

NOTIFICATION OF TRANSMITTAL

To: Virginia Community Flood Preparedness Fund
cfpf@dcr.virginia.gov

From: Northern Virginia Regional Commission
Nora Jackson, Resiliency Planner njackson@novaregion.org

Regarding: Application to conduct a hydrologic study of Four Mile Run

Date: April 8, 2022, Time: 2:00 PM

This transmittal package contains the official and authorized application from the NVRC to DCR for the Virginia Community Flood Preparedness Fund to conduct a Hydrologic Conditions Analysis in Four Mile Run watershed.

The electronic file contained herein contains the following information:

- Appendix A- Application Form for Grant Requests for All Categories
- Appendix C- Scoring Criteria for Studies
- Appendix D- Checklist All Categories
- Scope of Work Narrative
- Budget Narrative
- Supporting Documentation

Cc: ngoulet@novaregion.org

Appendix A: Application Form for Grant Requests for All Categories

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Name of Local Government:

Northern Virginia Regional Commission

Category of Grant Being Applied for (check one):

Capacity Building/Planning

Project

Study

NFIP/DCR Community Identification Number (CID) N/A

If a state or federally recognized Indian tribe, Name of tribe _____

Name of Authorized Official: Robert Lazaro

Signature of Authorized Official: 

Mailing Address (1): 3040 Williams Drive Ste 200

Mailing Address (2): _____

City: Fairfax State: VA Zip: 22031

Telephone Number: (703) 642-0700 Cell Phone Number: ()

Email Address: rlazaro@novaregion.org

Contact Person (If different from authorized official): Nora Jackson

Mailing Address (1): 3040 Williams Drive Ste 200

Mailing Address (2): _____

City: Fairfax State: VA Zip: 22031

Telephone Number: (703) 642-4369 Cell Phone Number: (443) 949-1158

Email Address: njackson@novaregion.org

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? Yes _____ No X

Categories (select applicable project):

Project Grants (Check All that Apply)

- Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development.
- Wetland restoration.
- Floodplain restoration.
- Construction of swales and settling ponds.
- Living shorelines and vegetated buffers.
- Structural floodwalls, levees, berms, flood gates, structural conveyances.
- Storm water system upgrades.
- Medium and large scale Low Impact Development (LID) in urban areas.
- Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool.
- Dam restoration or removal.
- Stream bank restoration or stabilization.
- Restoration of floodplains to natural and beneficial function.
- Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.

Study Grants (Check All that Apply)

- Studies to aid in updating floodplain ordinances to maintain compliance with the NFIP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.
- Revising other land use ordinances to incorporate flood protection and mitigation goals, standards and practices.
- Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the Federal Emergency Management Agency (FEMA). For example, a local government might conduct a hydrologic and hydraulic study for an area that had not been studied because the watershed is less than one square mile. Modeling the floodplain in an area that has numerous letters of map change that suggest the current map might not be fully accurate or doing a detailed flood study for an A Zone is another example.
- Studies and Data Collection of Statewide and Regional Significance.
- Revisions to existing resilience plans and modifications to existing comprehensive and hazard.
- Other relevant flood prevention and protection project or study.

Capacity Building and Planning Grants

- Floodplain Staff Capacity.
- Resilience Plan Development
 - Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.
 - Resource assessments, planning, strategies and development.
 - Policy management and/or development.
 - Stakeholder engagement and strategies.

Location of Project (Include Maps): Four Mile Run Watershed (Arlington and Fairfax Counties, Cities of Falls Church and Alexandria)

NFIP Community Identification Number (CID#):(See appendix F 515520, 515519, 510054, 515525)

Is Project Located in an NFIP Participating Community? Yes No

Is Project Located in a Special Flood Hazard Area? Yes No

Flood Zone(s) (If Applicable): Zone AE, X

Flood Insurance Rate Map Number(s) (If Applicable): 5100540018D, 5155190033F, 5155190029F,
51013C0077D, 51013C0076D

Total Cost of Project: \$137,947

Total Amount Requested \$68,500

Appendix C: Scoring Criteria for Studies

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Applicant Name:		
Eligibility Information		
Criterion	Description	Check One
1. Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?		
Yes	Eligible for consideration	X
No	Not eligible for consideration	
2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?		
Yes	Eligible for consideration under all categories	
No	Eligible for consideration for studies, capacity building, and planning only	X
3. If the applicant is <u>not a town, city, or county</u>, are letters of support from all affected local governments included in this application?		
Yes	Eligible for consideration	X
No	Not eligible for consideration	
4. Has this or any portion of this project been included in any application or program previously funded by the Department?		
Yes	Not eligible for consideration	
No	Eligible for consideration	X
5. Has the applicant provided evidence of an ability to provide the required matching funds?		
Yes	Eligible for consideration	X
No	Not eligible for consideration	
N/A	Match not required	

Studies Eligible for Consideration		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Applicant Name:			
Scoring Information			
Criterion	Point Value	Points Awarded	
6. Eligible Studies (Select all that apply)			
Revising floodplain ordinances to maintain compliance with the NFIP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.	30		
Creating tools or applications to identify, aggregate, or display information on flood risk or creating a crowd-sourced mapping platform that gathers data points about real-time flooding. This could include a locally or regionally based web-based mapping product that allows local residents to better understand their flood risk.	15		
Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the Federal Emergency Management Agency (FEMA).	35	35	
Studies and Data Collection of Statewide and Regional Significance. Funding of studies of statewide and regional significance and proposals will be considered for the following types of studies:			
<input type="checkbox"/> Updating precipitation data and IDF information (rain intensity, duration, frequency estimates) including such data at a sub-state or regional scale on a periodic basis.	45		
<input type="checkbox"/> Regional relative sea level rise projections for use in determining future impacts.	45		
<input type="checkbox"/> Vulnerability analysis either statewide or regionally to state transportation, water supply, water treatment, impounding structures, or other significant and vital infrastructure from flooding.	45		
<input checked="" type="checkbox"/> Flash flood studies and modeling in riverine regions of the state.	45	45	
<input type="checkbox"/> Statewide or regional stream gauge monitoring to include expansion of existing gauge networks.	45		

<input type="checkbox"/> New or updated delineations of areas of recurrent flooding, stormwater flooding, and storm surge vulnerability in coastal areas that include projections for future conditions based on sea level rise, more intense rainfall events, or other relevant flood risk factors.	45	
<input checked="" type="checkbox"/> Regional flood studies in riverine communities that may include watershed-scale evaluation, updated estimates of rainfall intensity, or other information.	50	50
<input checked="" type="checkbox"/> Regional hydrologic and hydraulic studies of floodplains.	45	45
<input type="checkbox"/> Studies of potential land use strategies that could be implemented by a local government to reduce or mitigate damage from coastal or riverine flooding.	40	
<input type="checkbox"/> Other proposals that will significantly improve protection from flooding on a statewide or regional basis	35	
7. Is the study area socially vulnerable? (Based on ADAPT VA's Social Vulnerability Index Score.)		
Very High Social Vulnerability (More than 1.5)	15	
High Social Vulnerability (1.0 to 1.5)	12	
Moderate Social Vulnerability (0.0 to 1.0)	8	
Low Social Vulnerability (-1.0 to 0.0)	0	0
Very Low Social Vulnerability (Less than -1.0)	0	
8. Is the proposed study part of an effort to join or remedy the community's probation or suspension from the NFIP?		
Yes	10	
No	0	0
9. Is the proposed study in a low-income geographic area as defined in this manual?		
Yes	10	
No	0	0
10. Projects eligible for funding may also reduce nutrient and sediment pollution to local waters and the Chesapeake Bay and assist the Commonwealth in achieving local and/or Chesapeake Bay TMDLs. Does the proposed project include implementation of one or more best management practices with a nitrogen, phosphorus, or sediment reduction efficiency established by the Virginia Department of Environmental Quality or the Chesapeake Bay Program Partnership in support of the Chesapeake Bay TMDL Phase III Watershed Implementation Plan?		
Yes	5	
No	0	0
Total Points		175

Appendix D: Checklist All Categories

Virginia Department of Conservation and Recreation

Community Flood Preparedness Fund Grant Program

Scope of Work Narrative	
Supporting Documentation	Included
Detailed map of the project area(s) (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
FIRMette of the project area(s) (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Historic flood damage data and/or images (Projects/Studies)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current floodplain ordinance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Non-Fund financed maintenance and management plan for project extending a minimum of 5 years from project close	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
A link to or a copy of the current hazard mitigation plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
A link to or a copy of the current comprehensive plan	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Social vulnerability index score(s) for the project area from ADAPT VA's Virginia Vulnerability Viewer	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If applicant is not a town, city, or county, letters of support from affected communities	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Completed Scoring Criteria Sheet in Appendix B, C, or D	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Budget Narrative	
Supporting Documentation	Included
Authorization to request funding from the Fund from governing body or chief executive of the local government	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Signed pledge agreement from each contributing organization	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A

Proposal for Analysis of Hydrologic Conditions in Four Mile Run

Scope of Work Narrative

Study Area and Background

The Northern Virginia Regional Commission (NVRC) proposes a new study to assess changes in watershed hydrology using existing streamflow and precipitation monitoring data from Four Mile Run. By analyzing historical streamflow and precipitation data, the study aims to provide locally-specific information to inform effective watershed resource management and stormwater mitigation efforts.

Rapid population growth in Northern Virginia following World War II (>500% between 1930 and 1960) resulted in extensive land development and the construction of impervious surfaces such as roads, rooftops, and other hardscapes. By the time stormwater regulations and requirements were introduced in the 1970s, much of the Four Mile Run watershed was already developed. Since then, watershed jurisdictions have been working to retroactively improve stormwater infrastructure while also managing continued urbanization and accompanying expansion of impervious surfaces.



Sub-hourly measurements of streamflow and precipitation are available at the Four Mile Run stream gage since the beginning of water years (Oct. 1 – Sept. 30) 1998 and 2005, respectively. Additionally, peak annual and mean daily streamflow records date back to 1951, though multiple gaps exist in the daily streamflow record during periods when the gage was not operational. The long duration of this dataset, facilitated by an ongoing long-term partnership between USGS and the NVRC, presents a unique opportunity to evaluate multi-decadal change in a suite of hydrologic metrics in an urban watershed. Since 1998, when the current period of monitoring began, and 1951 when data were first collected, the watershed has been subjected to multiple pressures such as changing climate and urbanization. Understanding how these forces have, and continue to, collectively alter watershed hydrology, is critical for addressing issues such as flooding, water-quality degradation, channel instability, and reductions in stream health.

Frequent flash flooding occurred in the Arlandria section of the watershed prior to the completion of a multi-million dollar channel modification project in 1977. This frequent flash flooding was attributed to the cumulative impacts of development from all four jurisdictions that share the watershed. Residential and commercial areas located between the Potomac River and I-395 sustained over \$40 million worth of property damages from seven major floods that ravaged the watershed throughout the 1960s and early 1970s.

More recent flooding events and their economic impacts on the region are noted in the [2017 Northern Virginia Hazard Mitigation Plan](#). However, the region continues to experience intense rain events and frequent localized flooding outside of mapped FEMA floodplains, often overwhelming stormwater systems and leading to infrastructure damages. See Figures 1-3 for photos of damages from a 2019 rain event.

During the Fall of 2020, the Federal Emergency Management Agency (FEMA) held a series of Community Coordination and Outreach (CCO) Meetings for the jurisdictions of Arlington County, City of Alexandria and the City of Falls Church to update their Flood Insurance Rate Maps (FIRM). The following preliminary FIRM maps have been released within the Four Mile Run watershed and are included in this application: 5100540018D, 5155190033F, 5155190029F, 51013C0077D, 51013C0076D.

The watershed encompasses a large and diverse area that ranges from Very Low to High Social vulnerability, less than -1 to 1.4 on Adapt VA’s Social Vulnerability Index. When compared to other watersheds in the Northern Virginia region, Four Mile Run has a greater concentration of vulnerable neighborhoods. The census tracts with high social vulnerability scores all shared the same housing characteristic of dense housing/older stock/lacking plumbing. See the table below for a sample list of scores:

Census Tract	Social Vulnerability Index Classification	Social Vulnerability Index Score
4514	High Social Vulnerability	1.4
1020.03	High Social Vulnerability	1.4
2012.03	High Social Vulnerability	1.1
1020.03	High Social Vulnerability	1.4
1024	Low Social Vulnerability	-0.9
4527	Moderate Social Vulnerability	0.5
1029.1	Very Low Social Vulnerability	-1.9
1028.01	Low Social Vulnerability	-0.4
2008.01	Low Social Vulnerability	-1.0
1010	Very Low Social Vulnerability	-1.3
1027.01	Moderate Social Vulnerability	0.2
1011	Very Low Social Vulnerability	-1.7

Scope of Work

Utilizing data from the existing USGS streamgage and precipitation gage (USGS Station ID 01652500), located on Four Mile Run at Shirlington Road on the border of Arlington County and Alexandria, the objectives of this proposed effort are to:

1. Compute a suite of hydrologic metrics to characterize the flow regime,
2. Investigate multi-decadal trends in those metrics,
3. Compare metrics at Four Mile Run to other monitored streams in the region where similar analyses have been conducted.

To investigate changes in the flow regime, multiple methods will be explored to compute trends in mean daily streamflow. Trends will also be analyzed on a record of peak annual streamflows, which are available continuously from 1951 to present. These data quantify the magnitude of the largest streamflow event each year and may have increased over this period due to urban activities that promote rapid runoff such as the development of impervious surfaces, stream channelization, and construction of storm sewers; as well as climate factors such as changes in rainfall volume and intensity.

Evaluations of the flow regime will also include hydrograph separations to quantify the portions of streamflow that occur as baseflow (discharging groundwater) or stormflow (runoff), runoff ratios to investigate relations between precipitation and stormflows, and stream flashiness to characterize the frequency and rapidity of short-term changes in streamflow. Although changes may occur throughout the entire flow regime, particular focus will be placed on changes in stormflow hydrology. A common feature of urbanization is an increase in impervious cover, leading to an increase in storm runoff. The four jurisdictions draining Four Mile Run, the cities of Falls Church and Alexandria, and the counties of Arlington and Fairfax have approximately 60, 43, 42, and 22 percent of their lands covered by impervious surfaces, respectively. Likewise, changes in climate have been linked to an increase in the volume, intensity, and recurrence of storm events in both recent and future decades. Individual storm events will be extracted from the long-term record and used to describe the duration, volume, rate of change, magnitude, and timing of storm hydrographs. Collectively, these event-based analyses will be used to characterize the transport of precipitation from land to stream and determine if and how those processes have changed over time.

Duration metrics that reflect the volume and intensity of precipitation, as well as the volume and timing of water inputs to the stream, which are functions of watershed storage and transport, will be computed. Event duration will be characterized with three metrics: 1) total duration, 2) duration of the rising limb, and 3) duration of the falling limb. Increased stormflow volume and runoff rates result in increased peak streamflow. In addition to exacerbating flooding issues, the increased energy exerted on the stream channel leads to bank and bed instability that can damage infrastructure and cause ecological harm. Change in magnitude of stormflows will be assessed by computing a trend on the peak streamflow from each storm event that occurred throughout the study period.

This effort will culminate in a published peer-reviewed scientific journal article characterizing patterns and trends in the long-term hydrologic and precipitation data at the existing Four Mile Run streamgage. A summary of the findings will be presented to all stakeholders in the region.

Target criteria for the chosen consultant includes:

- 1) extensive hydraulic and hydrologic analysis experience,
- 2) streamflow trend calculations
- 3) peer-reviewed scientific journal publication development

The selected vendor will work with NVRC and local government staff to complete the analysis and share the results with the appropriate audience.

Expected Future Use and Applicability Across the Region and State

A sustainable and resilient watershed incorporates water management solutions that are specific to the characteristics of its landscape, therefore understanding how the flow regime has changed and computing trends is critical to implement successful management and mitigation practices. The results of this study will inform regional coordination and planning efforts and provide a comprehensive understanding of multi-decadal changes in an urban watershed.

Advancing resilience in the face of climate change is a statewide need and priority. Since changes in climate have been linked to an increase in the volume and intensity rain events in both recent and future decades, the Commonwealth expressed the need for predictive floodplain mapping to assist localities with understanding future risk in Phase 1 of VA's Coastal Resilience Master Plan (CRMP). In order to more accurately model changes in the watershed, we need to understand how land development has altered stream hydrology, especially with respect to the extreme rain events the region has already experienced. The increase in stormflow volume and runoff rates can not only harm water quality but also damage critical infrastructure, causing injuries and even loss of life.

Phase 1 of the CRMP outlined the need for a full riverine and coastal gauge indication and warning system. Virginia has relatively few coastal gauges and even fewer that have data over a usable timespan showing accurate trends. The proposed study would support efforts in Phase 2 of the CRMP to build a statewide gauge system and provide crucial information to local planners and emergency managers.

If funded, this study would complete the initial step in a comprehensive evaluation of the Four Mile Run watershed and address iterative work needs outlined in the CRMP. Building on this effort, additional studies could analyze of the relative influence of the potential drivers of change such as climate and urbanization. More and better-integrated data is critical to anticipate the severity of flood events and better prepare Virginians for the hazards posed by floods.

Budget Narrative

Estimated total project cost: \$137,947.00

Amount of funds requested from the Fund: \$68,500

Amount of cash funds available: \$ \$69,447.00

The Commission estimates the cost of this study at \$137,947. The requested funds will cover the cost of a contractor analysis and journal publication, and NVRC will provide 50% match to manage the project through existing Stormwater Resiliency and Four Mile Run Watershed Management budget programs.

Total Budget Worksheet			
Category	CFPF Request	Matching Funds	Total
Personnel	\$ 3,500.00	\$ 44,270.00	\$ 47,770.00
Fringe		\$ 23,518.35	\$ 23,518.35
Travel			\$ -
Supplies			\$ -
Contractual	\$ 65,000.00		\$ 65,000.00
Total Direct Costs	\$ 68,500.00		\$ 68,500.00
Indirect Costs		\$ 1,658.65	\$ 1,658.65
Total	\$ 68,500.00	\$ 69,447.00	\$ 137,947.00

Additional Links:

- Arlington Adopted Area Plan- <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2018/12/4mrv-adopted-area-plan.pdf>
- Arlington County Floodplain Ordinance- https://www.arlingtonva.us/files/sharedassets/public/county-board/documents/code/ch48_floodplainmanagement.pdf
- FY22 Approved Budget- <https://www.novaregion.org/DocumentCenter/View/13067/FY-2022-Adopted-Budget-PDF>

Supporting Documents:

1. Map of HUC12: 020700100301
2. ADAPT VA Social Vulnerability Index Map
3. Preliminary FIRM maps- 5100540018D, 5155190033F, 5155190029F, 51013C0077D, 51013C0076D
4. Authorization to request and accept funding- signed resolution
5. Approved NVRC budget- Four Mile Run Watershed Management and Stormwater Resiliency work programs
6. Flood damage photos- <https://www.arlnow.com/2019/07/09/arlington-estimates-3-5-million-in-flood-damage-to-county-property/>



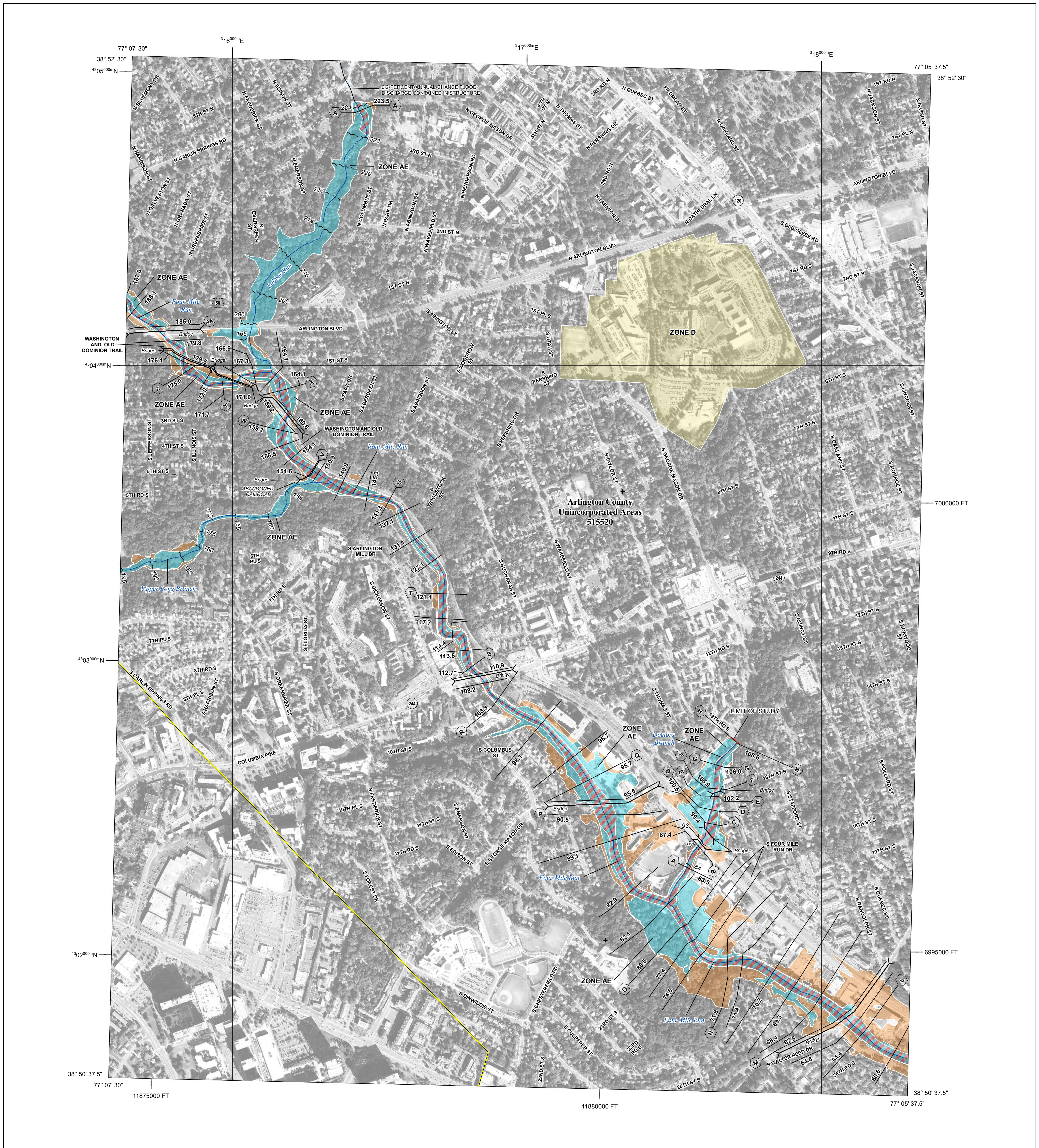
Figure 1: Damage in Glencarlyn Park, along Four Mile Run (photo courtesy Mark Wigfield)



Figure 2: Pedestrian bridge washed away along Lubber Run (photo by Ashley Hopko)



Figure 3: Damage in Glencarlyn Park, along Four Mile Run (photo courtesy Amanda Lowenberger)



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
	NO SCREEN Areas of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation
	Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

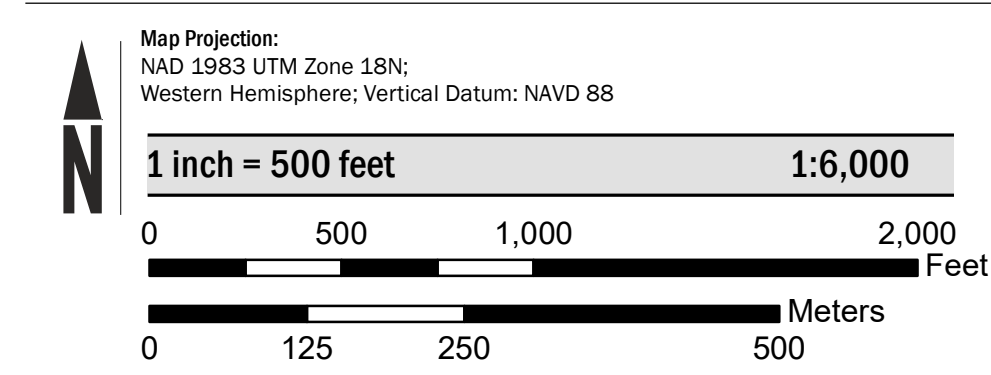
For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

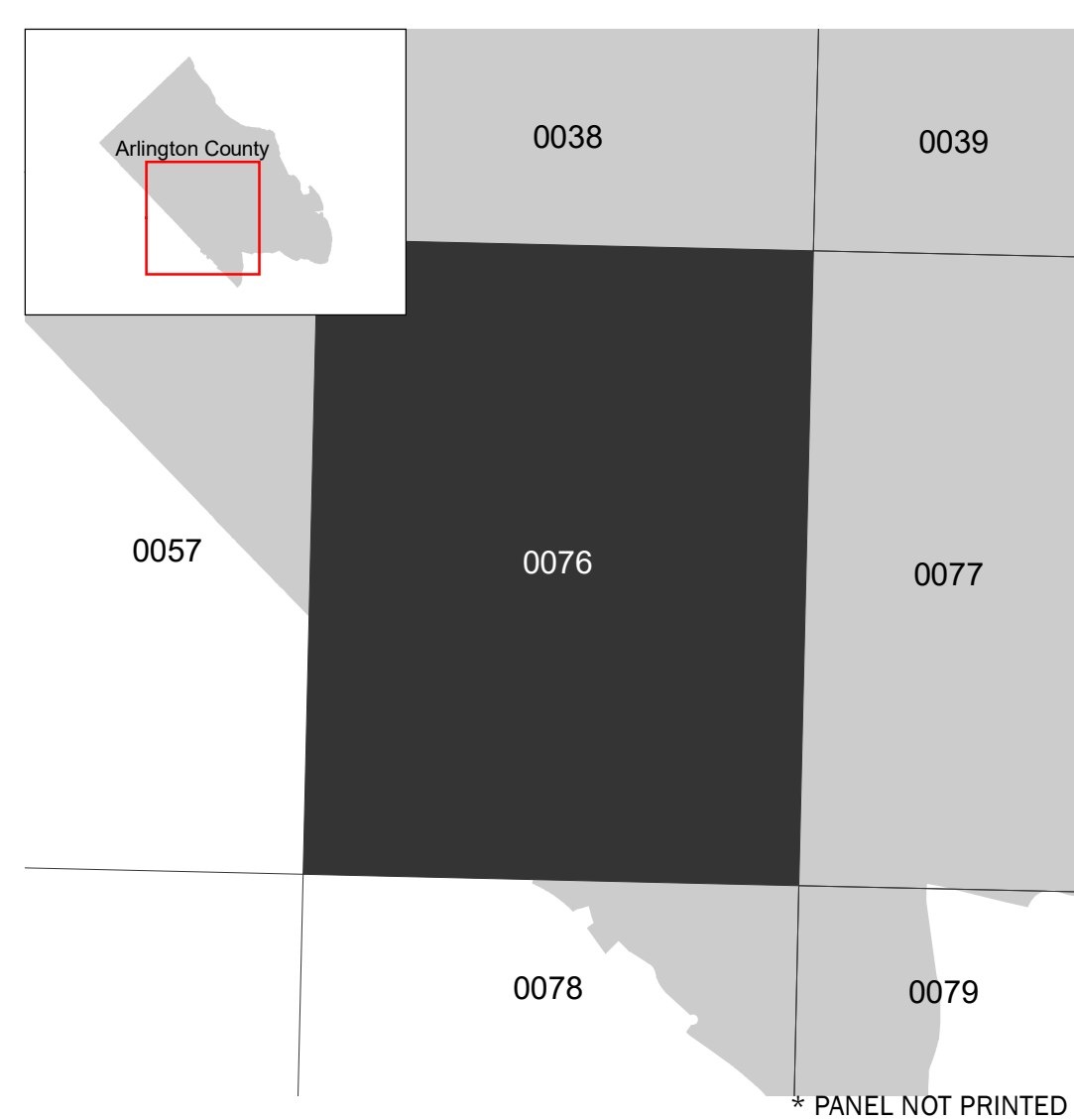
For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction. To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Department of Agriculture - Aerial Photography Field Office (USDA - APFO), National Agriculture Imagery Program (NAIP). This information was derived from digital orthophotography at a 2-foot resolution from photography dated 2019.

SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

ARLINGTON COUNTY, VIRGINIA
 (All Jurisdictions)

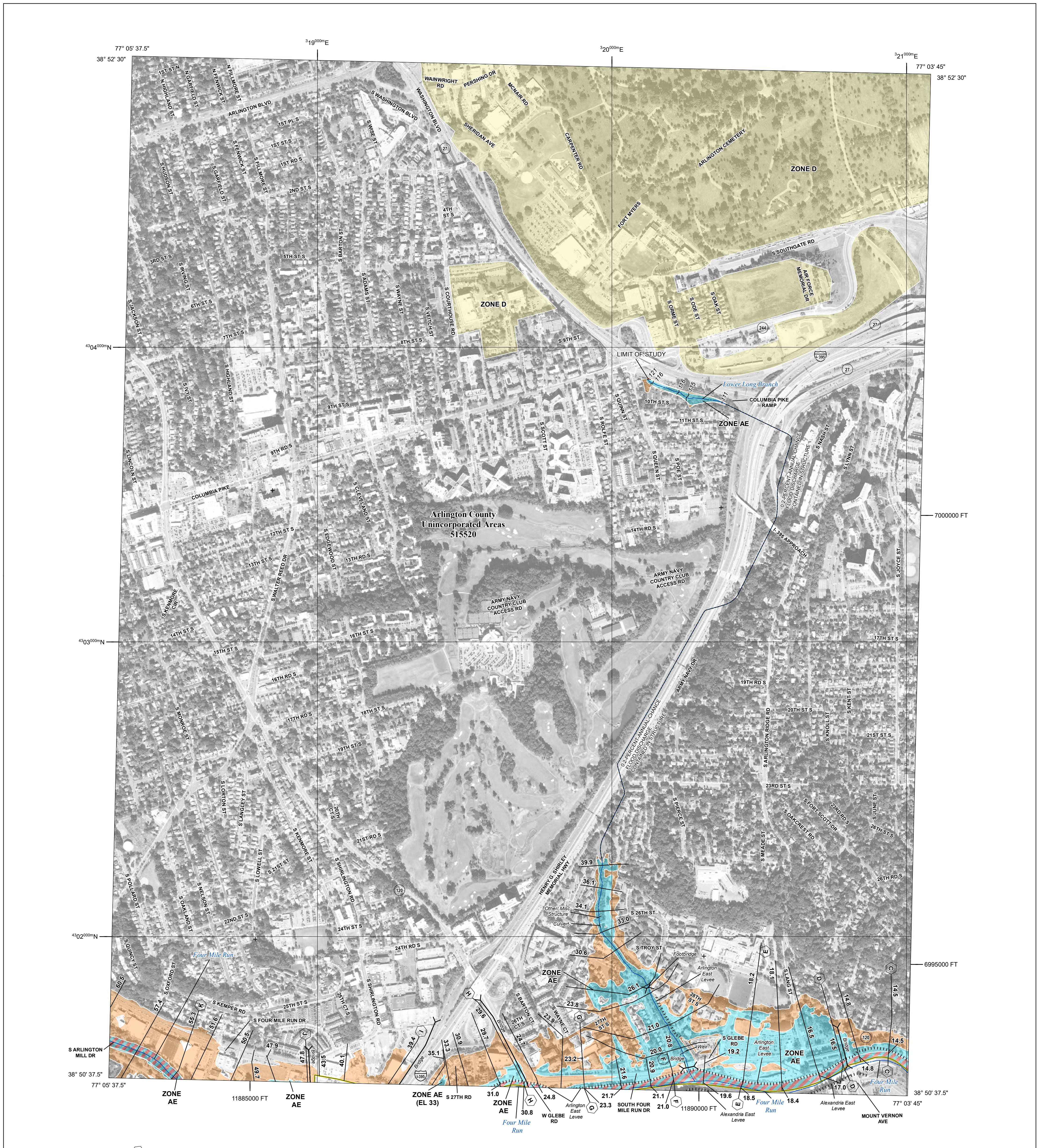
PANEL 76 of 83

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
ARLINGTON COUNTY	515520	0076	0

PRELIMINARY
9/18/2020

VERSION NUMBER
2.6.4.6
 MAP NUMBER
51013C0076D
 MAP REVISED



FLOOD HAZARD INFORMATION

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	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
	NO SCREEN Areas of Minimal Flood Hazard Zone X
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	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation
	Coastal Transect
	Profile Baseline
	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

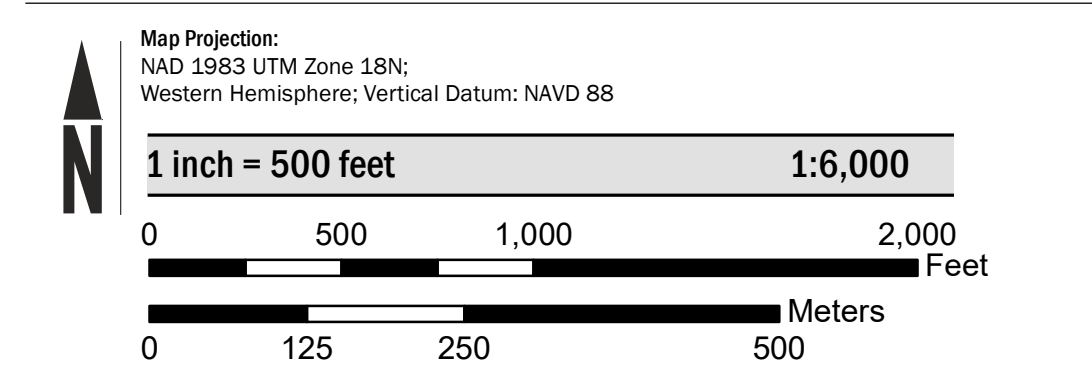
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For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

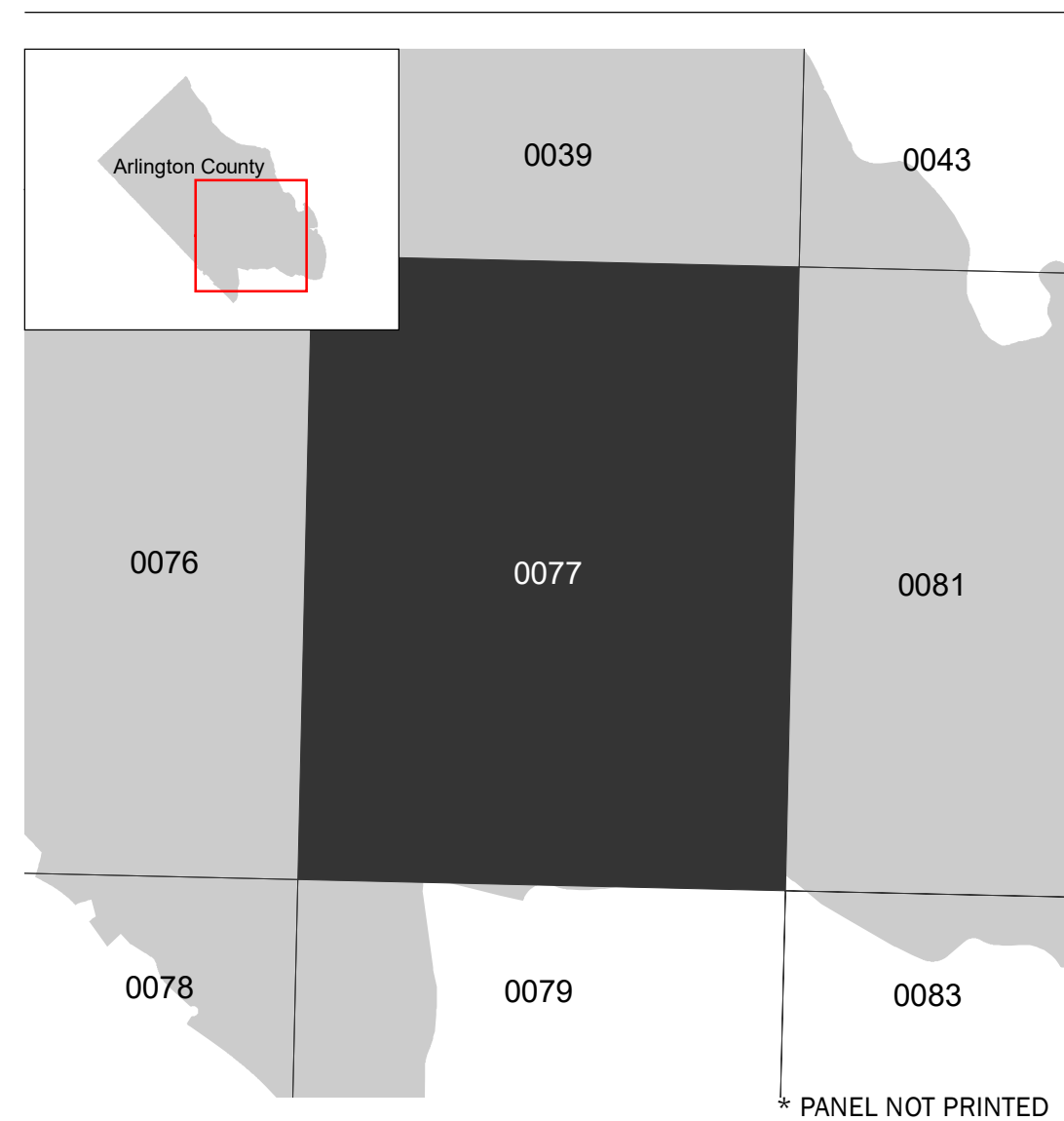
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SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
 FLOOD INSURANCE RATE MAP

ARLINGTON COUNTY, VIRGINIA
 (All Jurisdictions)

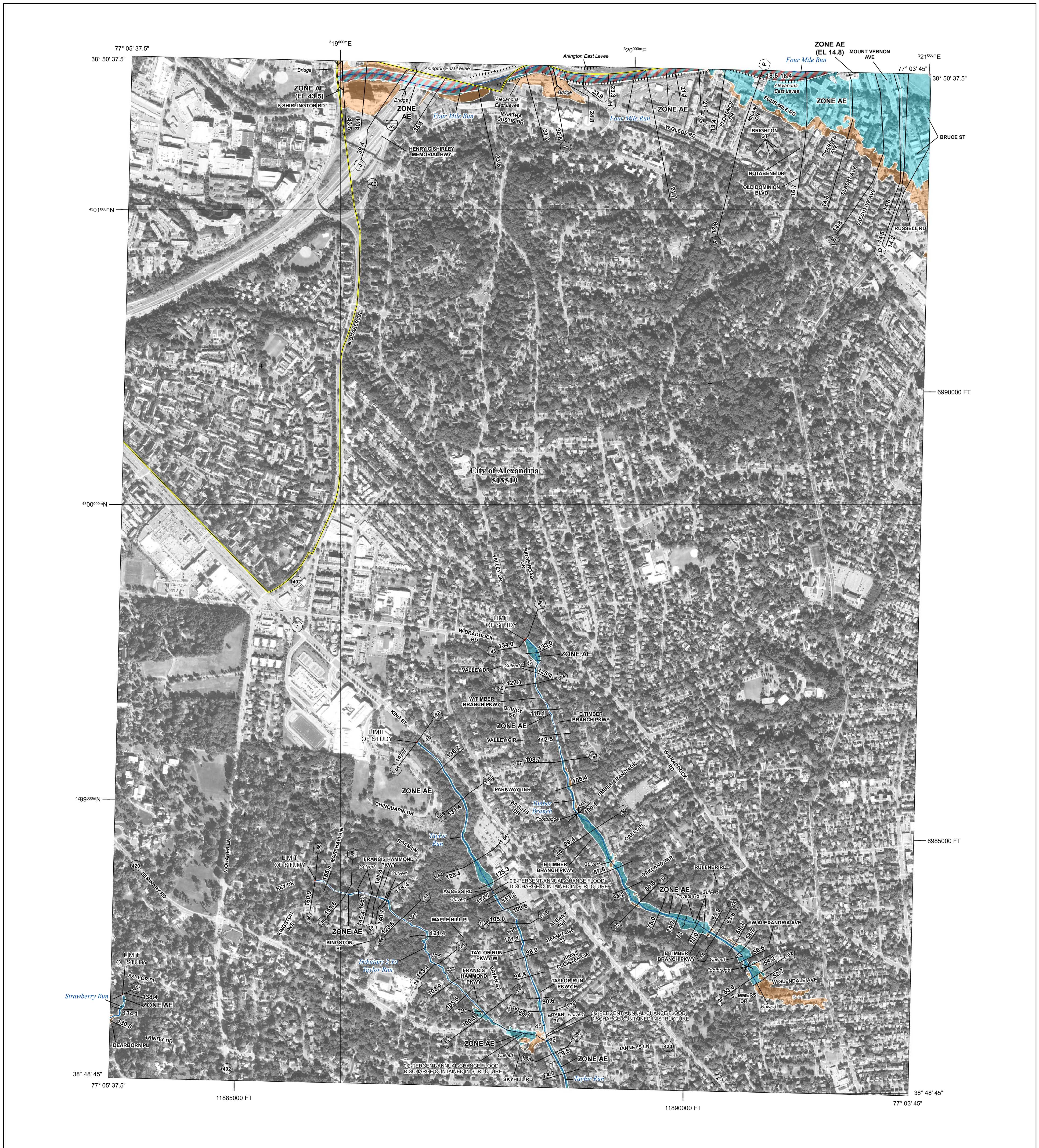
PANEL 77 of 83

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
ARLINGTON COUNTY	515520	0077	0

PRELIMINARY
9/18/2020

VERSION NUMBER
2.6.4.6
 MAP NUMBER
51013C0077D
 MAP REVISED



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
	NO SCREEN Areas of Minimal Flood Hazard Zone X
	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation
	Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

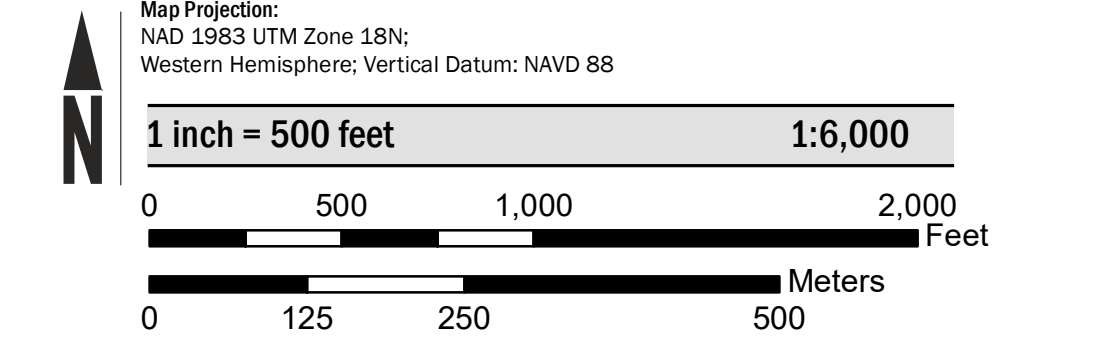
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

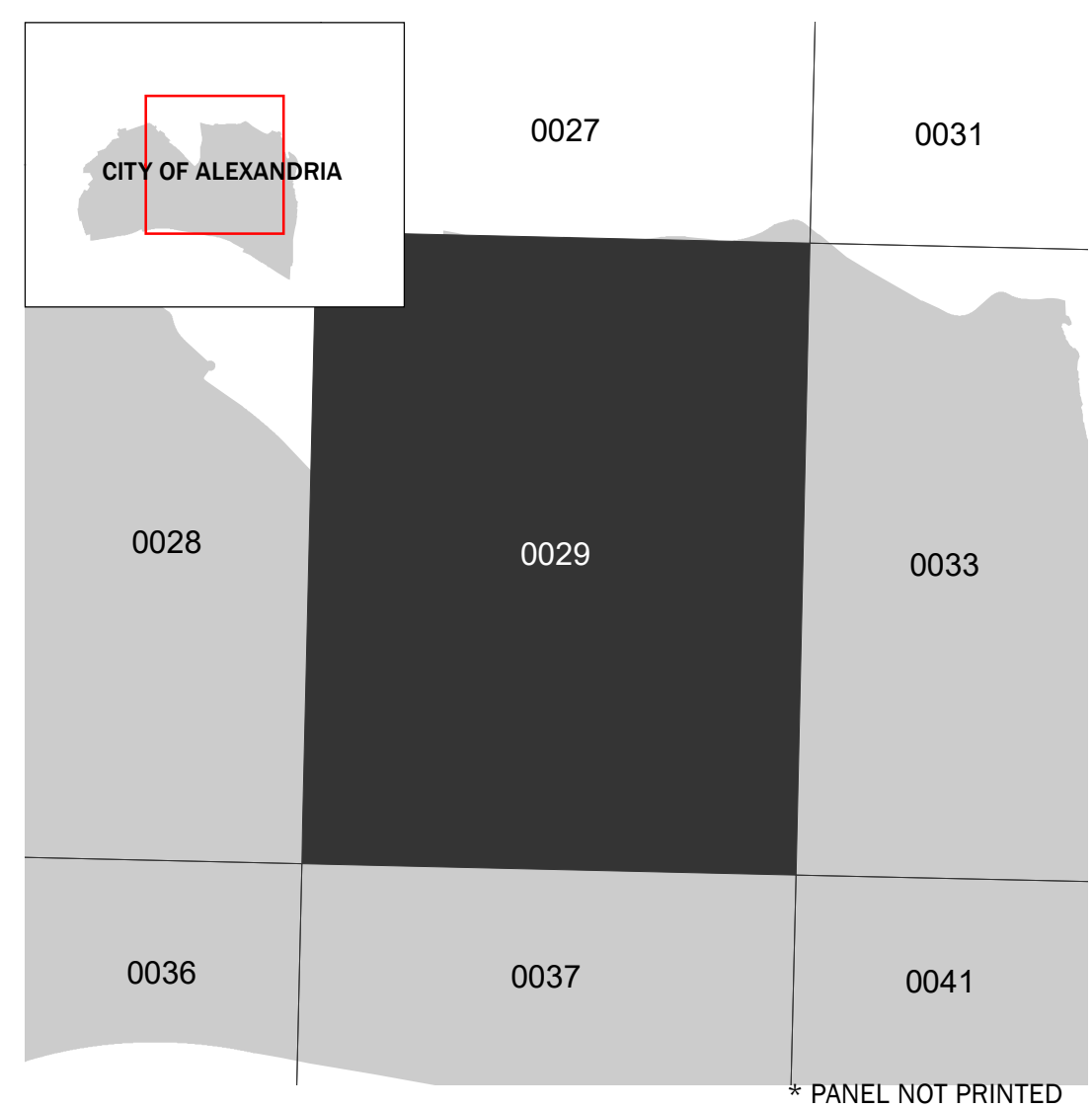
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was provided in digital format by the United States Department of Agriculture - Aerial Photography Field Office (USDA - APFO), National Agriculture Imagery Program (NAIP). This information was derived from digital orthophotography at a 2-foot resolution from photography dated 2019.

SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

CITY OF ALEXANDRIA, VIRGINIA
 Independent City
PANEL 29 of 45

FEMA

Panel Contains:

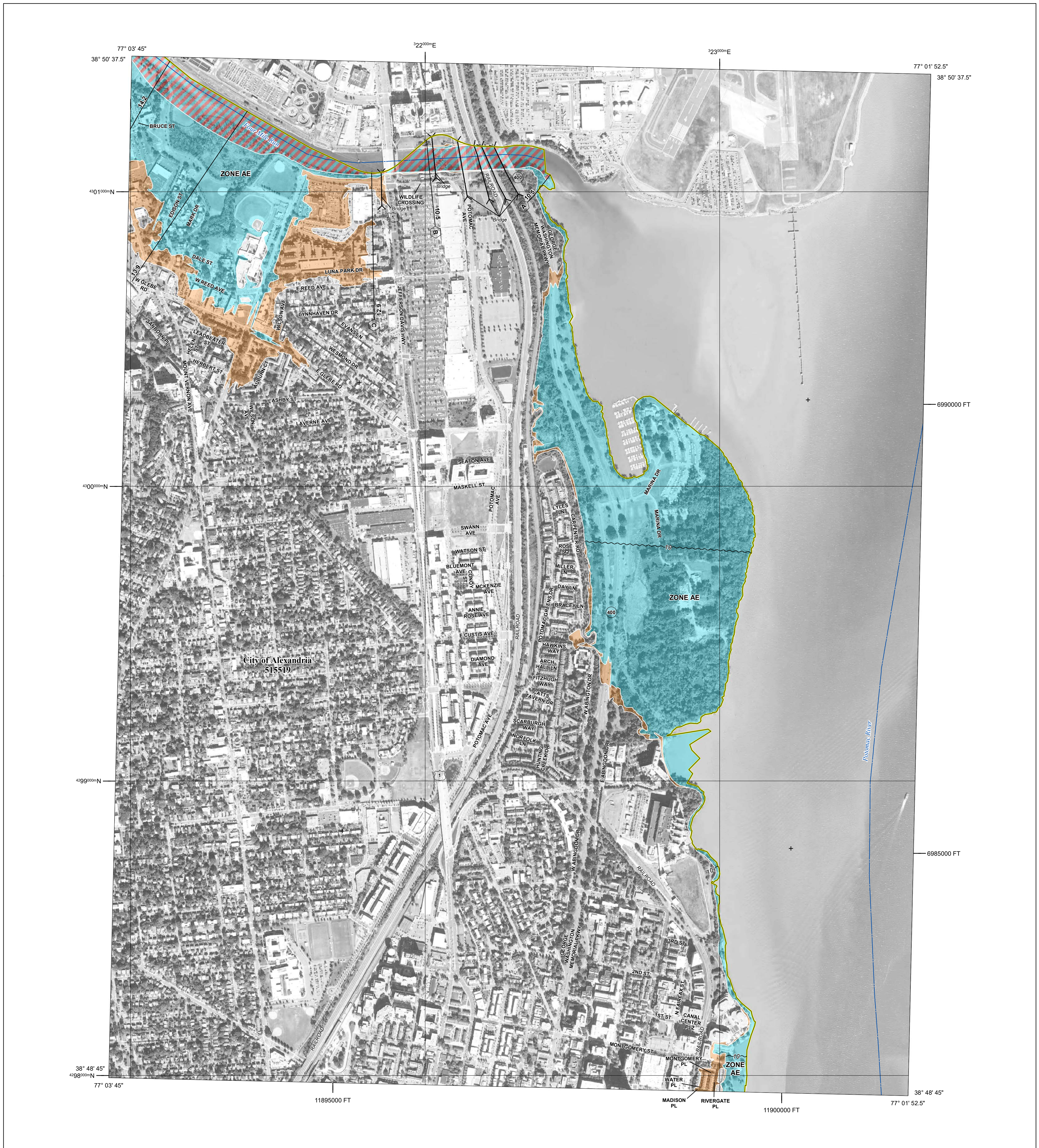
COMMUNITY	NUMBER	PANEL	SUFFIX
ALEXANDRIA, CITY OF	515519	0029	F

PRELIMINARY
9/30/2020

VERSION NUMBER
2.6.4.6

MAP NUMBER
5155190029F

MAP REVISED



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT [HTTPS://MSC.FEMA.GOV](https://MSC.FEMA.GOV)

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes, Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Areas of Minimal Flood Hazard Zone X
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		18.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary

NOTES TO USERS

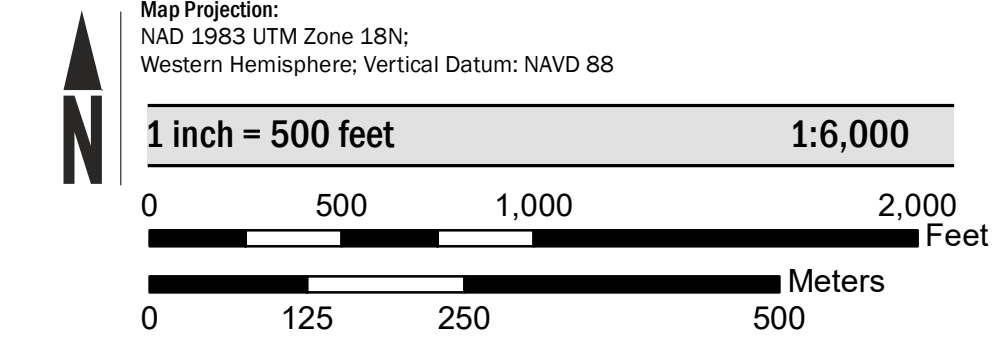
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SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

CITY OF ALEXANDRIA, VIRGINIA
 Independent City
PANEL 33 of 45

Panel Contains:







COMMUNITY	NUMBER	PANEL	SUFFIX
ALEXANDRIA, CITY OF	515519	0033	F

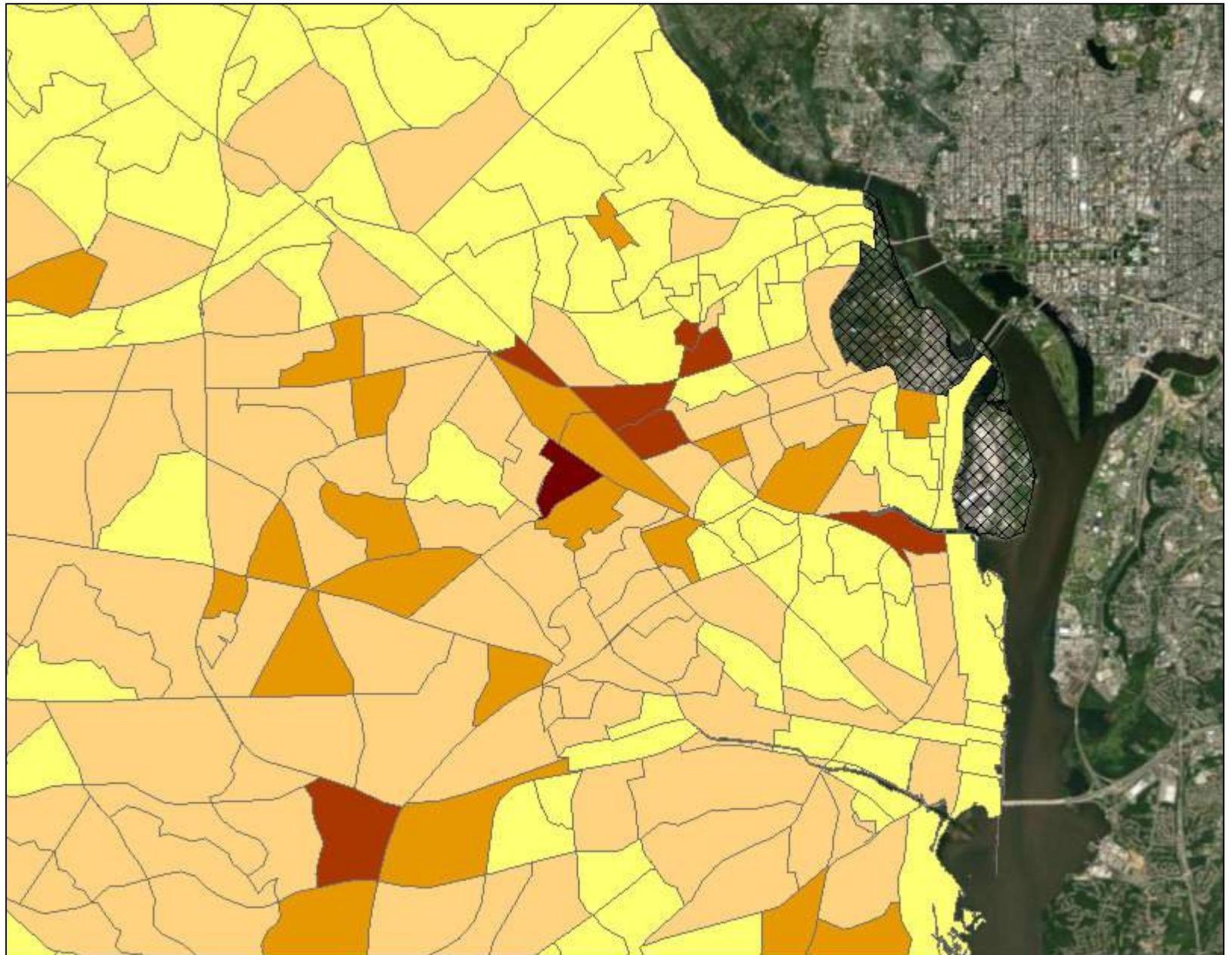
PRELIMINARY
9/30/2020

VERSION NUMBER
2.6.4.6
MAP NUMBER
5155190033F
MAP REVISED

Four Mile Run Vulnerability Index

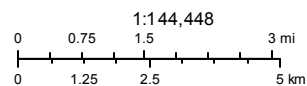
Social Vulnerability Index Score

-  Very Low Social Vulnerability
-  Low Social Vulnerability
-  Moderate Social Vulnerability
-  High Social Vulnerability
-  Very High Social Vulnerability
-  Not included in the analysis



April 5, 2022

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

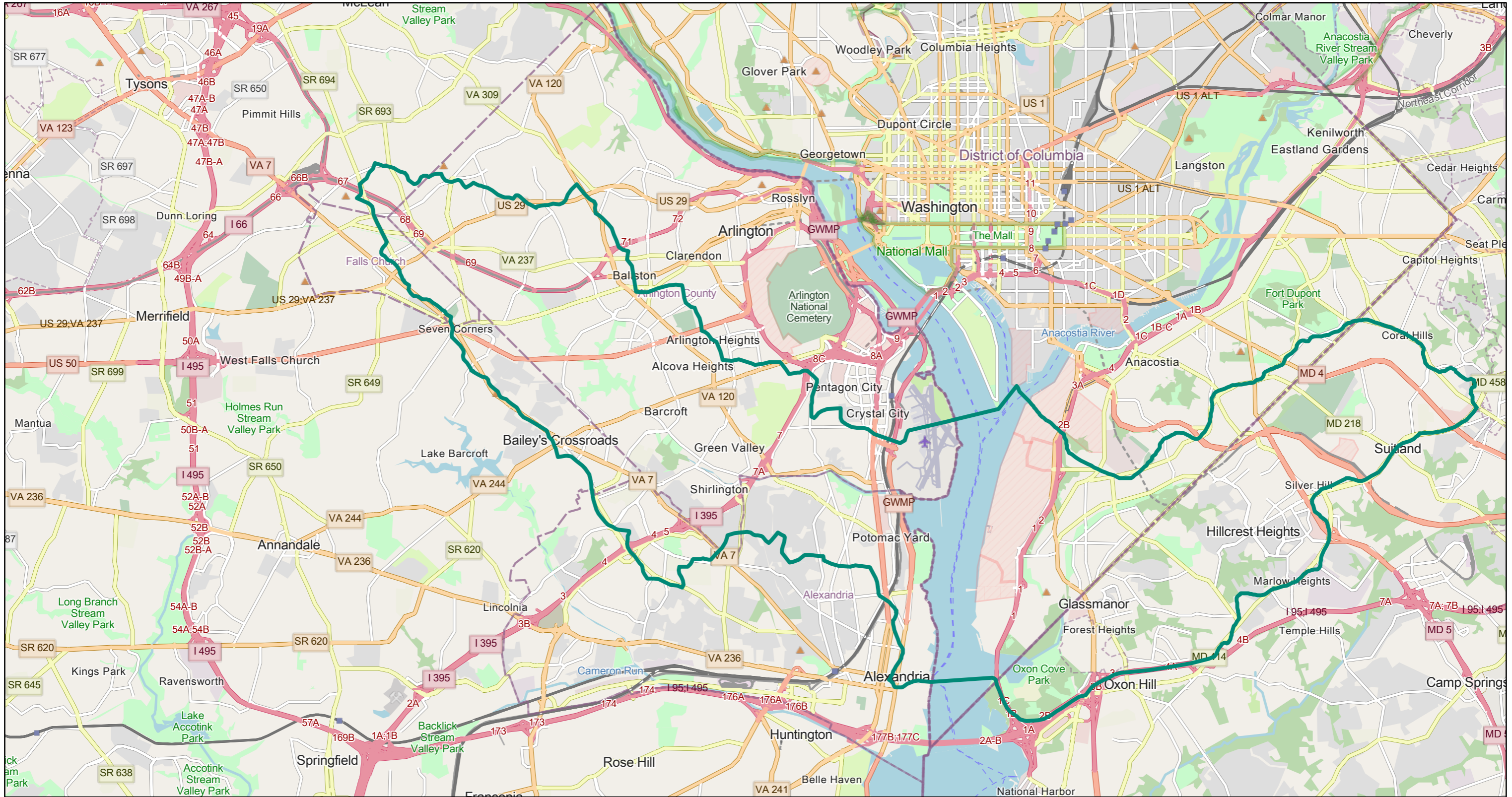


Created from the Virginia Vulnerability Viewer



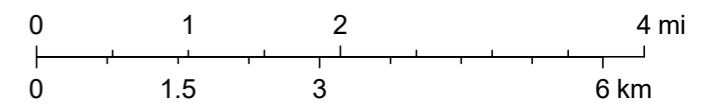
ADAPTVA

Four Mile Run Watershed



4/6/2022

1:102,728



Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

RESOLUTION

Resolution No. 22-25

PATRON: Robert W. Lazaro, Jr.
Executive Director
DATE: March 24, 2022

AUTHORIZATION TO SUBMIT A HYDROLOGIC STUDY PROPOSAL TO THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION

WHEREAS, the Four Mile Run watershed is one of the most heavily urbanized drainage basins in the Northern Virginia region; and

WHEREAS, the United States Geological Survey owns and operates a rainfall-runoff gage for the watershed; and

WHEREAS, hydrologic data for the watershed is available starting in 1947 and throughout the urbanized development of watershed; and

WHEREAS, these records are strongly representative of the cumulative, downstream impacts of land use changes and stormwater management actions during a period of rapid development; and

WHEREAS, floods are one of the most common natural hazards in our region and can result in significant damage as an increasing number of localized heavy downpour events overwhelm stormwater conveyance systems; and

WHEREAS, inland flooding due to extreme rainfall is increasing with warming temperatures; and

WHEREAS, evaluating long-term rainfall-runoff dynamics in the watershed would provide insight into the effectiveness of past management actions and help inform future management actions; and

WHEREAS, the Northern Virginia Regional Commission has over a 20-year history coordinating the Four Mile Run Watershed Program; and

WHEREAS, the Virginia Department of Conservation And Recreation has grant funding available for conducting flood protection and prevention studies; and

THEREFORE BE IT RESOLVED, that the Northern Virginia Regional Commission authorizes the Executive Director to apply for a grant not to exceed \$95,000 from the Department of Conservation And Recreation in support of furthering a hydrologic study in Four Mile Run watershed;

BE IT FURTHER RESOLVED that the Northern Virginia Regional Commission authorizes the Executive Director to enter into a contract with the Virginia Resources Authority, should the proposal be accepted for funding.



CERTIFICATION

The undersigned certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Northern Virginia Regional Commission on March 24, 2022.

Robert W. Lazaro, Jr.
ROBERT W. LAZARO, JR., CERTIFYING OFFICER

RESOLUTION

Resolution No. P21-34

PATRON: Robert W. Lazaro, Jr.
Executive Director

DATE: June 24, 2021

ADOPTION OF THE FY 2022 ANNUAL BUDGET AND PROGRAMS

WHEREAS, the Commission considers a *Preliminary Budget* each fall for the upcoming fiscal year; and

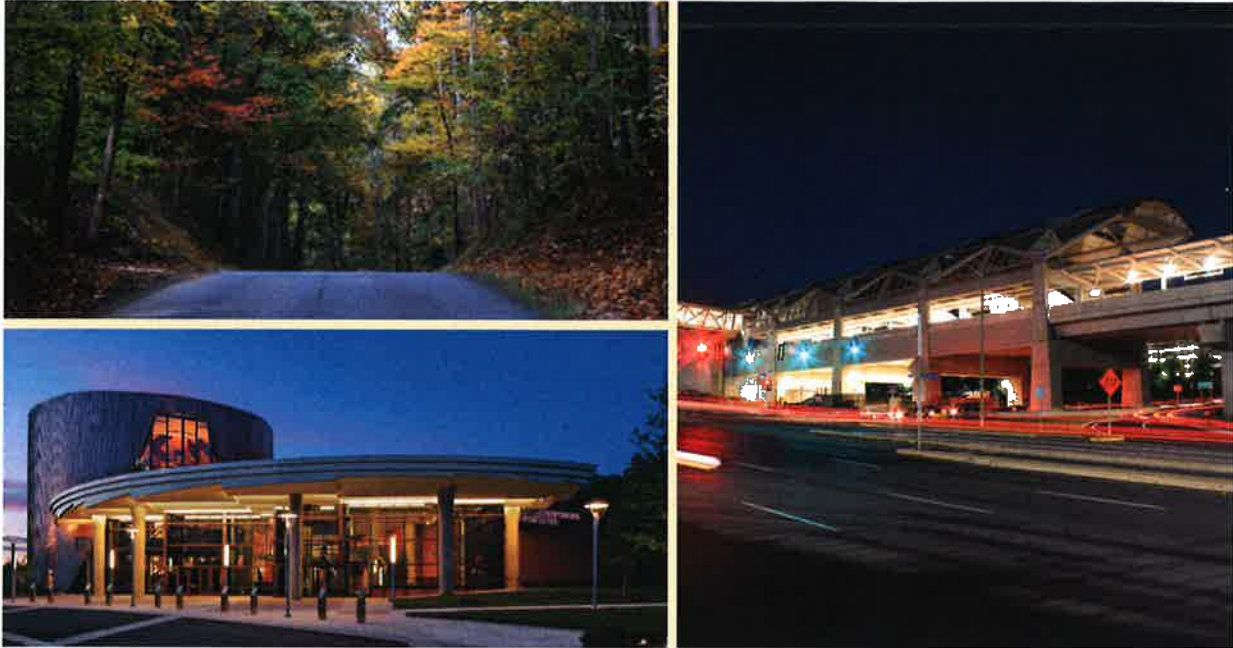
WHEREAS, the sources and amounts of expected funds have altered since the Commission adopted the *FY 2022 Preliminary Budget* on October 22, 2020; and

WHEREAS, in accordance with the Commission's budget policy, the Executive Director has prepared a draft *Annual Budget and Programs* for FY 2022;

THEREFORE BE IT RESOLVED, that the Northern Virginia regional Commission adopts the draft proposed *FY 2022 Annual Budget and Programs* dated June 24, 2021, including member government general dues contributions at a rate of \$0.60 per capita and total projected revenue and expenditures as follows:

Revenue:	\$7,942,690
Expenditures:	\$7,806,578
Contingency/reserves:	\$ 136,112

BE IT FURTHER RESOLVED, that in approving the *FY 2022 Annual Budget and Programs*, the Commission acknowledges and authorizes the staff positions as detailed in the Personnel Schedule (pp.8-9), subject to modification in accordance with the Commission's *Personnel and Administrative Policies and Practices*.



Fiscal Year 2022 Budget

**NORTHERN VIRGINIA
REGIONAL COMMISSION**

FY 2022

Annual Budget and Programs

June 24, 2020

Budget Message 1

FY 2022 Annual Budget Summary (Schedules)

Revenue 3
Local Contributions..... 4
Expenditures 6
Program Expenditures as a Percent of Total Budget 7
Personnel Schedule 8
Indirect Costs 10

FY 2022 Annual Budget Work Program

Regional Council Services 11
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Demographics / Geographical Information System (GIS)..... 14
Four Mile Run Watershed Management..... 15
Occoquan Watershed Management..... 16
Northern Virginia Waste Management Board 17
Coastal Resources Management..... 18
Municipal Separate Storm Sewer (MS4) Workgroup..... 19
Other Environmental Services..... 20
Stormwater Resiliency 21
Energy Management 22
Regional Planning Services..... 23
Trails, Open Space and Heritage Resources..... 24
Other Human Services Programs 25
HIV / AIDS Programs 26
Commuter Ferry 27

June 24, 2021

Dear Chairman Tarter and Honorable Members of the Northern Virginia Regional Commission:

I am pleased to submit for your consideration the *Budget and Programs for Fiscal Year 2022*. The budget in my opinion supports the work of the Commission and helps us to continue to provide value to our local government partners.

The proposal contains no per capita dues increase to our local government members nor does it rely on speculative revenue to balance it. The proposal is conservative in nature and allows the Commission full flexibility in making future changes.

I am proud that working together we have had more than four years of positive financial performance. As you know, as of the end of FY2019 we have eliminated the structural deficit and made our first contribution to the Commission's Reserve Fund consistent with Commission policy. The Budget before the Commission projects to make a contribution to the Reserve Fund as well. While we must be mindful of events outside of our control, I am pleased to report our staff continues to provide excellent results for our region and partner local governments.

Highlights of the Budget include:

- No increase in per capita dues
- Reflects an increase of funding from the Commonwealth of Virginia in the amount of \$14,000
- Budget remains in balance
- Anticipates the award of a \$3 Million grant from Virginia Housing for affordable housing
- Provides \$250,000 in funding from the District of Columbia for the Commuter Fast Ferry
- Adds one new position dedicated to the issue of resiliency planning and flooding
- Adds funding for the required Regional Water Supply Plan which is mandated by State regulation. This is the first major update in more than ten years. All jurisdictions regardless of NVRC membership are required to participate in the plan.

I am thankful for this opportunity to present the budget to the Commission for approval.

Sincerely,



Robert W. Lazaro, Jr.
Executive Director

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##

FY 2022 REVENUE
June 24, 2021

NVRC FY 2022 Annual Budget and Programs

LOCAL GOVERNMENTS

Annual Contributions	1,496,223	1,509,032	1,512,326
Special Contributions:	530,874	516,519	516,519
Coquan Watershed Management Program	211,043	204,520	204,520
Four Mile Run Watershed Management Program	149,786	135,639	135,639
Northern Virginia Waste Management Program	82,545	88,860	88,860
Regional Energy Strategy	87,500	87,500	87,500
Member government planning assistance	106,051	311,968	117,950
Subtotal:	2,133,148	2,337,519	2,146,795

COMMONWEALTH OF VIRGINIA (state and indirect federal)

Annual Contribution (DHCD)	151,943	151,943	165,943
Contracts:	2,267,538	2,566,724	2,649,245
Department of Environmental Quality	117,493	115,875	96,833
Virginia Department of Transportation	19,435	-	-
Virginia Department of Health	1,870,351	2,088,917	1,977,969
Virginia Department of Motor Vehicles	107,823	157,690	125,074
Virginia Department of Housing & Comm Dvlpmt (Go VA)	152,436	204,242	249,994
Virginia Housing	-	-	199,375
Subtotal:	2,419,481	2,718,667	2,815,186

FEDERAL (direct)

National Park Service	15,885	50,441	50,220
MARAD	10,229	-	-
Military installations	-	-	13,500
Subtotal:	26,114	50,441	63,720

OTHER INCOME

District of Columbia	2,299,954	2,721,000	2,424,816
Shared facilities income (NVTA / HSA)	180,134	188,668	193,176
Other contracts / fees / contributions	115,881	206,062	295,995
Interest	14,940	3,000	3,000
Misc	-	-	-
Subtotal:	2,610,910	3,118,730	2,916,987

TOTAL REVENUE

	\$ 7,189,652	\$ 8,225,357	\$ 7,942,690
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FY 2022 LOCAL CONTRIBUTIONS 1/

June 24, 2021

Jurisdiction	Population for FY 2022 Dues Calculation 2/	FY 2020 Dues 3/	FY 2021 Dues 3/	FY 2022 Dues 3/	Change FY 22-FY 21
Alexandria	159,152	\$ 96,431	\$ 96,630	\$ 95,491	(1,139)
Arlington County	242,152	143,444	144,619	145,291	672
City of Fairfax	23,943	14,295	14,731	14,366	(365)
Falls Church	14,331	8,561	8,676	8,599	(77)
Fairfax County	1,102,442	661,412	662,926	661,465	(1,461)
Herndon	24,601	14,719	14,727	14,761	34
Vienna	16,485	9,926	9,934	9,891	(43)
Loudoun County	359,819	205,112	211,463	215,891	4,428
Leesburg	53,727	32,529	32,380	32,236	(114)
Manassas City	41,757	25,070	25,232	25,054	(178)
Manassas Park	16,636	9,685	9,917	9,982	65
Prince William County	459,576	270,456	274,687	275,746	1,059
Dumfries	5,922	3,138	3,140	3,553	413
TOTAL	2,520,543	\$ 1,494,779	\$ 1,509,033	\$ 1,512,326	3,294
PER CAPITA RATE		0.60	0.60	0.60	

1/ Does not include the assessments for four programs which are separately assessed to by the participating localities and agencies. The contributors, and the proposed level of their financial participation for FY 2021, are depicted in separate tables below.

2/ Source: Weldon Cooper Center for Public Service (Counties and Cities); US Census (Towns) - July 1, 2018 estimates

3/ Formula for computation of jurisdictional contributions set by Bylaws: straight per capita basis, with the rate (dollars/cents) per capita established annually by the Commission.

Northern Virginia Waste Management Program		FY 2022 Contributions
Participating Jurisdictions		
Alexandria	\$ 13,329.00	
Arlington County	13,329.00	
Fairfax County	13,329.00	
Loudoun County	13,329.00	
Pr. William County	13,329.00	
Dumfries	2,776.88	
City of Fairfax	2,776.88	
Falls Church	2,776.88	
Herndon	2,776.88	
Leesburg	2,776.88	
Manassas	2,776.88	
Manassas Park	2,776.88	
Vienna	2,776.88	
		\$ 88,860.04

Occoquan Watershed Management Program		FY 2022 Contributions
Participating Jurisdictions		
Fairfax County	\$ 48,110	
Fairfax Water	45,390	
Fauquier County	10,590	
Loudoun County	5,650	
City of Manassas	7,920	
City of Manassas Park	1,140	
Prince William County	42,070	
Prince William Co. Service Auth.	43,650	
		\$ 204,520

Four Mile Run Watershed Management Program		FY 2022 Contributions
Participating Jurisdictions		
Alexandria	\$ 48,830	
Arlington County	62,394	
Fairfax County	20,346	
Falls Church	4,069	
		\$ 135,639

Regional Energy Strategy	
Participating Jurisdictions	FY 2022 Contributions
	\$
Arlington	-
Fairfax	-
Loudoun County	35,000
Prince William	-
Alexandria	35,000
City of Fairfax	2,500
Falls Church	2,500
Manassas	2,500
Manassas Park	2,500
Herridon	2,500
Leesburg	2,500
Dumfries	-
Vienna	2,500
	<hr/>
	\$ 87,500

FY 2022 EXPENDITURES
June 24, 2021

Budget Category	Line Item	FY 2020 Actual June 30, 2020	FY 2021 Adopted Expenditures June 25, 2020	FY 2022 Proposed Expenditures October 22, 2020	FY 2022 Proposed Expenditures June 24, 2021
PERSONNEL COST					
	Salaries and Wages	1,532,871	1,635,600	1,678,198	1,862,942
	Fringe Benefits	452,641	642,646	551,377	637,275
	Subtotal:	1,985,512	2,278,246	2,229,575	2,500,217
CONTRACT SERVICES					
	Consultants / Contract Services	618,932	734,384	738,233	1,039,918
	RW / HOPWA Subgrants	3,303,298	4,029,103	4,388,100	3,450,000
	Other Subgrants	19,435	-	-	-
	Subtotal:	3,941,665	4,763,487	5,126,333	4,489,918
HOUSEKEEPING EXPENSES					
	Postage	2,085	7,407	3,697	2,935
	Rent	524,344	539,464	550,963	550,963
	Telephone	7,378	8,300	8,280	8,435
	Audit & Insurance	21,353	26,700	26,700	26,700
	Equipment Repair	1,395	5,000	5,000	5,000
	Depreciation	25,084	25,000	25,000	25,000
	Advertising (not employment)	3,911	7,750	8,600	8,150
	Subtotal:	585,550	619,621	628,240	627,183
OPERATING EXPENSES					
	Memberships & Subscriptions	12,802	11,427	13,907	14,702
	Education Materials	364	-	-	-
	Office Supplies	14,191	36,008	23,892	19,580
	Equipment Rental	903	904	904	904
	IT Expenses	54,718	50,735	59,510	63,933
	Subtotal:	82,978	99,074	98,213	99,119
DUPLICATING					
	Reproduction	13,487	14,105	14,583	14,556
	Printing	27,347	35,844	26,044	26,544
	Subtotal:	40,833	49,949	40,627	41,100
TRAVEL AND CONFERENCES					
	Local Travel	5,318	10,849	8,446	9,196
	Non-Local Travel	7,805	14,239	11,675	11,675
	Meetings	56,027	15,300	15,050	16,170
	Subtotal:	69,150	40,388	35,171	37,041
RECRUITMENT AND DEVELOPMENT					
	Employment Advertising	377	2,000	2,000	2,000
	Employee Relocation	-	-	-	-
	Educational Assistance	838	5,000	5,000	5,000
	Subtotal:	1,215	7,000	7,000	7,000
OTHER					
	Interest expense (line of credit)	-	-	-	-
	Uncollectable receivable (write off)	-	-	-	-
	Bank service fees	4,314	5,000	5,000	5,000
	Loss on disposal of assets	-	-	-	-
	Subtotal:	4,314	5,000	5,000	5,000
TOTAL EXPENDITURES					
		\$ 6,711,217	\$ 7,862,765	\$ 8,170,159	\$ 7,806,578

PROGRAM EXPENDITURES AS A PERCENT OF TOTAL BUDGET: FY 2020 - FY 2022
June 24, 2021

	2020 Actual June 30, 2020	%	2021 Adopted June 25, 2020	%	2022 Proposed October 22, 2020	%	2022 Proposed June 24, 2021	%
Regional Council Services	\$672,231	10.0%	\$640,969	8.2%	\$752,086	9.2%	\$745,503	9.5%
Demographics/GIS	188,496	2.8%	289,463	3.7%	240,333	2.9%	242,444	3.1%
Environmental Services Programs	849,421	12.7%	988,594	12.6%	1,142,263	14.0%	1,138,070	14.6%
Energy Management	111,003	1.7%	172,434	2.2%	111,816	1.4%	112,735	1.4%
Regional Planning Services	51,537	0.8%	8,868	0.1%	27,854	0.3%	27,963	0.4%
Trails, Open Space and Heritage Resources	203,947	3.0%	274,677	3.5%	259,870	3.2%	259,643	3.3%
Human Services Programs	4,238,791	63.2%	5,088,370	64.7%	5,321,823	65.1%	4,614,535	59.1%
Regional Economic Vitality Planning	395,791	5.9%	399,390	5.1%	314,113	3.8%	665,685	8.5%
Total	\$6,711,216	100.0%	\$7,862,765	100.0%	\$8,170,158	100.0%	\$7,806,578	100.0%

PERSONNEL SCHEDULE

Regular Positions	Grade	Rate*	FTE	Amount	
Executive					
Executive Director	n/a	163,060	1.00	163,060	
Deputy Executive Director	14	152,388	1.00	152,388	
Management Analyst	7	76,880	1.00	76,880	
Executive Assistant	5	-	-	-	Vacated due to promotion
Financial Manager	7	-	-	-	
Receptionist (job share) **	3	-	-	-	To be filled with contract employee during FY22
Receptionist (job share) **	3	-	-	-	To be filled with contract employee during FY22
Environmental & Resiliency Planning					
Director, Environmental and Resiliency Planning	13	128,212	1.00	128,212	
Four Mile Run Program Manager / PE or equiv	11	-	-	-	To be covered with existing staff and contractor
Senior Regional Planner - energy and climate change	12	100,145	1.00	100,145	
Environmental Planner - solid and hazardous waste	11	95,283	1.00	95,283	
Environmental Planner - coastal and ChesBay	11	80,653	1.00	80,653	
Environmental Planner - flood control	8	68,500	1.00	68,500	NEW FY22
Water Resources Planner / GIS Analyst	8	69,870	1.00	69,870	
Regional Demographer / Analyst	11	107,100	1.00	107,100	
GIS Program Manager	9	-	-	-	To remain unfilled pending additional funding
Human Services					
Director, Human Services Programs	12	121,460	1.00	121,460	
Deputy Division Director, Human Services	11	-	-	-	To remain unfilled pending additional funding
Human Services Planner	7	86,882	0.75	65,162	
Federal Grants Data Analyst	7	78,200	1.00	78,200	
Federal Grants Quality Manager	8	73,403	1.00	73,403	
HOPWA Contract Monitor / Resources Specialist 70440	7	70,440	0.34	23,909	
Federal Grants Contract Monitor	7	68,969	1.00	68,969	
AIDS Program Analyst	7	-	-	-	To remain unfilled pending additional funding
Administrative Assistant	3	-	-	-	To remain unfilled pending additional funding
Housing Development Coordinator	11	88,500	1.00	88,500	NEW FY22
Director Military Partnerships	12	129,249	1.00	129,249	
TDM Outreach	7	73,537	0.75	55,153	
SUBTOTAL - Regular Positions (funded)			17.84	\$ 1,746,095	

* Executive Director pay set by Commission Resolution No. 21-26. Annualized rates of other employees are as of June 30, 2021. Pay adjustments between July 1, 2021 and June 30, 2022 to be made within the allowance detailed below.

Allowance for Merits and Promotions (pool equals 4.0% of total regular salaries & wages)	\$ 69,844
Temporary Help	
** Receptionist/Secretary (2,080 hrs of coverage @ \$20.29/hr)	42,203
Intern - waste management program	<u>800</u>
SUBTOTAL - Temporary Help	\$ 43,003
Other Compensation: Accrued Leave	\$ 4,000
GRAND TOTAL - Salaries and Wages	<u><u>\$ 1,862,942</u></u>

FY 2022 INDIRECT COSTS
June 24, 2021

Indirect costs, which support all projects, are allocated based on the ratio of the individual project's direct salaries, leave and fringe benefits to total direct salaries, leave and fringe benefits.

Budget Category	Line Item	2020 Actual Expenditures June 30, 2020	2021 Adopted Expenditures June 25, 2020	2022 Proposed Expenditures June 24, 2021
PERSONNEL COST				
	Salaries and Wages	247,241	330,505	311,029
	Fringe Benefits	53,425	116,858	94,133
	Subtotal:	300,666	447,363	405,162
CONTRACT SERVICES				
	Consultants/ Contract Services RW/HOPWA Subgrants	48,351	71,979	78,518
	Subtotal:	48,351	71,979	78,518
HOUSEKEEPING EXPENSES				
	Postage	367	425	425
	Rent	346,985	354,851	361,842
	Telephone	5,137	6,200	6,200
	Audit & Insurance	21,353	24,200	24,200
	Equipment Repair	1,395	3,500	3,500
	Depreciation	22,584	25,000	25,000
	Advertising (not employment)	-	750	-
	Subtotal:	397,821	414,926	421,167
OPERATING EXPENSES				
	Memberships & Subscriptions	1,546	1,500	2,400
	Education Materials	-	-	-
	Supplies	7,301	10,250	8,750
	Equipment Rental	903	904	904
	IT Expenses	27,191	24,500	21,889
	Subtotal:	36,942	37,154	33,943
DUPLICATING				
	Reproduction	5,038	4,715	5,215
	Printing	386	3,000	500
	Subtotal:	5,424	7,715	5,715
TRAVEL AND CONFERENCES				
	Local Travel	-	100	100
	Non-Local Travel	-	-	-
	Meetings	1,566	2,000	2,000
	Subtotal:	1,566	2,100	2,100
RECRUITMENT AND DEVELOPMENT				
	Employment Advertising	207	2,000	2,000
	Employee Relocation	-	-	-
	Educational Assistance	338	5,000	5,000
	Subtotal:	545	7,000	7,000
OTHER				
	Interest expense (line of credit)	-	-	-
	Uncollectable receivable (write off)	-	-	-
	Bank service fees	4,309	-	-
	Loss on disposal of assets	-	-	-
	Subtotal:	4,309	-	-
TOTAL EXPENDITURES		795,624	988,237	953,605

The audited indirect cost rate for FY 2020 was 47.40% calculated as follows:

FY 2020 Indirect cost pool 795,624
Total direct salaries, leave, fringe 1,678,720

The budgeted indirect cost rate for 2021 is 53.98% calculated as follows:

FY 2021 Indirect cost pool 988,237
Total direct salaries, leave, fringe 1,830,883

The proposed budgeted indirect cost rate for 2022 is 45.52% calculated as follows:

FY 2022 Indirect cost pool 953,605
Total direct salaries, leave, fringe 2,095,055

Regional Council Services

- a. Hold monthly Commission meetings including presentations / learning opportunities for Commissioners, focusing on topics directed by the Commission.
- b. Review and restate the Commission’s mission and role in addressing important, current or emerging regional issues.
- c. Provide a daily weekday e-newsletter, “*News from the Region and State*,” summarizing news related to local and statewide issues.
- d. Convene, host and participate in (where appropriate) meetings of regional peer groups composed of local government counterparts – including chief elected officers, chief administrative officers, and others – to share information, and strategies on issues that are likely to benefit from a regional perspective.
- e. Work toward strengthening the capacity of Virginia’s network of 21 planning district commissions to serve as a reliable statewide resource for information and technical services, by continuing active involvement in the Virginia Association of Planning District Commissions.
- f. Continue to work with international partners – especially from Germany, France, United Kingdom, Sweden, Canada, Japan, Switzerland, South Korea, Italy, Belgium and Ireland – that have economic connections (i.e., in trade and foreign direct investment) with Northern Virginia, to achieve transfer of policy and technical innovations from overseas that will benefit the economies, environment and communities of the Northern Virginia region.
- g. Establish and maintain strategic alignments with Northern Virginia’s commercial, civil society, academic, scientific and research communities engaged in parallel international work (e.g., George Mason University, Northern Virginia Community College, Northern Virginia Technology Council).
- h. Work with the Community Foundation for Northern Virginia to diversify opportunities for funding and carrying out projects and programs benefiting the Northern Virginia region.
- i. Continue to serve as program administrator of the Commonwealth’s “GO Virginia” initiative for regional economic projects.

FTE 1 = 2080 hr	0.96	Expenses	Revenue
		Personnel	
		Contract	\$ 249,994
		Subgrants	-
		Other	1,200
		Share of indirect costs	193,176
		TOTAL	301,133
			\$745,503

Community - Military Partnership

- a. Direct the Partnership program to protect, preserve and enhance Northern Virginia military installations and community partnerships by supporting bi-monthly meetings. Encourage regular communication on military facility viability; exploration of privatization opportunities such as autonomous vehicles and cybersecurity; and on issues affecting readiness, public safety and security. Facilitate cooperative and constructive relationships among the military installations in the region, and collaboration among military installations and the civilian sector, on critical topics such as land use, critical infrastructure, cybersecurity, veterans' needs, GIS, first- and last-mile transportation needs, environmental and energy issues, and other common areas where partnerships will lead to the "base of the future." Specifically, direct focus on:
 - Engaging with regional bases (Joint Base Myer-Henderson Hall, Fort Belvoir and Marine Corps Base Quantico, as well as regional Army Reserves, Virginia National Guard Units, and Reserve Marine Corps.
 - Tracking legislation, Executive Orders and appropriations, in order to inform local governments of compliance and funding matters that could have a bearing on their responses to any future Base Realignment and Closure decisions.
 - Working with state officials in advocating for the defense industry in the Commonwealth of Virginia.
 - Participating with the Secretary of Veterans and Defense Affairs on the Virginia Military Advisory Council.
 - Continuing work with military, public and private institutions with respect to coordination of efforts related to a cyber-ready workforce.
 - Promoting the military value of the installations within the region, providing awareness of the state of current and future mission readiness, and providing demographic and economic data to support the missions.
- b. Continue to support the concept of transportation alternatives with outreach and education through Commuter Centers at Fort Belvoir, Quantico and Joint Base Myer-Henderson Hall by assisting military and defense workers find viable commuter options that relieve Northern Virginia's congestion from single-occupancy vehicles on the roads and at the gates, by working with the Transportation Demand Management County representatives.
- c. Continue to partner with non-profits and other private-sector resources to support the military and their families with services from the community.
- d. Conduct research, analysis, and assessment of models and practices that will place the Northern Virginia region in a strategically advantageous position for upcoming Base Realignment and Closure and cyber threats.
- e. Work toward reaching the "Base of the Future" with partnership opportunities.
- f. Assist bases in Northern Virginia with strategic public-public and public-private partnerships.

FTE	1.29	Expenses	Revenue
1 = 2080 hr		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$225,675	\$ 159,895
		23,350	13,500
		-	126,027
		8,267	(5¢ per capita)
		102,721	60,591
		\$360,013	\$360,013

Workforce

- a. Continue the Commission's initiative engaging academic, business, government, and non-profit sectors in preparing a regional workforce for the labor requirements of the Northern Virginia region. Such efforts include coordination with the US Military, public school divisions and the private sector.
- b. Continue to partner with the region's public school districts, institutions of higher learning, and private sector, to help foster improved coordination of cyber workforce initiatives.
- c. Leverage funding with the Commission's investment, to help plan and carry out actions that help meet the program's objectives.

FTE <i>f = 2080 hr</i>	0.14		
		Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 37,543	\$ -
		-	-
		-	50,411 (2¢ per capita)
		300	-
		17,089	4,521
		\$ 54,932	\$ 54,932

Demographics/Geographical Information System (GIS)

- a. Provide information and analysis related to trends, issues and other matters that impact the region to Commissioners, local government partners and the public. Demographer will coordinate efforts with Environmental, Human Services and Community/Military in-house staff and work with local government partners.
- b. Provide meeting space and participate in regional workgroups of local governments, Virginia Geographical Information Network (VGIN), demographers, data analysts and GIS Managers
- c. Respond to requests for demographic and GIS information
- d. Provide internet presence of updated demographic and GIS information that accurately reflects the region.
- e. Undertake special studies at the direction of the Commission and / or Executive Director.

FTE 1 = 2080 hr	0.88			
		Expenses	Revenue	
		Personnel	\$152,848	Grants/contracts
		Contract	5,000	Fees
		Subgrants	-	Local designated funds
		Other	15,025	Other
		Share of indirect costs	69,571	General Funds
		TOTAL	\$242,444	TOTAL
				242,444
				\$242,444

Four Mile Run Watershed Management

- a. Continue to implement the Four Mile Run Watershed Management Program, which was established to ensure that drainage modification projects in the Four Mile Run Watershed do not increase runoff peaks in a manner that could impair the effectiveness of the U.S. Army Corps of Engineer's Flood Control Project, and which now includes activities designed to improve the quality of the surface and ground waters in the Four Mile Run watershed.
 - Operate the Four Mile Run computer model as a tool for planning around and preparing for channel impacts.
 - Update the model incorporating new data from participating jurisdictions on watershed changes to maintain the accuracy and validity of assumptions; incorporate more recent and standard versions of the software; coordinate with the Technical Review Committee in implementing the best option; and work with the jurisdictions to update the model with the best available GIS data.
 - Continue to gather precipitation and discharge data in the watershed to assist with model calibration.
 - Continue to co-fund the U.S. Geological Survey stream gauge at Shirlington and the tidal gage near Rt. 1, to provide continuous stage, flow and precipitation data.
 - Continue to provide participating jurisdictions with information on the effectiveness of local programs for controlling storm water runoff to prevent flooding in the US Army Corps of Engineers flood control channel in lower Four Mile Run. Provide assessments of the impact of proposed individual land surface, storm drain network, or stream channel changes.
 - Continue to provide liaison with non-local agencies (e.g., VDOT, US Army Corps of Engineers, Virginia Department of Environmental Quality, USGS and others) to ensure their awareness of and cooperation with the Four Mile Run Watershed Management Program.
 - Maintain a library of historic information related to the Four Mile Run watershed and management program and manage an Internet webpage of relevant Four Mile Run documents, announcements, etc.

- b. Continue to assist with modeling and coordination to meet the requirements of FEMA's National Floodplain Insurance Program (NFIP) along Four Mile Run, which contains a FEMA-designated Special Flood Hazard Area regulated by the NFIP.
- c. Continue to run the Four Mile Run model on an as-needed basis to evaluate the effect of developmental projects on the flood control channel volume. When those projects are not sponsored by a Four Mile Run partner, the Commission will seek reimbursement for time and expenses from the developmental entity.

d. Oversee contractor for a Chesapeake Bay Trust grant for the development of a regional Intensity, Duration, Frequency (IDF) Curves to assist localities in the development of stormwater planning in the context of climate change. Joint project with Occoquan Watershed Management Program.

FTE 1 = 2080 hr	0.16	Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 19,548 120,000 - 325 8,898 \$148,771	\$ - 10,000 135,639 - 3,132 \$148,771

Occoquan Watershed Management

- a. Provide ongoing program management for the Occoquan Reservoir water supply protection program, including:
 - Managing the modeling contract between NVRC and the Occoquan Watershed Monitoring Lab.
 - Developing water quality projections for the Occoquan Reservoir based upon the Occoquan Model and projected population and development growth within the watershed or other scenarios based upon input from the Occoquan Watershed Modeling Subcommittee.
 - Continuing to develop education and outreach tools for the Occoquan watershed management plan and as a way of promoting watershed stewardship, including control of pollution from runoff.
- b. Participate in Chesapeake Bay Program activities affecting the Occoquan Program, including the Water Quality Goal Implementation Team, the Watershed Technical Workgroup, the Modeling Workgroup, and the Urban Stormwater Workgroup. Continue to serve as the Chairman of the Urban Stormwater Program.
- c. Participate in Metropolitan Washington Council of Governments' activities affecting the Occoquan Program, including the Chesapeake Bay Policy Committee and the Water Resources Technical Committee.
- d. Continue to serve on Commonwealth Technical Advisory Committees and Policy Advisory Committees in development of water resource regulations and policies.
- e. Continue to research alternate stormwater BMPs and participate in the Chesapeake Bay Urban Stormwater BMP Expert Panels.
- f. Oversee contractor for a Chesapeake Bay Trust grant for the development of a regional Intensity, Duration, Frequency (IDF) Curves to assist localities in the development of stormwater planning in the context of climate change – a joint project with the Four Mile Run Program.
- g. Continue to develop coordination, education and outreach tools for the SaMS salt reduction effort to reduce the impact to the Occoquan Reservoir.

FTE 1 = 2080 hr	0.50	Expenses	Revenue
		Personnel Contract Subgrants Other Share of indirect costs	Grants/contracts Fees Local designated funds Other General Funds
		\$ 82,748 116,000 - 5,715 37,664	\$ 3,333 - 204,520 - 34,275
		TOTAL	TOTAL
		\$242,128	\$242,128

Northern Virginia Waste Management Board

- a. Continue to provide ongoing program management for the Northern Virginia Waste Management Board and serve as a liaison between state and local and federal agencies and associations.
- b. Conduct the biannual residential solid waste services and management practices survey for Washington metropolitan area jurisdictions, working with the Board to improve data quality and collection.
- c. Track proposed changes to federal and state solid waste regulations and report to the Board. Convene ad-hoc "review and comment" committees as necessary, coordinating input from the Board on legislative issues to the Commission.
- d. Continue to maintain the Know Toxics education campaign to identify audiences and most effective messages for campaigns on proper management of hazardous waste.
- e. Pursue special projects related to solid waste as directed by the waste board.

FTE 1 = 2080 hr	0.41		
		Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 67,844	\$ -
		1,600	-
		-	88,860
		3,818	-
		30,880	15,282
		\$104,142	\$104,142

Coastal Resources Management

- a. Provide coordination and technical support to eligible member governments in Northern Virginia on coastal resources management issues. Continue to serve as a point of information exchange and as a liaison between local governments and state agencies including the Governor's Special Assistant for Coastal Resiliency, Virginia Department of Conservation and Recreation Chesapeake Bay Local Assistance, the Virginia Department of Environmental Quality Coastal Resources Management Program, and the Department of Conservation and Recreation.
 - Work with stakeholders in the region on issues related to litter and marine debris.
- b. Continue to provide expertise and information to local governments and Northern Virginia residents in order to promote sustainable development along the Potomac River, taking into consideration changes to sea level rise, storm surge, and other coastal hazards.
- c. Manage the Northern Virginia Climate Resiliency Project, which seeks to increase the resilience of critical built infrastructure in Northern Virginia. Continue to coordinate and work with a stakeholder group to identify tools and information that can help determine priorities and actions that can be taken to decrease the severity of future consequences emanating from climate and extreme weather.
- d. Continue to implement the Northern Virginia Clean Water Partners – Regional Stormwater Education Campaign, in coordination with local government partners and other interested parties. The campaign is a region-wide education and outreach strategy aimed at reducing nonpoint source pollution through individual behavioral changes and supports Northern Virginia local jurisdictions in meeting their stormwater permit requirements.
- e. Serve as representative of NVRC on the Virginia Coastal Policy Team.
- f. Coordinate on a quarterly basis with the Virginia Coastal Zone Management Program and Virginia's eight other Coastal planning district commissions.
- g. Speak and give presentations about NVRC projects at applicable meetings or conferences when required.
- h. Write proposals for new projects that include scope of work, budgets, deliverables and schedule for implementation.

FTE 1 = 2080 hr	0.67			
		Expenses	Revenue	
		Personnel	\$ 91,751	Grants/contracts
		Contract	110,000	Fees
		Subgrants	-	Local designated funds
		Other	1,895	Other
		Share of indirect costs	41,763	General Funds
		TOTAL	\$245,409	TOTAL
				\$ 64,500
				-
				-
				110,000
				70,969
				\$245,409

Municipal Separate Storm Sewer (MS4) Workgroup

- a. Continue to implement a regional program for managing storm water in Northern Virginia, convening an MS4 Workgroup composed of local staff, and assisting member governments in addressing the following goals:
- Effectively address state and federal regulations;
 - Foster regional cooperation and share professional knowledge and experience;
 - Lessen the expenditures of each local government by conducting cooperative activities wherever possible;
 - Facilitate the efficient collection and distribution of information to agencies;
 - Cost effectively facilitate training to governmental staff and the development community;
 - As possible and where feasible negotiate as one collective entity with the EPA and state agencies;
- b. Continue to serve as a vital source of information and analysis on the Chesapeake Bay TMDL, the associated Watershed Implementation Plan (WIP) development process, stormwater and municipal separate storm sewer systems (MS4) regulatory development for local governments, and as a vehicle for EPA and the Commonwealth to reach local stakeholders
- c. Participate in the upcoming Department of Environmental Quality (DEQ) Advisory Committee to discuss revising the phosphorus water quality standard to meet water quality requirements of the Virginia Stormwater Management Program.
- d. Continue to participate as a stormwater expert in the Secretary of Natural Resource's Chesapeake Bay Stakeholder Advisory Group which has been tasked with overseeing the development of Virginia's Chesapeake Bay Watershed Implementation Plan.

FTE	0.55	Expenses	Revenue
1 = 2080 hr		Personnel	Grants/contracts
	\$ 93,173	Contract	Fees
	-	Subgrants	Local designated funds
	4,930	Other	Other
	42,410	Share of indirect costs	General Funds
	\$140,513	TOTAL	TOTAL
			\$29,000
			-
			75,616
			-
			35,897
			\$140,513

Other Environmental Services

- a. Coordinate 2023 Northern Virginia Water Supply Plan update with participating jurisdictions and the regions Water Authorities
- b. Coordinate with the Interstate Commission on the Potomac River Basin to incorporate its demand, supply and needs assessments through 2050 for the Virginia participants in the CO-OP Water Supply Program into the Northern Virginia Plan.
- c. Continue to develop demand, supply and needs assessments through 2050 for all jurisdictions and utilities outside of the CO-OP Program.
- d. Aid in the development of alternative scenarios for water supply and work with local governments to find consensus on the alternatives.
- e. Continue to coordinate with other environmental agencies, particularly the Metropolitan Washington Council of Governments, the Potomac Watershed Roundtable, and the local Soil and Water Conservation Districts.
- f. Assist the Department of Conservation and Recreation (DCR) and the Department of Environmental Quality (DEQ) to meet the requirements of Virginia's commitments to the Chesapeake Bay Agreement by serving as a catalyst for intergovernmental communication.
- g. Develop partnerships and grant opportunities to educate and coordinate water infrastructure efforts and initiatives.

FTE 1 = 2080 hr	0.57		
		Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 95,558	\$ -
		-	-
		6,325	116,750
		43,494	-
		\$145,377	28,627
			\$145,377

Stormwater Resiliency

- a. Assist in responding to the 2016 Northern Virginia Hazard Mitigation Plan update, which determined that most of the Northern Virginia jurisdictions have a 'Highly Likely' probability of continued flood risk due to a 'High' vulnerability to flood hazards.
- b. Coordinate a regional approach to addressing a critical part of the flood response strategy: communicate with the public about flood risk and provide education about overland relief encroachments, flood insurance and ways to prepare for floods, by
 - Assembling stakeholders to determine education and outreach needs and opportunities.
 - Identifying existing public information efforts.
 - Identifying hazardous areas and properties and hazard types.
 - Assembling flood insurance information.
 - Determining coordinated messages.
 - Creating a website with all relevant information.
 - Delivering messages on various platforms at coordinated times.
 - Developing "Soak it Up" workshop guides/materials.
 - Conducting a series of "Soak it Up" Workshops.

FTE	0.66			
<i>f = 2080 hr</i>				
		Expenses	Revenue	
		Personnel	Grants/contracts	\$ -
		Contract	Fees	-
		Subgrants	Local designated funds	
		Other	Other	-
		Share of indirect costs	General Funds	111,730
		TOTAL	TOTAL	\$111,730

Energy Management

- a. Expand regional energy management activities to enhance local energy programs through common actions or shared service delivery.
 - Expand residential and commercial building energy efficiency programs to additional communities across the NVRC region.
 - Identify policy roadblocks to implementing local energy policies and develop alternatives to remove the roadblocks.
 - Sustain integration of energy and sustainability policy programs
- b. Strengthen regional and local energy planning and projects.
 - Coordinate NVRC energy program actions with regional groups and localities.
 - Support public utility and other energy company initiatives.
 - Facilitate involvement of universities, research, commercial, NGO and other education institutions in regional sustainability and local energy efforts.
 - Work with partners on the implementation of programs supported in the Virginia Clean Economy Act and Solar Freedom Act that are beneficial to the region.
 - Continue to operate programs that promote renewable energy, sustainability and energy efficient efforts (Solarize NOVA).
- c. Identify, track, and analyze energy-based state legislative actions related to Northern Virginia jurisdictions' legislative priorities.
- d. Enhance energy best practices through international exchanges, policy transfer and lesson learning opportunities to help the region replicate successful practices for energy management, sustainability and security.

FTE 1 = 2080 hr	0.41		
		Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 75,822	10,000
		-	87,500
		-	-
		2,400	15,235
		34,513	\$112,735
		\$112,735	

Regional Planning Services

a. Assist member governments and other parties in sharing industry best practices related to sustainability, through a region-wide sustainability network.

<p>FTE 1 = 2080 hr</p>	<p>0.11</p>	<p>Expenses</p> <p>Personnel Contract Subgrants Other Share of indirect costs TOTAL</p>	<p>Revenue</p> <p>Grants/contracts Fees Local designated funds Other General Funds TOTAL</p>
		<p>\$ 19,065 - - 220 8,678 \$ 27,963</p>	<p>\$ - - - - 27,963 \$ 27,963</p>

Trails, Open Space and Heritage Resources

- a. Promote bicycle and pedestrian safety by working with Virginia Department of Motor Vehicles and others, by providing outreach and training on “sharing the road,” especially areas where there is a high incidence of bicyclist and pedestrian crashes.
- a. Continue partnership with the National Park Service in developing the Potomac Heritage National Scenic Trail in Northern Virginia, through activities such as:
 - Organizing and promoting outdoor recreation, heritage tourism and conservation interests to demonstrate the value of increased outdoor recreation opportunities for residents and visitors.
 - Maintaining an inventory of gaps in the trail network and working to support gap closures and more equitable access to trails from communities.
 - Implementing projects, in support of public water access plans, in consultation with a regional advisory group, for increasing water access from trail segments while conserving viewsheds and integrating access to public transit.
 - Conducting scenic resource inventories.
 - Promoting and supporting recognition of the PHNST in Northern Virginia.

FTE 1 = 2080 hr	0.55		
		Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 89,362	\$175,295
		90,550	-
		-	-
		39,056	-
		40,675	84,348
		\$259,643	\$259,643

Other Human Services Programs

- a. Accept and award funds received from the Virginia Housing PDC Grant Program to local affordable/ workforce housing development projects that will result in new habitable units within three years of the grant award. From the \$3M funding anticipated monies will be used to underwrite partial NVRC staff time, limited direct costs, public opinion polling re: proposed projects, and an \$83,000 (each) contribution toward the production of at least 30 new affordable housing units.
- b. Continue to host the Northern Virginia Aging Network (local Agency on Aging staff and related agencies) web presence at www.novaregion.org/nvan. Offer the meeting venue, with conference call support to this group. Provide fiduciary services receiving payments for NVAN's annual Legislative Breakfast.
- c. Continue to support the *Quick Guide Online*; seek external resources (e.g., foundation support) to further modernize this resource.
- d. Update and maintain the regional lists of local homeless shelters, winter overflow shelters, and homeless day programs.
- e. Convene and provide program and administrative support to the Northern Virginia Human Service Officials (HSOs) Committee, which may include joint planning, creation of new methods to advance human services, visioning and implementation of service regionalization activities developed by HSO consensus.

FTE 1 = 2080 hr	1.12	Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
			\$199,375
			\$176,722
			50,000
			-
			9,140
			80,437
			6,100
			110,824
			\$316,299
			\$316,299

HIV / AIDS Programs

- a. Provide critical medical care, housing, and supportive services via subcontract service providers to low-income, uninsured people with HIV / AIDS. This includes:
 - \$2.0 million in Ryan White Part B funds split between subcontracts to serve people living with HIV in Northern Virginia (and statewide) and technical consulting on various HIV issues from NVRC staff to Virginia Department of Health.
 - \$2.4 million in Housing Opportunities for Persons with AIDS (HOPWA) funds to support long-term housing subsidies, homelessness prevention, and essential support services for persons with HIV and their families in 16 Virginia localities, including all NVRC member localities.
- b. Advocate for the appropriate allocation of Ryan White and HOPWA resources to Northern Virginia from the DC Department of Health, HIV / AIDS, Hepatitis, STD & TB Administration (HAHSTA), and from the Virginia Department of Health.
- c. Continue to add key referral information to the HIV Resources Project website, focusing on information useful to the greater Northern Virginia community, e.g., affordable housing programs. Make minor expansions to the website to improve how-to information on various housing topics among persons living with HIV. (This material will be appropriate for a statewide audience.) About \$50,000 is set aside within the HOPWA allocation to support this activity as well as limited telephone counseling for persons with HIV in need of housing assistance.

FTE 1 = 2080 hr	4.90		
		Expenses	Revenue
		Personnel	Grants/contracts
		Contract	Fees
		Subgrants	Local designated funds
		Other	Other
		Share of indirect costs	General Funds
		TOTAL	TOTAL
		\$ 559,632	\$4,152,785
		23,400	-
		3,450,000	-
		10,475	-
		254,728	145,451
		\$4,298,236	\$4,298,236

Commuter Ferry

- a. Procure expert consultant services to begin development of a business case for a commuter fast ferry service on the M-495 Marine Highway designated by the US Department of Maritime Administration, to serve as a foundation for public and private investment in this mode of commuter service along the waterfront communities on the Anacostia, Potomac, and Anacostia rivers that border eastern Prince William and southern Fairfax Counties, suburban Maryland, several military bases including Joint Base Anacostia-Bolling, Department of Homeland Security, and other locations into the District of Columbia.
- b. Address in this initial work the following types of questions:
 - What service models, governance options and financial models should be considered?
 - What feedback can be obtained from the industry on potential delivery/service options?
 - What information can be gleaned about private investment funding by conducting private sector sounding exercises?
 - What freight options are available?
- c. Coordinate meetings of, and input from, the M495 Stakeholders as an advisory group on the project.

FTE 1 = 2080 hr	0.12	Expenses	Revenue
	\$	Personnel Contract	Grants/contracts
	26,966	Subgrants	Fees
	207,500	Other	Local designated funds
	-	Share of indirect costs ¹	Other
	4,000	TOTAL	General Funds
	12,274		TOTAL
	\$		\$
	250,740		250,000
			-
			-
			740
			250,740



CFPF, rr <cfpf@dcr.virginia.gov>

CFPF Four Mile Run Study Proposal

1 message

Nora Jackson <njackson@novaregion.org>
To: "CFPF, rr" <cfpf@dcr.virginia.gov>
Cc: Normand Goulet <NGoulet@novaregion.org>

Fri, Apr 8, 2022 at 2:06 PM

Good afternoon,

Attached please find the Northern Virginia Regional Commission's official application to DCR to conduct an Analysis of Hydrologic Conditions in Four Mile Run. Let me know if there is anything else I can provide.

Best,

Nora

Nora Jackson
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