Mitigation Plan)

PROGRESS REPORT



*Mobile Pump deployment at the Belle Haven tidal gate during a coastal storm surge event, Fall 2021
(Fairfax County Photo)*

Prepared by:

STORMWATER PLANNING DIVISION
DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENTAL SERVICES
A Fairfax County, VA Publication, July 2022

Table of Contents

	Page
I. Introduction	1
II. Fairfax County Mitigation Action 2 (2006): Continue to develop and implement flood proofing solutions for structures analyzing flood causes and responsibilities	2
III. Fairfax County Mitigation Action 5 (2006): Continue to install remote lake level sensors, data collectors/alarms, stream flow gauges, tide gauges and rain gauges at critical locations throughout the county to allow for earlier warning of potential flooding.....	2
IV. Fairfax County Mitigation Action 13 (2006): Identify need for backup generators, communications, and/or vehicles at critical public facilities. Develop means to address shortfall identified.....	3
V. Fairfax County Mitigation Action 28 (2006): Continue to implement building and development standards as required under the National Flood Insurance Program	3
VI. Fairfax County Mitigation Action 6 (2010): Continue to employ a broad range of warning systems throughout the county	3
VII. Fairfax County Mitigation Action 12 (2010): Identify funding opportunities to replace vulnerable or undersized culvert stream crossings with bridges or larger culverts to reduce flood hazards	4
VIII. Fairfax County Mitigation Action 16 (2010): Upgrade the New Alexandria/Belle View pump station fuel oil storage tanks from underground to aboveground storage	4
IX. Fairfax County Mitigation Action 17 (2010): Continue to seek voluntary buy-outs of FEMA’s repetitive loss properties within the floodplain	5
X. Fairfax County Mitigation Action 20 (2010): Collaborate with FEMA to develop risk maps for the Cameron Run Watershed and the Belle View communities	5
XI. Fairfax County Mitigation Action 21 (2010): Develop an outreach program aimed at assisting private dam owners with proper operation and maintenance	5
XII. Fairfax County Mitigation Action 23 (2010): Identify gaps in current recovery planning efforts within the county	5
XIII. Fairfax County Mitigation Action 26 (2010): Use fee simple and/or permanent easement to prevent development in the highest priority undeveloped floodplain (and/or wetlands) areas. Work with land trusts to purchase the land or conservation easements. Use these areas as public open space for passive recreational uses	6

XIV. Fairfax County Mitigation Action 27 (2010): Continue development of a comprehensive River Flood Response System for New Alexandria/Belle View and Huntington in partnership with the National Weather Service and the U.S. Army Corps of Engineers6

XV. Fairfax County Mitigation Action 29 (2010): Conduct annual outreach to each FEMA-listed repetitive loss and severe repetitive loss property owner, providing information on mitigation programs (grant assistance, mitigation measures, flood insurance information) that can assist them in reducing their flood risk.....6

XVI. Fairfax County Mitigation Action 30 (2010): Promote structural mitigation to assure redundancy of critical facilities, to include but not limited to roof structure improvement, to meet or exceed building code standards, upgrade of electrical panels to accept generators, etc.7

XVII. Fairfax County Mitigation Action 32 (2010): Encourage public and private water conservation plans, including consideration of rainwater catchment system.....7

XVIII. Fairfax County Mitigation Action 33 (2010): Work with the Virginia Department of Forestry to review local zoning and subdivision ordinances to identify areas to include wildfire mitigation principles7

XIX. Fairfax County Mitigation Action 1 (2017): Develop an Emergency Action Plan for the Huntington Levee project7

XX. Fairfax County Mitigation Action 2 (2017): Collaborate with other departments of Fairfax County to identify satellite locations throughout Fairfax County to build additional salt storage facilities to reduce the travel time and distance during snow/ice events8

XXI. Fairfax County Mitigation Action 3 (2017): Secure funding to purchase additional equipment/trucks to enhance our current level of service to be able to dedicate one piece of equipment/truck to each police station within Fairfax County or identify other resources to accomplish this need.....8

XXII. Fairfax County Mitigation Action 4 (2017): Coordinate and support the Virginia Department of Transportation (VDOT) in the identification and resolution of road flooding and drainage issues related to VDOT roadways8

XXIII. Fairfax County Mitigation Action 5 (2017): Armor stream bank and construct a flood wall to prevent stream bank erosion and flooding at the Noman M. Cole, Jr. Pollution Control Plant.....8

XXIV. Fairfax County Mitigation Action 6 (2017): Design and construct safe rooms at critical facilities to house personnel and community members during high wind events9

XXV. Fairfax County Mitigation Action 7 (2017): Provide emergency utility capabilities for critical facilities. This includes, but is not limited to providing generator and emergency water hookups9

XXVI. Fairfax County Mitigation Action 8 (2017): Improve Fairfax County’s Community Rating System (CRS) classification from Class 6 to Class 5 by documenting services that are currently being provided.....9

XXVII. Fairfax County Mitigation Action 9 (2017): Provide routine inspections and maintenance of dams to ensure they are functional9

XXVIII. Fairfax County Mitigation Action 10 (2017): Continue to implement flood mitigation projects for communities in Fairfax County that are exposed to severe flooding risk10

XXIX. Fairfax County Mitigation Action 11 (2017): Update flood information website to include a link to the Office of Emergency Management website and the private dam owners outreach materials 11

XXX. Fairfax County Mitigation Action 12 (2017): Support mitigation of priority flood-prone structures through promotion of acquisition/demolition, elevation, flood proofing, minor localized flood control projects, mitigation reconstruction and where feasible using FEMA HMA programs where appropriate11

Floodplain Management Plan Progress Report

I. Introduction

In an effort to reduce the nation's mounting natural disaster losses, the United States Congress passed the Disaster Mitigation Act of 2000 (DMA 2000), which amends the Robert T. Stafford Disaster Relief and Emergency Act. Section 322 of DMA 2000 emphasizes the need for state and local governments to coordinate closely on mitigation planning activities and makes the development of a hazard mitigation plan a specific eligibility requirement for any local government applying for federal mitigation grant funds. These funds include the Hazard Mitigation Grant Program (HMGP) and the Pre-Disaster Mitigation (PDM) Program, both of which are administered by the Federal Emergency Management Agency (FEMA) under the U.S. Department of Homeland Security.

The Northern Virginia Regional Hazard Mitigation Plan was developed in accordance with state and federal rules and regulations governing local hazard mitigation plans. Fairfax County (county) adopted the plan in accordance with the authority and police powers granted to counties and municipalities under sections 15.2-2223 through 15.2-2231 of the Virginia State Code. A list of participating counties is provided in the 2017 Northern Virginia Hazard Mitigation Plan. Under Code 44 of Federal Regulations (CFR) Part 201.6(c) (4) (i), the plan maintenance process includes a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan. Under 44 CFR Part 201.6(c)(4)(ii), the plan maintenance process includes a procedure by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate.

The purpose of the Northern Virginia Hazard Mitigation Plan is to:

- Protect life, safety, and property by reducing the potential for future damages and economic losses that result from natural hazards;
- Make communities safer places to live, work and play;
- Demonstrate a local commitment to hazard mitigation principles;
- Comply with state and federal legislative requirements for local multi-jurisdictional hazard mitigation plans.

Each jurisdiction participating in the Northern Virginia Hazard Mitigation Plan is responsible for implementing specific actions as prescribed in their locally adopted mitigation action plan. In each mitigation action plan, every proposed action is assigned to a specific local department or agency for responsibility and accountability. This approach enables individual jurisdictions to update their unique mitigation action plan as needed without altering the broader focus of the regional plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

The Fairfax County Department of Public Works and Environmental Services (DPWES), Stormwater Planning Division (SWPD), has prepared this progress report on the implementation of the flood mitigation actions of the Northern Virginia Hazard Mitigation Plan in response to requirements for the County's participation in the Community Rating System (CRS) program. The CRS is a program under FEMA's National Flood Insurance Program (NFIP) that provides flood insurance discounts to participating communities. This report is required to be submitted annually.

Copies of the progress report are sent to all members of the Fairfax County Board of Supervisors (Board) each year. In addition, this report will be released to the media and made available to the public. A news release inviting the media and the public to review the progress report on the county website is sent to the county media mailing list. Hard copies of this and earlier progress reports are available to the public and media at the SWPD, Fairfax County Government Center, 12000 Government Center Parkway, Suite 449, Fairfax, VA 22035.

A hard copy of this and earlier progress reports may be obtained from the SWPD by calling 703-324-5500, TTY 711, or a request may be made by email at DPWESSWPDMail@fairfaxcounty.gov.

The Board adopted the county's portion of the current Northern Virginia Hazard Mitigation Plan on April 4, 2017. This report provides an annual update of the county's actions required by this plan. Provided below is a brief discussion of the progress made on specific flood mitigation actions proposed by the county as identified in the Northern Virginia Hazard Mitigation Plan.

II. Fairfax County Mitigation Action 2 (2006):

Continue to develop and implement flood proofing solutions for structures analyzing flood causes and responsibilities

Huntington Levee

This project was completed in June 2019. The Huntington Community was excluded from FEMA's Special Flood Hazard Areas (SFHAs) in Fairfax County through a Letter of Map Revision (LOMR), with an effective date of December 13, 2021.

III. Fairfax County Mitigation Action 5 (2006):

Continue to install remote lake level sensors, data collectors/alarms, stream flow gauges, tide gauges and rain gauges at critical locations throughout the county to allow for earlier warning of potential flooding

Operation and maintenance of the County Flood Warning System continues. No new sites were added over the past year but a significant system upgrade to ALERT 2 communication is currently ongoing which will improve system reliability. Hardware for the ALERT 2 upgrade

has been purchased and implementation of the upgrade is currently scheduled to occur in Fall 2022.

IV. Fairfax County Mitigation Action 13 (2006):

Identify need for backup generators, communications, and/or vehicles at critical public facilities. Develop means to address shortfall identified

The Fairfax County Park Authority (FCPA) has received Virginia State Emergency Shelter Grant funding to install a backup natural gas-powered electric generator at the Lee District Rec Center, to be complete by the end of fiscal year 2023 (June 2023). The generator will support the emergency shelter sections of the facility (gym, lower club room, lower halls, and locker rooms). The back-up generator design for Spring Hill Recreation Center has yet to be installed and could be part of a potential future grant submission. Wastewater Management operates and maintains 54 wastewater pump stations and three storm water facilities that require emergency backup power generators. These range in size for 10 KW to 1750 KW. Thirteen (13) of these wastewater pumping stations, and all three storm water facilities are located within the county's floodplain areas. In addition, five generators with installed capacity of 2 MW each were already installed at Noman M. Cole Jr. Pollution Control Plant. In 2021, a new UV final effluent disinfection system went online and there is 750 KW backup generator dedicated to this process.

V. Fairfax County Mitigation Action 28 (2006):

Continue to implement building and development standards as required under the National Flood Insurance Program

The Fairfax County Department of Land Development Services (LDS) continues to enforce Virginia Building Codes and the county's floodplain regulations. Together, these provisions meet or exceed NFIP standards. LDS conducts regular training for building inspectors, permit technicians, and plan reviewers to ensure consistent implementation of these provisions.

VI. Fairfax County Mitigation Action 6 (2010):

Continue to employ a broad range of warning systems throughout the county

The Department of Emergency Management and Security (DEMS) utilizes Fairfax Alerts (which is part of the National Capital Region's mass alerting system) to alert residents, employees, businesses, and visitors. Other technology such as the Wireless Emergency Alerts system (WEA) and social media are also deployed and operationalized. The Maintenance and Stormwater Management Division (MSMD) and SWPD also maintain and utilize a remote advance flood warning system that provides rainfall and water level information at the county's state regulated dams and flood-prone areas.

VII. Fairfax County Mitigation Action 12 (2010):

Identify funding opportunities to replace vulnerable or undersized culvert stream crossings with bridges or larger culverts to reduce flood hazards

FCPA's Trail Development Plan guides the development and renovations of trails. FCPA utilizes General Obligation Bonds, General Fund, Sinking Funds, Proffers, various federal grant funding and revenue from telecommunications poles to address trail erosion and improve vulnerable or undersized culvert stream crossings.

In FY 22, FCPA's Planning and Development Division renovated approximately two miles of stream valley trail in the Accotink and Long Branch watersheds. This includes the resurfacing of eroded gravel trails with asphalt, replacement of several corroded corrugated metal culverts with HDPE, and the installation of several new culverts to improve drainage. In Accotink Stream Valley, the replacement of a failing steel bridge with a fiberglass bridge and the repair of one additional steel bridge was also completed. Also, a failed bridge was replaced in Smokewood Park utilizing proffer and sinking fund funding. In addition, a Virginia Department of Conservation and Recreation (VDCR)-Recreational Trails Program grant funded the construction of approximately one-half mile of new trail in the Pohick Stream Valley watershed. Funding for these activities were made available through the 2016 Park Bond.

Planned bond funded projects for FY 23 include replacing an inadequate low water crossing at the outfall of the Lake Accotink dam with an elevated walkway, the replacement of one bridge and two fair-weather crossings with fiberglass bridges and the renovation of an additional two miles of stream valley trail in the South Run watershed, and the replacement of an inadequate culvert crossing with a new bridge in the Rocky Run Stream Valley. Staff is also conducting a stream crossing replacement study for four stream crossings in the Pimmit Run Stream Valley. In addition, a second VDCR-Recreational Trails Program grant application was submitted for the funding of the construction of approximately one-half mile of new trail in the Pohick Stream Valley watershed. Staff is also managing FCDOT funded projects which include the renovation of approximately one-half mile of stream valley trail in the Old Courthouse Spring Branch and Difficult Run watersheds, including new asphalt surfaces and the replacement of "wet" crossings with culverts. Funding for these activities will be made available through the 2016 and 2020 Park Bond, park proffers and sinking fund money. Additionally, \$1 million in American Rescue Plan Act of 2021 (ARPA) funding is being provided by the VDCR for several trail improvements in Royal Lake Park and the Rabbit Branch Stream Valley. The stream crossing replacements study in the Pimmit Run Stream Valley is funded by the Board of Supervisors Sidewalk/Walkways Fund.

VIII. Fairfax County Mitigation Action 16 (2010):

Upgrade the New Alexandria/Belle View pump station fuel oil storage tanks from underground to aboveground storage

The Wastewater Design and Construction Division completed upgrades to the fuel oil storage tanks at the New Alexandria/Belle View pump station. The project included the removal of

underground fuel oil tank and replacement with an aboveground tank. The project was substantially complete on October 29, 2021.

IX. Fairfax County Mitigation Action 17 (2010):

Continue to seek voluntary buyouts of FEMA’s repetitive loss properties within the floodplain

As part of the Tripps Run at Barrett Road Flood Mitigation Project, the County is working with nine private property owners (many of the properties being repetitively loss) for voluntary acquisition to create a reconnected floodplain and an environmental stream corridor. At this location, the Tripps Run floodplain is currently designated by FEMA as “Zone AE”, whereby the base flood elevations have been determined (FIRM 51059C0285E, Panel 285 of 450, September 17, 2010). The nine owners have voluntarily supported an application for FEMA Flood Mitigation Assistance Funding which was submitted through the Virginia Department of Emergency Management earlier this year (January 2022). The County continues to investigate other funding sources and apply for eligible grants to fund this important project.

X. Fairfax County Mitigation Action 20 (2010):

Collaborate with FEMA to develop risk maps for the Cameron Run watershed and the Belle View communities

FEMA, as part of their RiskMap initiative, is updating Fairfax County’s Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) including Cameron Run and Belle View. The county received their preliminary FIRM and FIS on June 30th, 2021. After review and resolution of any appeals, FEMA is expected to issue a Letter of Final Determination (LFD) for the FIRM and FIS in 2023. The county is required to adopt the maps within six months of receiving the LFD.

XI. Fairfax County Mitigation Action 21 (2010):

Develop an outreach program aimed at assisting private dam owners with proper operation and maintenance

SWPD will identify specific outreach techniques for the private dam owners when resources become available.

XII. Fairfax County Mitigation Action 23 (2010):

Identify gaps in current recovery planning efforts within the county

The 2012 Pre-Disaster Recovery Plan (PDRP) first review and revision is complete. The new 2020 plan was adopted/signed by the County Executive in April 2020.

XIII. Fairfax County Mitigation Action 26 (2010):

Use fee simple and/or permanent easement to prevent development in the highest priority undeveloped floodplain (and/or wetlands) areas. Work with land trusts to purchase the land or conservation easements. Use these areas as public open space for passive recreational uses

FCPA continues to acquire land in undeveloped floodplain areas via fee simple acquisitions, developer dedications, donations, and easements. In FY 2021, 5.6 acres of resource protected land was acquired in fee simple to provide continuous natural habitat in the Backlick Stream Valley Park in Lee District.

XIV. Fairfax County Mitigation Action 27 (2010):

Continue development of a comprehensive River Flood Response System for New Alexandria/Belle View and Huntington in partnership with the National Weather Service (NWS) and the U.S. Army Corps of Engineers

MSMD continues to coordinate with NWS on updates to the county's flood warning system. SWPD is also working with the U.S. Army Corps of Engineers to develop rainfall/tide triggers for the community protected by the tide gate at New Alexandria/Belle View.

XV. Fairfax County Mitigation Action 29 (2010):

Conduct annual outreach to each FEMA-listed repetitive loss and severe repetitive loss property owner, providing information on mitigation programs (grant assistance, mitigation measures, flood insurance information) that can assist them in reducing their flood risk

The county developed 21 repetitive loss area maps based on FEMA's list of properties that have experienced repetitive loss from flooding. FEMA defines repetitive loss property as, "*a National Flood Insurance Program-insured structure that has had at least two paid flood losses of more than \$1,000 each in any 10-year period since 1978.*" The county forwards a letter to all properties that located within the mapped repetitive loss area every year. The letter advises the recipients that their property is located in an area that may experience periodic flooding and how to prepare for flooding. The letter also advises the recipients about implementing permanent flood protection and provides information about FEMA Hazard Mitigation Assistance and basic facts about flood insurance.

XVI. Fairfax County Mitigation Action 30 (2010):

Promote structural mitigation to assure redundancy of critical facilities, to include but not limited to roof structure improvement, to meet or exceed building code standards, upgrade of electrical panels to accept generators, etc.

This will be completed based on available funding.

XVII. Fairfax County Mitigation Action 32 (2010):

Encourage public and private water conservation plans, including consideration of rainwater catchment system

FCPA offers a large number of educational and outreach materials and programs that are aimed to promote stewardship to the residents and visitors of the county. Many of the educational programs include a component that is related to water conservation. Additionally, the county partners with Northern Virginia Soil and Water Conservation District to host workshops and technical classes that encourage conservation plans, including consideration of rainwater catchment systems.

XVIII. Fairfax County Mitigation Action 33 (2010):

Work with the Virginia Department of Forestry to review local zoning and subdivision ordinances to identify areas to include wildfire mitigation principles

The Virginia Department of Forestry recently drafted a “Firewise Plan” that focuses on a voluntary outreach-based program to engage the community to go out and remove fuels, clean gutters, and other activities that can help prevent wildfire mitigation. FCPA continues to partner with the Virginia Department of Forestry to develop staff training and outreach language material to support prescribed burn activities in Fairfax. Through this program, FCPA staff speak one on one with county residents about prescribed burns in their area and discuss the benefits of prescribed burns for restoration and the reduction of natural fuels. The FY 20 bond proposes continued funding for the Helping Our Land Heal Program which facilitates this citizen outreach as part of its prescribed burn program.

XIX. Fairfax County Mitigation Action 1 (2017):

Develop an Emergency Action Plan for the Huntington Levee project

An interim flood response plan for the Huntington community was completed in June 2019 to reflect new triggers and actions for emergency operation activities. This plan was developed as part of the overall flood warning system which is required as part of the FEMA levee accreditation. After interdepartmental reviews and incorporation of comments, the plan was finalized on July 9, 2021. The county received a letter from FEMA dated February 23, 2022, confirming that the levee had been accredited.

XX. Fairfax County Mitigation Action 2 (2017):

Collaborate with other departments of Fairfax County to identify satellite locations throughout Fairfax County to build additional salt storage facilities to reduce the travel time and distance during snow/ice events

The salt domes at Central Material Facility (CMF) and Dulles Material Facility (DMF) were completed in November 2020 and both are operational. A salt storage facility is currently in the design phase at a new stormwater/wastewater site which will be located at Freds Oak Road, Fairfax Station. The County is also partnering with Fairfax County Public Schools (FCPS) to install a salt dome and vehicle wash facility at W.T. Woodson High School. There have been no other sites identified for salt storage as of this time.

XXI. Fairfax County Mitigation Action 3 (2017):

Secure funding to purchase additional equipment/trucks to enhance our current level of service to be able to dedicate one piece of equipment/truck to each police station within Fairfax County or identify other resources to accomplish this need

The county has provided a contracted resources at each police station for the last two seasons. To sustain this level of service, the county is currently looking for additional drivers/operators and equipment that may be deployed from within DPWES to sustain this service. Staff will continue to request this additional funding for equipment and resources in future budgets.

XXII. Fairfax County Mitigation Action 4 (2017):

Coordinate and support the Virginia Department of Transportation (VDOT) in the identification and resolution of road flooding and drainage issues related to VDOT roadways

Coordination with VDOT on the identification and resolution of road flooding and drainage issues is ongoing.

XXIII. Fairfax County Mitigation Action 5 (2017):

Armor stream bank and construct a flood wall to prevent stream bank erosion and flooding at the Noman M. Cole, Jr. Pollution Control Plant

The project was substantially complete on March 11, 2020.

XXIV. Fairfax County Mitigation Action 6 (2017):

Design and construct safe rooms at critical facilities to house personnel and community members during high wind events

This will be initiated as funding is available.

XXV. Fairfax County Mitigation Action 7 (2017):

Provide emergency utility capabilities for critical facilities. This includes, but is not limited to, providing generator and emergency water hookups

This will be completed as funding is available.

XXVI. Fairfax County Mitigation Action 8 (2017):

Improve Fairfax County's Community Rating System (CRS) classification from Class 6 to Class 5 by documenting services that are currently being provided

FEMA's CRS management contractor conducted the five-year CRS verification cycle visit on December 18, 2019, and the county was notified it would remain a class 6 CRS community on July 31, 2020. The county successfully completed annual recertification of its rating on August 18, 2021. SWPD will continue to evaluate opportunities for improving the county's CRS classification.

XXVII. Fairfax County Mitigation Action 9 (2017):

Provide routine inspections and maintenance of dams to ensure they are functional

County owned state regulated dams are regularly inspected in accordance with Virginia Department of Conservation and Recreation (DCR) approved facility specific operation and maintenance plans which require the dams to be inspected at a minimum annually. State regulated dam inspections may include operator inspections, maintenance inspections, technical safety inspections (performed by a professional engineer), dam owner (or designee) inspections, and overtopping inspections. Inspection reports are submitted to the DCR annually. Routine maintenance on state regulated dams occurs throughout the year. Mowing and routine maintenance is more frequent during the growing season with mowing occurring approximately monthly on state regulated dams. Maintenance work orders and/or contractor purchase orders are prepared to address any maintenance items identified in the inspection to ensure the dams remain functional.

County owned stormwater management facility dams that are not state regulated are inspected at a minimum biennially by a qualified county consultant. Maintenance work orders and/or

contractor purchase orders are prepared to address any maintenance items identified in the inspection to ensure the dams remain functional.

Privately owned stormwater management facility dams are inspected at a minimum every five years by a qualified county consultant. Maintenance items identified during the inspection are sent to the facility/dam owner requesting maintenance and follow up documentation that maintenance has been performed to ensure the dam and stormwater management facility is functional.

XXVIII. Fairfax County Mitigation Action 10 (2017):

Continue to implement flood mitigation projects for communities in Fairfax County that are exposed to severe flooding risk

As a result of the July 8th, 2019, storm event, the county conducted flood damage assessments and identified several potential flood mitigation projects for further evaluation and implementation. These potential projects were incorporated into the County's plan to address properties and areas with severe flooding risks, including those areas previously identified as repetitive loss areas.

The Department of Public Works and Environmental Services (DPWES) is currently managing 39 active flood mitigation projects with a total estimated cost of \$53M that vary in scope from flood risk reduction measures on individual lots to neighborhood-scale stormwater improvements.

The Tripps Run at Barrett Road flood mitigation project in the Mason District, involves an area of historic flooding along Barrett Road which has been identified as one of the county's 21 repetitive loss areas. The area of interest is the segment between Annandale Road and Sleepy Hollow Road. A study was conducted, and the final report was completed in December 2020, with a report revision issued November 2021. The report recommended a scenario that included acquisition of nine properties to create an environmental stream corridor with restorative stream enhancements and stabilization. The county is currently pursuing several funding options to allow design development, property acquisition, and implementation of the recommended scenario.

Other examples of flood mitigation projects in various stages of implementation include:

- Dead Run Drive (Dranesville District)
- Valley Avenue (Dranesville District)
- Forest Villa Lane (Dranesville District)
- Woodacre Drive (Dranesville District)
- Weaver-Dillon Avenue Stormwater Neighborhood Improvements (Dranesville District)
- Tucker Avenue (Dranesville District)
- Kent Gardens (Dranesville District)
- Potomac Hills neighborhood stormwater improvements (Dranesville District)
- Sunset Hills Drainage Improvement Project (Hunter Mill District)

- Ravenwood Park Neighborhood Stormwater Improvement Project Study (Mason District)
- Chowan Avenue and 8th Street (Mason District)
- Ridgecrest Drive Drainage Improvements (Mt. Vernon District)

The primary focus of these projects is to prevent structural flooding. Since the July 8th, 2019, storm event, DPWES has completed 17 flood mitigation projects on individual residential properties. It should be noted that some structural floodings do not have any feasible solution beyond voluntary acquisition of the property or are not supported by the homeowner and do not move forward.

In addition, stormwater staff regularly respond to flooding and drainage reports from residents. The majority of these responses are conducted by Maintenance and Stormwater Management Division staff. Staff regularly address drainage and flooding concerns through routine maintenance actions. Staff also provide information to property owners about what steps they can take to report drainage/flooding issues and insure and better protect their properties.

XXIX. Fairfax County Mitigation Action 11 (2017):

Update flood information website to include a link to the Department of Emergency Management and Security and outreach materials for private dam owners.

A link to the Fairfax County Department of Emergency Management and Security website is included on the flood information web page:
<https://www.fairfaxcounty.gov/publicworks/stormwater/flood-information>. Also included on this page is general information on dams and dam safety for, as well requirements for proposed developments located in the breach zones of state regulated dams in the county.

XXX. Fairfax County Mitigation Action 12 (2017):

Support mitigation of priority flood-prone structures through promotion of acquisition/demolition, elevation, flood proofing, minor localized flood control projects, mitigation reconstruction and where feasible using FEMA HMA programs where appropriate

The Tripps Run at Barrett Road Flood Mitigation Project involves an area of historic flooding along Barrett Road which has been identified as one of the County's 21 repetitive loss areas. Most recently, several structures in this area experienced flooding and interior damage during the July 8, 2019, and July 7, 2020, storm events.

A study analyzing and evaluating several flood mitigation alternatives was completed in December 2020. The study recommended a scenario that included acquisition and demolition of nine properties (many of these repetitive loss) to create a reconnected floodplain and an environmental stream corridor. The County is currently identifying additional funding for this important project and anticipates beginning the design phase this summer.

To request this information in an alternate format, call 703-324-5500, TTY 711.



Fairfax County
Department of Public Works and Environmental Services
Stormwater Planning Division
12000 Government Center Parkway
Suite 449
Fairfax, VA 22035
Fairfax County website: <https://www.fairfaxcounty.gov/publicworks/stormwater>
703-324-5500, TTY 711
FAX 703-802-5955