ADDENDUM, Updated June 2025

Staff from the Fairfax County (County), Department of Public Works and Environmental Services (DPWES), the Department of Land Development Services (LDS), the Department of Planning and Development (DPD), and the Office of Environmental and Energy Coordination (OEEC) worked together to identify risk reduction strategies. Risk reduction strategies are grouped into three categories: projects, programs, and policies (regulations), that complement each other to reduce flood risk. This addendum updates the 2024 data provided regarding flood projects, policies, and programs, available at the following links:

- April 2024 Memorandum: https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/Assets/Documents/May_14_Land_Use_policy_Flood_Risk_Policy_memorandum.pdf
- April 2024 Addendum to the Memorandum: https://www.fairfaxcounty.gov/boardofsupervisors/sites/boardofsupervisors/files/Assets/Documents/May_14_Land_Use_policy_Flood_Risk_Policy_memo_Addendum.pdf

1.0 Projects

DPWES leads the County projects to reduce structural flood risk. The County's Resilient Fairfax plan states that climate resilience should be integrated into project prioritization and implementation. Resilient Fairfax projects increased the need for capital projects to address climate vulnerabilities. Project considerations fall into three different categories:

1. **Structural flood risk from coastal flooding.** The County Belle Haven Watershed experiences coastal flooding from storm surge. Current mapping estimates that 330 structures are at risk of flooding from the 100-year storm adjusted for climate change. Current mapping estimates that 108 structures are at risk of flooding from the 25-year storm, without adjustment for climate change. This includes 17 subterranean "J-unit" apartments that are at heightened risk during a storm surge event. As climate changes and the sea levels rise, additional homes and businesses will face increased risk of structural flooding from coastal flooding. In April 2023, the communities of Belle View, New Alexandria, and River Towers rejected the U.S. Army Corps proposed solution to build a floodwall to protect the community from the 100-year storm because the community wanted the wall located on U.S. National Park Services property. The National Park Services rejected this proposal. DPWES has no alternative projects identified for structural flood solutions for this area. Subject to technical feasibility, DPWES recommends issuing a Request for Expressions of Interest to partner with the private sector to identify if there are any feasible structural solutions other than the flood wall identified by the U.S. Army Corps. DPWES also strongly recommends targeted programs in this area to prepare residents to take their own actions to minimize risk from coastal flooding, described later in this memo.

2. **Noncoastal, confirmed structural flooding.** DPWES responds to service requests related to flooding, investigates the causes, and documents findings. In 2023, DPWES analyzed more than 30 years of historic service request data to identify confirmed, structural flooding. In 2024, this data was prioritized to direct the implementation of flood mitigation projects. Through this and other project identification efforts, DPWES estimates there are at least 570 new projects in addition to those already included in the five-year capital improvement project (CIP) list to address existing, confirmed structural flooding at the 100-year storm event adjusted for climate change. Based on past project cost estimates, DPWES estimates $600 million of new project funding needed in addition to the $95 million included in the current five-year CIP to fund these projects as described in **Attachment B**.

   DPWES continues to seek additional funding sources to address flood risk. Since 2020, DPWES has been awarded over $6 million in federal and state grants for the voluntary acquisition of structures that have experienced flooding and over $21 million to fund flood mitigation projects.

   At current flood risk reduction CIP appropriation levels, it would be approximately 70 years, or at least until the year 2094, to resolve the approximately $695 million of projects needed to address existing, confirmed structural flooding. Increased stormwater tax and staffing would be required to resolve these known structural flooding problems at the 100-year storm interval level of service sooner.

3. **Noncoastal predicted risk for structural flooding.** DPWES analyzed topography and infrastructure to identify low-lying areas with higher predicted risk of structural flooding from heavy rainfall. Isolated, heavy rain events have led to structural flooding of homes and businesses in low-lying areas or drainage flow paths, also called overland relief paths. DPWES and LDS mapped structures that exist in low-lying areas, called sumps. This analysis shows opportunities for future projects and programs to minimize the risk to some structures. Currently, DPWES recommends pursuing programs instead of projects for structures in this category.

These three project categories all follow the proposed 2025 Flood Risk Reduction Policy, including prioritization for stormwater capital expenditures. This 2025 proposed policy updates the 1997 Board Policy.

2.0 Programs

Staff recommends developing programs to empower residents and owners with knowledge of their individual flood risk, services available to them, and strategies they can initiate to protect themselves and their property, in accordance with the County's Resilient Fairfax plan.

2.1 Existing Programs

County staff and the Northern Virginia Soil and Water Conservation District (NVSWCD) currently administer the following programs:

- **Technical assistance for private property owners.** The NVSWCD provides technical assistance to owners to advise on drainage issues on private property. See https://www.fairfaxCounty.gov/soil-water-conservation/drainage-problem.

- **Flood Risk Outreach.** Staff analyzed and published information about low-lying areas (sumps) and modeled floodplains, both FEMA and non-FEMA.

  As one example of providing knowledge of flood risk, LDS published this Flood Risk Awareness Tool, available at this link. Staff anticipates that heightened outreach to make residents aware of their risk will lead to questions to the Board district offices and to staff. This will require increased staff effort to assist residents in understanding their risk and how they can minimize that risk.

  Staff anticipate property owner concern on publishing flood risk as it may relate to property values. Nonetheless, staff believes the need for all residents to be aware of their risk outweighs property owners' concerns for property values.

- **Coastal Flooding Outreach.** Staff worked with Belle Haven community leaders in 2023 to advise residents of their risk, including mailing flood risk information to residents. Staff recommend furthering these efforts by partnering with a nonprofit organization or consultant to make residents aware of their existing flood risk, advise them of flood insurance options for their homes and its contents, practice communications on Riverwatch, and practice evacuation routes and procedures. Staff also recommend implementing a voluntary property acquisitions program with targeted outreach for those properties with the highest risk of potential loss of life during a coastal storm surge event. In May 2024, DPWES published a series of flood information webpages with the themes of reporting flooding, knowing your risk, flood preparedness, and coastal flooding. In May 2025, DPWES staff along with our partners hosted a Coastal Flood Preparedness Open House in the Belle Haven community. In support of the Open House, an informational video was created outlining key coastal flood related topics, and this video can also be found on the DPWES Coastal Flooding webpage.

https://www.fairfaxcounty.gov/publicworks/flood-info

- **Continued efforts with the National Flood Insurance Program.** Since 1993, Fairfax County has worked with the Community Rating System (CRS) and is one of five Class 6 jurisdictions in the Commonwealth of Virginia. A Class 6 CRS rating allows property owners in the County to obtain a 20% reduction in flood insurance premiums. See more at Flood Information | Public Works and Environmental Services (fairfaxCounty.gov). In May 2025, the Repetitive Loss Area Analysis Report was adopted. Adoption of the RLAA report will provide the County with additional CRS points that could potentially result in the County achieving a Class 5 which will provide a 25% discount to NFIP policyholders in the County.

- **County Grant Programs.** The Board has approved grant programs for:
  - Flood mitigation assistance to residents. The program began on July 1, 2024 and as of June 1, 2025, there have been 35 applications with a total of over $84,000 distributed to applicants.
  - Stormwater facility maintenance where residents bear private maintenance burden, and DPWES continues to develop this program.
  - Conservation Assistance Program. Focuses on water quality and has been in place since 2017, see Virginia and Fairfax County Conservation Assistance Programs | Northern Virginia Soil and Water Conservation District.

  As these grant programs progress, staff recommends reassessing funding levels to meet community needs.

2.2 Proposed Programs

Staff recommends developing the following programs:

- **Future grant programs.** Additional grant programs should focus on erosion prevention and control for channels threatening private or common interest properties and areaway protection and disconnect from sanitary sewer to prevent flooding.

- **Easement program.** Identify where the County should obtain additional storm drainage easements and assume maintenance responsibility. This will require staff and funding.

- **Enhanced Countywide Floodplain Modeling Efforts Considering Climate Change.** Staff recommends updating the County floodplain mapping to identify risk from rainfall adjusted for climate change and sea level rise from climate change, coupled with ultimate buildout conditions that are already used in County floodplain mapping. Updated mapping would help identify if there are additional structures at risk of flooding.

- **Targeted Community Outreach to Vulnerable Communities.** Of residential structures at risk, approximately 18% occur in neighborhoods with vulnerability index scores of high or very high as shown in **Attachment C**. Staff recommends increased outreach which will focus on the availability of programs and targeted outreach for these vulnerable communities. Staff recommend that the County engage with a nonprofit organization or consultant to assist in developing communications that will target these communities to enhance their understanding of flooding risk, applying for grant programs and assistance with navigating the land development process. To date, staff have implemented:
  - Analyses identify communities scoring in the high or very high vulnerability indices that also fall in areas at risk of flooding.
  - Updated outreach materials, with full translation via the County website, such as DPWES door hangers and communications information.
  - Vulnerable community engagement partnering between DPWES, OEEC, Neighborhood and Community Services, Department of Emergency Management and Security, Department of Family Services, and Department of Housing and Community Development. **Attachment C** has additional information.

- **Proactive County Project Participation.** DPWES recommends that all County projects evaluate stormwater management options to reduce downstream flows. This would require that DPWES, FCDOT, VDOT, HCD, and FCPS consider using innovative approaches to address stormwater in the most cost-effective manner.

- Voluntary Acquisition Program

3.0 Regulations

As directed by the Board, staff have begun to update regulations and design standards relating to stormwater and flood risk reduction to better ensure flood-resilient and climate-ready communities, in alignment with the Resilient Fairfax plan.

Stormwater and floodplain regulations are established in several adopted Ordinances and regulations:

- The Fairfax County Zoning Ordinance Section 5105 establishes floodplain regulations, including defining which uses may be permitted in the floodplain, and those that need approval of a Special Exception (SE), as well as limitations that all uses must meet. One such use limitation, is any new residential dwellings constructed since 1978 require 18 inches of freeboard, and unless a SE is approved, a 15-foot setback.

- The Public Facilities Manual (PFM), adopted by the Board of Supervisors, was developed in the 1960s from policies for the preparation of site and subdivision plans and has since evolved to include a wide range of stormwater related requirements. The PFM provides engineering standards and details – the "how" of demonstrating compliance with the stormwater and floodplain regulations located in various Ordinances.
- The Stormwater Management Ordinance, Chapter 124, was first adopted in 2014 as a result of significant state mandates and specifies the current level of stormwater quality and quantity control. It is a compilation of various existing requirements. For example, the water quality control requirements were previously contained in Chapter 118, Chesapeake Bay Protection Ordinance but moved in the SWMO. In 2025, the county merged Chapter 124 with Chapter 104, Erosion and Sediment Control to create the current Chapter 124.1, Erosion and Stormwater Management Ordinance. While most changes were limited to edits necessary to merging the two ordinances, the new combined ordinance incorporates the residential detention obligation of the county's Localized Flooding Mitigation Policy for Residential Infill Development (described below).
- LDS has incorporated the following recent policies to reduce flood risk:
  - Effective September 5, 2022, Land Development Services issued Technical Bulletin 22-06 that established the Localized Flooding Mitigation Policy for Residential Infill Development – Detention Requirements. The policy established the criteria and methodology to mitigate the impacts of the increase in stormwater runoff from the increase in impervious surfaces associated with residential infill development that are located upstream of outfalls with known erosion of capacity problems. The policy created a simplified methodology for developments to comply by providing onsite detention equal to 2.56 inches of rainfall from the net increase in impervious area.
  - For all development that will disturb more than 2,500 sq ft, LDS requires developers and owners to demonstrate adequate conveyance of surface water leaving the development site. On July 31, 2023, LDS released updates to the GIS-based Flood Risk Analysis Tool to make available the Potential Sump Conditions layer and the Overland Relief Flow Accumulation layer. These layers provide design professionals with additional information to better address potential flooding of low-lying areas and flow paths. This information has allowed developers and owners to better consider the drainage impacts of their development without adding expense by making data available.
  - DPWES maintains a database of service requests submitted from property owners related to potential drainage issues. MSMD investigates the service requests to determine relevance. DPWES has provided LDS with access to the data since as early as 2005, and later in a GIS-based application. Information related to known or suspected drainage issues informs plan review decisions related to the adequacy of streams and stormwater conveyance systems.

- Effective October 21, 2020, the PFM was amended to require basement floor elevations of residential structures to be set above the seasonal groundwater table. This amendment prevents problems such as groundwater flooding of the basement or continuously running sump pumps which can cause damage to the building and create hardship and financial loss for existing and future homeowners. Frequent cycling of sump pumps, due to the extended presence of groundwater, can also result in concentrated and sustained discharge, yard flooding, potential road right-of-way hazards, and impacts to adjacent properties.

- In 2025, the County adopted changes to Chapter 118 regulations to comply with state requirements for incorporating sea level rise into analyses supporting proposed development in resource protection areas (RPA).

  The amendments to the Chesapeake Bay Preservation Ordinance (CBPO) incorporated provisions to preserve mature trees, resilience to coastal flooding and adaptation to climate change. The amendments were mandated by changes to the Chesapeake Bay Preservation Area Designation and Management Regulations adopted by the State Water Control Board, promulgated in response to 2020 legislation. The new provision will require proposed projects within the Resource Protection Area to assess and adapt to the increase in sea level and storm surge. This increases resilience of projects on the properties located along the tidal Potomac River and tidal tributaries.
- LDS, DPWES, DPD, and OEEC recommend the following future policies.
  - In cases where owners are not making substantial improvements to homes, consider a streamlined process for individual residences in floodplain in exchange for the owner agreeing to comply with certain standards that reduce flood risk. Currently, owners must request a special exception, which is expensive and requires additional calendar time compared to development without a special exception. A streamlined process will also discourage residents from "incremental improvements," where they split projects up to avoid triggering a special exception requirement. Staff would like to encourage owners to improve homes, which should include reducing their risk from flooding. Creating a by-right path in exchange for enhanced standards encourages both outcomes.
  - By adoption of the new Chapter 124.1 Erosion and Stormwater Management Ordinance in 2025, the County removed the limited exemption from both storm water quantity and quality control for land disturbing activities greater than 2,500 sq. ft. but less than one acre for the construction of single-family detached residential structures where the total impervious area is less than 2,500 sq. ft. or 18% of lot area whichever is greater, or where the total lot area is ½ acre or less and no more than 500 sq. ft. of new impervious area will be added. The required stormwater quantity control for

these projects reduces the peak discharge, and thereby slightly reduce the flood risk for downstream properties.

- The County has contracted engineering consultants to provide recommendations for regulatory and policy changes to mitigate existing and future structural flood risk. Staff anticipate recommendations in the fall of 2025 and will recommend changes to:
- 1) Regulatory storm events to account for the changes to the statistical record resulting from climate change; and,
- 2) Regulatory changes that create safety factors to be incorporated into design standards that will account for the rapid change in the statistical record.
- These changes will result and builder obligations for additional on-site detention and safe conveyance of large magnitude (i.e., 100-year) flooding.

Attachment A: Definition of the 100-Year Storm Adjusted for Climate Change

Fairfax County updates hydrologic and hydraulic evaluations and requirements following the most current data available federally, state-wide, and regionally. As a result, Fairfax County will continue to redefine the 100-year storm over time, including by adjusting storm volume to account for climate change. In addition to defining the volume of rain expected with storms at different probabilities (e.g., 100-year storm), Fairfax County will define the potential need for additional margins of safety to account for the impacts of a changing climate, such as additional freeboard requirements.

The National Oceanic and Atmospheric Administration (NOAA) updates rainfall volumes associated with the 2-year, 10-year, 100-year, and other storms periodically. Currently, NOAA states that they will publish updated rainfall volumes, accounting for climate change, in late 2025. Fairfax County also refers to regional data published in the Resilient Fairfax Climate Projections Report, available at Resilient Fairfax Climate Projections Report 2022 (fairfaxCounty.gov), which predicts the increased rainfall anticipated in Fairfax County due to climate change. As used in this analysis, terms are defined as:

Floodplain – Those land areas in and adjacent to streams and watercourses subject to continuous or periodic inundation from flood events with a one percent chance of occurrence in any given year (i.e., the 100-year flood frequency event also known as the base flood) and having a drainage area greater than 70 acres. For the purpose of administering Section of the Zoning Ordinance (Floodplain Regulations), minor floodplains are those floodplains which have a drainage area greater than 70 acres, but less than 360 acres and major floodplains are those floodplains which have a drainage area equal to or greater than 360 acres.

Localized flooding – Areas that may be inundated during storm events but from other sources than streams with a drainage area greater than 70 acres.

Adjusted for Climate Change – The process of increasing the anticipated rainfall used in the stormwater and floodplain calculations to include increases in rainfall intensity-duration-frequencies (IDF) curves, based on projections from the NOAA-funded research program of the Mid-Atlantic Region Integrated Sciences and Assessments (MARISA). Two scenarios were considered: the Representative Concentration Pathway (RCP) 4.5 and RCP 8.5. (RCPs are scenarios of trajectory of future greenhouse gas concentrations from global climate change prediction models.)

Attachment B: Projects for the DPWES Capital Improvement Program (CIP)

DPWES has identified flood risk from mapped floodplain, historic reporting, and a risk prediction tool. The County's website describes traditionally mapped floodplain at Flood Information | Public Works and Environmental Services (fairfaxCounty.gov). With climate change increasing flooding outside of mapped floodplain, staff identified risk trends for properties in addition to those already mapped.

Historic reporting. DPWES identified nearly 1,600 incidents of reported structural flooding using all historic records available, which date back to 1986:

- 1600 incidents include some repeat flooding at individual residences.
- Approximate number of residences with structural flooding from coastal events such as hurricanes: **200.**
- Approximate number of remaining residences with confirmed structural flooding, outside the coastal-at-risk communities: **570**
- Approximate number of residences with structural flooding likely from private causes such as sump pump failures or private plumbing failures: **500**
- Approximate number of residences with structural flooding risk alleviated by projects, such as a levee, drainage infrastructure, and other projects: **400.**
- Staff published additional information on the analysis of historic data augmented by GIS and modern data at: https://storymaps.arcgis.com/collections/9adf4f9877fe49bba9df9c28b0f40a09?item=20

Sump Conditions. DPWES and LDS staff created a Potential Sump Conditions layer in GIS to identify depressions or bowls where there is insufficient drainage for the water to get out of the depression. In some cases, storm drain inlets exist in the sump, but the inlets are overwhelmed by intense rain. This analysis identified more than 10,000 residential structures at risk based on the flood risk map, described in detail at: https://storymaps.arcgis.com/collections/9adf4f9877fe49bba9df9c28b0f40a09?item=27

Universe of Identified Risk. Table B-1 below identifies the universe of identified risk. No structure experiences zero risk of flooding, as plumbing failures or building alterations can change flood risk. However, the table identifies the reasonably expected universe of flood risk in Fairfax County. This is also described at https://storymaps.arcgis.com/collections/9adf4f9877fe49bba9df9c28b0f40a09?item=27.

Table B-1: Universe of Identified Risk

Scenario	Number of Structures	Potential Projects	Potential Programs
Confirmed, reported flooding, resolved	300	Completed	Include with outreach to general population.
At risk of coastal flooding	330	No structural solution because the community rejected any floodwall unless it is on the east side of the George Washington Memorial Parkway, which is National Park Service Property. The NPS rejected placing a floodwall on NPS property. There is no other structural solution.	Advise residents of their risk. Partner with a nonprofit to make residents aware of their insurance options. Practice communications on Riverwatch, practice evacuation routes and procedures. Implement a voluntary acquisition program.
Confirmed, reported flooding, unresolved	570	Fairfax County estimates 70 years to identify projects and solutions for the remaining 570 structures with confirmed flooding based on current staffing. Potential projects include grading to provide adequate overland relief, stormwater infrastructure upgrades, and flood proofing of structures.	Outreach and education on risk and flood insurance options. Provide guidance on common causes of flooding such as overland relief being blocked by fences or other obstructions. Grant Opportunities
Structure intersects floodplain	2,770	Unless structural flooding is confirmed and staff have determined that a project is necessary, no current projects are identified for these structures.	Outreach and education with an emphasis on equity Publish flood risk. Grant opportunities
Structure within sump condition	6,019		
Structure in path of overland relief with drainage area exceeding 10 acres	1,075		

Note: it is not valid to sum the total number of structures, as there is overlap. For example, one structure could be in a floodplain, also in a slump, and also in the path of overland relief.

- Using FEMA and CFPF grants to voluntarily acquire properties with a history of repetitive flooding (Woodacre, Swinks Mill Drive, Barrett Road)
- Realizing the gap in funding for flood mitigation projects, staff applied for and were successful recipients of over $15M in Virginia Community Flood Preparedness Fund (CFPF) Grants in 2023. In addition, staff recently applied for an additional $6.2M in funding for the most recent CPFP Grant cycle, which we expect to hear back in early 2024.
- Expanding partnerships to provide enhanced SWM on County projects to help mitigate downstream flows (CAP, FCDOT, VDOT, HCD, FCPS) while using innovative approaches to addressing stormwater in the most cost-effective manner.
- Ravenwood Park study
- We will need additional funding/staff to move towards a proactive and resilient program. A CFPF Grant Application was submitted in early 2025 for capacity building to hire a dedicated staff member for flood planning and mitigation efforts.
- Staff and funding for neighborhood stormwater improvement projects

Table B-2 below lists the current CIP flood projects. DPWES currently estimates ten years to complete these projects at current staffing and funding levels.

Table B-2: CIP for Flood

Project Name	Project Phase*	Total Project Cost
Little Pimmit Run Trib at Woodland Terrace	Under Final Design and Permitting	$4,718,000
Dead Run Drive Stormwater Improvements	Under Final Design and Permitting	$1,400,000
Forest Villa Lane Area Stormwater Improvements	Concept Design	$2,500,000
Kent Garden Neighborhood Stormwater Improvements	Concept Design, with Land Acquisition Division for easements	$10,400,000
Valley Avenue Neighborhood Stormwater Improvements	Concept Design	$2,000,000
Weaver Avenue/Dillon Avenue Stormwater Improvements	Concept Design	$8,100,000
Woodacre Drive Area Stormwater Improvements	Under Site Assessment and Preliminary Design	$2,800,000
Broad Branch Court Stormwater Improvements	Under Site Assessment and Preliminary Design	$4,200,000
Kings Manor Stormwater Improvements	Under Site Assessment and Preliminary Design	$6,250,000
Sunset Hills Drainage Improvements	Under Site Assessment and Preliminary Design	$14,600,000

Project Name	Project Phase*	Total Project Cost
Chowan Avenue Flood Mitigation	Under Site Assessment and Preliminary Design	$4,100,000
Tripps Run at Barrett Road Flood Mitigation	Preliminary Design	$12,836,000
Hollin Hall/Wellington Neighborhood Stormwater Improvements Study	FY2026 New Study Start	$300,000
Ravenwood Park Neighborhood Stormwater Improvements Study	Under Site Assessment and Preliminary Design	$400,000
Tucker Avenue Flood Mitigation	Under Construction with Substantial Completion Anticipated in Spring 2026	$12,800,000
MSMD Individual Flood Mitigation Completed Fiscal Year 2022-2024	10 Projects: Ridgecrest Dr, Rippling Pond Dr, Roxbury Ave Phase I, Cobbs Rd, Hunting Ridge Ln, Mclean Community Center, Ballantrae Farm Dr, Lily Dhu Ln, Bridle Path Ln, Westlawn Dr	$1,625,000
MSMD Individual Flood Mitigation Completed during Fiscal Year 2025	15 Projects: Fernleigh Blvd, Elder Ave, Winter Wren, Colmac Dr, White St, Lawrence Dr, Roxbury Ave Phase II, Jaslow St, Kings Park Dr, Westmoreland, Sunny Fields Ln, Summerday Dr, Springfield Village Dr, Byron Terrace, Mistletoe Ln	$3,016,000
MSMD Individual Flood Mitigation Under Construction	Anderson Rd, Mason Mill Ct (2 projects)	$630,000
MSMD Individual Flood Mitigation Under Site Assessment and Design	18 Projects: Bellamy Ave, Gordon Ave, Wilma Ln, Eaton Pl, Brush Dr, Fern Oak Ct, Galloway Dr, Jade Post Ln, Carriage Ct, Forestville Dr, Heming Ave, Lawrence Dr, Evers Dr, Lamar Dr, Fernleigh Blvd, Rivington Ave, Albro Ln, Oak Hill Dr	$3,981,000
Total		**$96,700,000**

*As of June 1, 2025

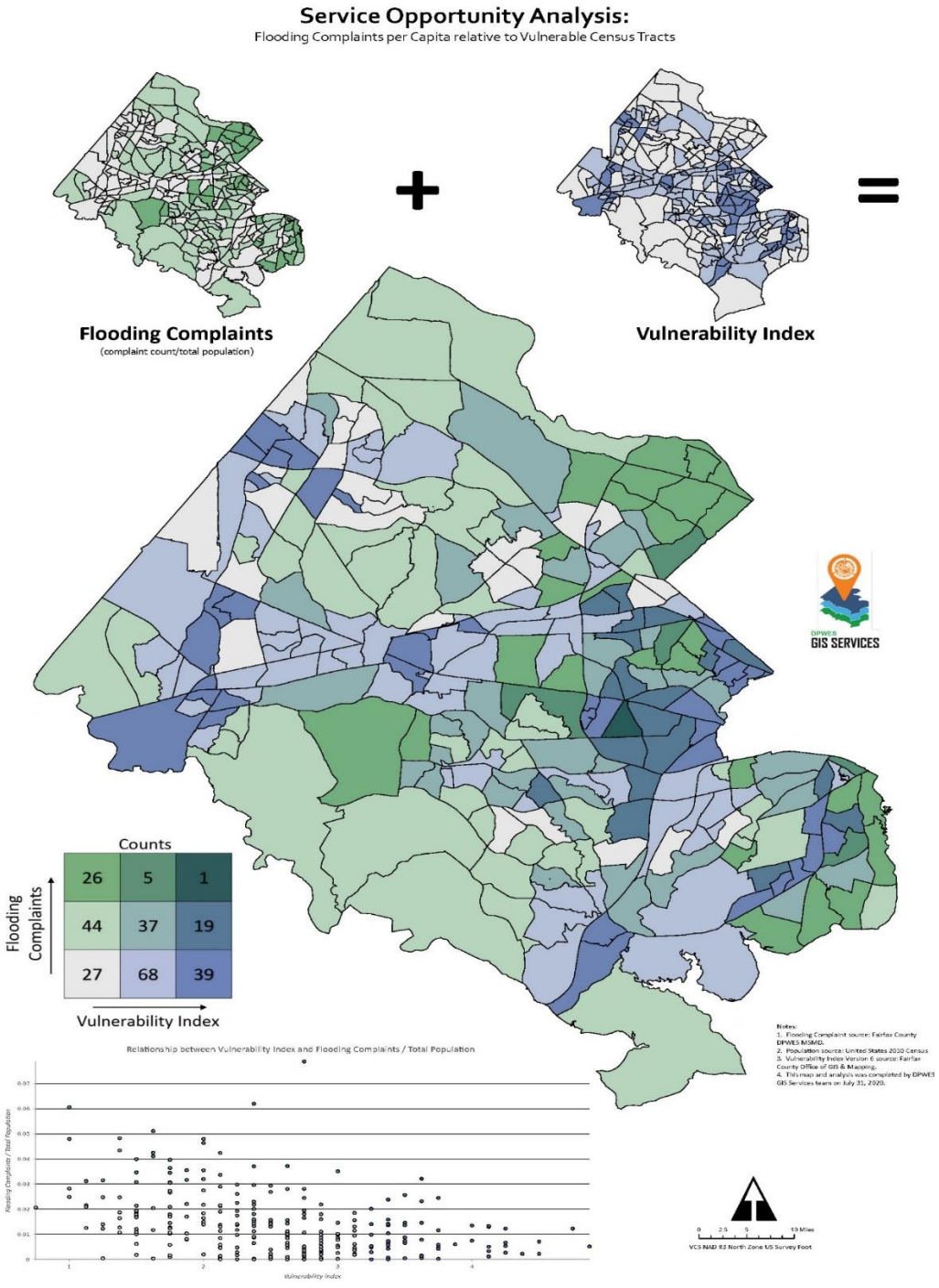
ATTACHMENT C: Vulnerable Communities at Risk of Flooding

DPWES used available data to evaluate the County's trends in flooding versus vulnerable communities. DPWES mapped where drainage complaints had historically been reported compared to the County's vulnerability layer. This analysis sought to answer the question: do areas with high/very high vulnerability have higher levels of reported flooding? Figure C-1 below shows the results of the mapping exercise.

DPWES concludes the following:

- Our data on historic drainage complaints may be limited. We have limited data on flood complaints for multifamily units at risk such as below grade basement apartments and condos. Renters may report issues to landlords who may not report them to the County.
- The County's early adoption of floodplain regulations (1967) protected the community and didn't allow for a lot of buildings within the floodplain.
- Floodplain policies resulted in minimal amounts of vulnerable communities co-located in the floodplain.
- There are exceptions such as Harmony Place that are vulnerable and co-located in the floodplain.
- DPWES will pursue further efforts related to drainage and flooding in vulnerable areas.

Figure C-1


Service Opportunity Analysis:
Flooding Complaints per Capita relative to Vulnerable Census Tracts
Flooding Complaints
(complaint count/total population)
Vulnerability Index
DPWES
GIS SERVICES
Counts
Flooding Complaints
26
5
1
44
37
19
27
68
39
Vulnerability Index
Relationship between Vulnerability Index and Flooding Complaints / Total Population
Notes:
1. Flooding Complaint source: Fairfax County DPWES MSMD.
2. Population source: United States 2010 Census
3. Vulnerability Index Version 6 source: Fairfax County Office of GIS & Mapping.
4. This map and analysis was completed by DPWES GIS Services team on July 31, 2020.
0 2.5 5 10 Miles
VCS NAD 83 North Zone US Survey Foot