

Virginia Department of Conservation and Recreation

# Community Flood Preparedness Fund Grant Application

April 8, 2022 (3rd round)

*Requesting support for **capacity building and planning** to facilitate the development of a **flood resilience plan**.*



**Albemarle County**  
**Facilities and Environmental Services**

401 McIntire Road  
Charlottesville, VA 22902  
434.296.5816



*Cover page photo descriptions and credits (clockwise from upper left):*

1. *Holkham Road washout in Albemarle County following a flash flood on May 30, 2018 due to Tropical Storm Alberto. Water and sewer lines remain suspended.*
2. *Old Ivy Road at railroad bridge in Albemarle County – which experiences frequent flooding – on September 29, 2015. Credit: Daily Progress ([https://dailyprogress.com/cdp-0930-weather168-jpg/image\\_77f826dc-66fd-11e5-bacb-97fe1ed460ad.html](https://dailyprogress.com/cdp-0930-weather168-jpg/image_77f826dc-66fd-11e5-bacb-97fe1ed460ad.html))*
3. *Rivanna River at Highway 250 bridge (“Free Bridge”) following May 30, 2018 storm. Albemarle County is on the left side of the river in this photo. Credit: Skyclad Aerial.*

## Table of Contents

Introduction and Background .....	4
About Albemarle County .....	4
Flood Resilience Planning – A Convergence of Priorities.....	4
Scope of Work.....	6
Assessment of Capacity Needs and Assets .....	6
Goals and Objectives.....	7
Stakeholder Identification, Outreach, and Education Strategies .....	8
Implementation Plan and Timelines .....	10
Responsible Party.....	10
Performance Outputs and Measures.....	10
Building and Maintaining Capacity .....	11
Budget Narrative.....	14
Estimated Total Project Cost.....	14
Amount of Funds Requested from the Fund .....	15
Amount of Cash Funds Available .....	15
Appendices.....	16
Appendix A: Application Form .....	17
Appendix B: Authorization to Request Funding.....	21
Appendix C: Supporting Documentation .....	22
Appendix D: Scoring Criteria for Capacity Building & Planning .....	23
Appendix E: Checklist All Categories.....	26
Appendix F: Letters of Support .....	27

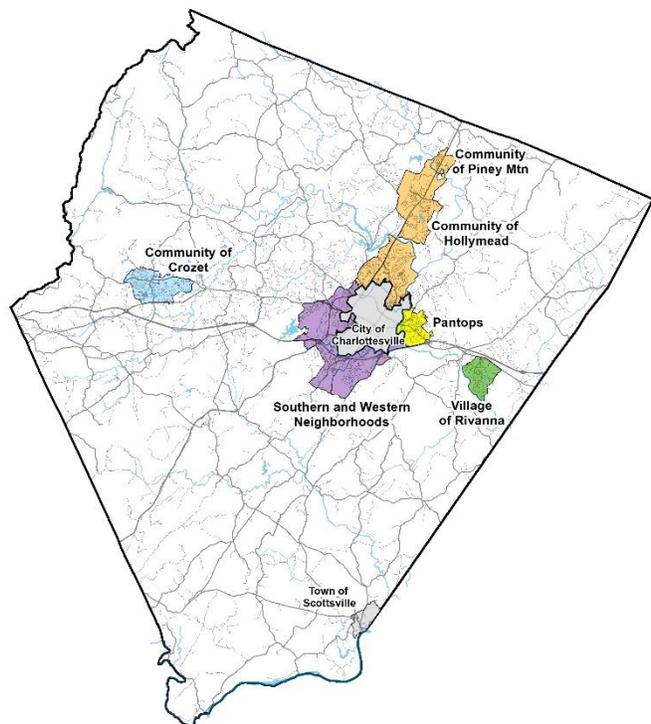
## Introduction and Background

Albemarle County is committed to developing a **flood resilience plan** over the course of fiscal year 2023. Our ambition to do this is driven by the alignment of several related priorities that include climate action and drainage infrastructure improvements, described in the following sections. But like many localities, we are constrained by limited resources. While we typically have the funding and staffing necessary to implement and develop our major programs, this is not necessarily the case for emerging demands – such as flood resilience planning. In addition to requiring more staff *capacity* to take on the development of a flood resilience plan, we also lack some of the internal technical expertise required for this type of endeavor.

Therefore, we are grateful for this opportunity to receive grant support from DCR’s Community Flood Preparedness Fund (CFPF) that would allow the County to immediately move forward with this matter of increasing importance and urgency.

### About Albemarle County

At 726 square miles, Albemarle County is one of the largest counties in Virginia. As early as 1971, the Albemarle County Board of Supervisors (Board) began establishing growth areas with the intent of focusing new development to create quality living areas, avoid sprawl, improve access to services, and protect the remaining rural areas. Today, the Development Areas – designated by the Comprehensive Plan and shown in the figure on the right – make up approximately five percent of the county’s geographic area, or 35 square miles. The other 95% of the County is rural and exurban in nature.



### Flood Resilience Planning – A Convergence of Priorities

As indicated in the introduction, Albemarle County is engaged in several initiatives that converge at the commencement of flood resilience planning. Two programs in particular – climate protection and drainage infrastructure – are identified as key priorities in the Board’s Strategic Plan for fiscal years 2020 – 2023.

**Climate Protection Program** – In 2019, the Board adopted community-wide greenhouse gas emission reduction targets. These targets include a 45% reduction from 2008 emission levels by 2030 and achieving zero net emissions by 2050. In 2020, the Board adopted the County’s first Climate Action Plan, developed by staff with significant contributions from residents and other community stakeholders. The Climate Action Plan defines objectives and action areas to meet the emission reduction targets and contribute towards the mitigation of global climate change.

The Climate Action Plan also commits to developing a climate adaptation and resilience plan to prepare the community and County operations for the inevitable intensification of rainfall, heat, drought, and other local manifestations of climate change. The County’s Comprehensive Plan, adopted in 2015, also calls for the development of a climate resilience plan. Staff are currently working with a consultant – fully supported by a local benefactor – to prepare a climate vulnerability assessment, the first step in developing a resilience plan. The assessment is expected to be completed by June 2022. Much of this assessment is devoted to the evaluation of the increasing risk of flooding due to climate change.

**Drainage Infrastructure Program** – Out of a concern about the condition of aging drainage infrastructure – particularly in the County’s Development Areas, where it is ubiquitous and interconnected – the Board has directed staff to explore a program to proactively manage this infrastructure. Staff have so far invested in creating a GIS-map of this infrastructure and video-assessing a portion large enough to make sound estimates of long-term maintenance costs. However, absent from the current exploration is an analysis of the *adequacy* of this urban drainage system. We do not have a sense of conveyance deficiencies and flood risks.



**Flood Study for Branchlands Neighborhood** – The County recently received news that it will receive funding assistance from the Federal Emergency Management Agency (FEMA) through the 2020 Building Resilient Infrastructure and Communities (BRIC) grant program. This anticipated grant will support the development of a flood study for a particular urban area that is believed to be at elevated flood risk. The study will include the development of a flood model for the 770-acre watershed and the identification of flood mitigation projects to reduce the risks.

Together, these programs provide a logical path towards – and a sound foundation for – a community-wide flood resilience planning effort. The soon-to-be completed climate vulnerability assessment is a prerequisite to resilience planning, including flood resilience. The County’s drainage improvement program will be significantly informed by the flood risks and mitigation projects identified by a flood resilience plan. And the Branchlands neighborhood flood study will allow for a sharper focus within an area of particular concern – both complementing the broader County-wide flood resilience plan and benefitting from its context.

Additionally, an obvious motivation for the County is to receive DCR approval of a flood resilience plan so that we will be eligible to submit future CFPF grant applications in the Project category, furthering the County’s ability to implement capital projects and initiatives identified in the flood resilience plan.

## Scope of Work

With the climate vulnerability assessment scheduled to be completed by June 2022 (comprising steps 1 and 2 in the adjacent image from the [U.S. Climate Resilience Toolkit](#)), the County is prepared to begin the next steps of developing a *climate* resilience plan – **investigate options** and **prioritize and plan**, steps 3 and 4.

The proposed flood resilience plan would be a major component of the climate resilience plan, and we envision these being developed in a single, coordinated process.



## Assessment of Capacity Needs and Assets

The County currently employs numerous staff in key roles who are proposed to be involved with this project, including:

- Irtefa Binte-Farid – Coordinator for Equity and Accountability
- Gabe Dayley\* – Climate Protection Program Manager
- Serena Gruia – Public Engagement Coordinator
- Greg Harper\*, P.E. – Chief of Environmental Services
- John Oprandy – Deputy Chief, Emergency Management (Fire Rescue)
- Frank Pohl, P.E. – County Engineer and Certified Floodplain Manager
- Laurel Williamson\* – Watershed Stewardship Manager

*\* staff of Environmental Services Division*

Nonetheless, these staff do not have the current capacity necessary to successfully administer a planning initiative of this scale and within the desired timeframe. Each of the staff members listed above manage a large portfolio of projects. While they will contribute valuable knowledge and skills to the planning process, extra help with resilience planning project management is sorely needed. The County is therefore requesting CFPF support for hiring a qualified person in a temporary, full-time position to coordinate the overall process of developing a flood resilience plan. This person would work most directly with Gabe Dayley, the Climate Protection Program Manager.

In addition, although the existing staff listed above have a reasonable level of knowledge within their areas of expertise, the goals, strategies, and nature-based projects of the adopted plan will be sounder and more comprehensive with support from risk and resilience planning specialists. To this end, we also request CFPF funding to allow the County to secure technical assistance.

Finally, the best resilience plan will result from a planning process that centers equity and inclusive community engagement. We have identified two gaps in capacity in this regard that grant funds will allow us to fill. First, localities across the country have recognized the need for paid equity advisory groups comprised of residents who are often excluded from planning processes; such groups play a critical role in outreach to historically marginalized groups and in vetting strategies that local

government staff develop.<sup>1</sup> Second, the success of such equity advisory groups hinges on adequate and appropriate training in understanding climate change; beyond compensation, this training builds the capacity of participants to engage in the process meaningfully. We include items in our budget to meet these needs for a robust, equity-centered flood resilience plan.

## Goals and Objectives

The overall **goal** of the proposed planning effort is to better prepare the Albemarle community for future extreme storms driven by climate change by reducing risks to personal health and safety, to community wellbeing, and to property. This will be accomplished through the development and implementation of a county-wide flood resilience plan that is generally consistent with guidance provided in the *Grant Manual, Appendix G: Elements of Resilience Plans* (repeated in adjacent text box).

Staff envision the plan incorporating the following **objectives**:

- covers the entire county jurisdiction – Development Areas and Rural Areas
- includes the engagement of local partners and stakeholders, including the City of Charlottesville, the Town of Scottsville, and the Virginia Department of Transportation
- emphasizes strengthening resilience among frontline communities, at-risk groups, lower-income areas, and communities of color
- includes considerable opportunities for community input – through the formation of a stakeholder advisory group and through broad community engagement
- considers and attempts to address historic and existing community inequities
- utilizes and builds on available science, technologies, local plans and analyses, and community knowledge and experiences
- identifies areas of flood risk
- identifies capital investments in infrastructure (nature-based to the extent possible) and policies and other adaptation measures to reduce the risks

### ***Elements of Resilience Plans (from CFPF Grant Manual)***

- *is project-based with projects focused on flood control and resilience*
- *incorporates nature-based infrastructure to the maximum extent possible*
- *includes considerations of all parts of a locality regardless of socioeconomics or race*
- *includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation*
- *is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps*



*Photo by Andrew Shurtleff (Daily Progress)*

<sup>1</sup> Recent examples include climate action plans developed by Richmond, VA; Portland, OR; Oakland, CA; Washington, DC; and other localities.

- integrates other County goals into risk mitigation measures, such as pollution reduction to address local and Chesapeake Bay TMDLs, enhanced native biodiversity, climate change mitigation, and providing outdoor amenities for residents



*Although the Albemarle community is fortunate in not having areas that experience significant, repetitive flood losses, there is still a history of losses across the county due to flooding – ranging from single residential lots to roadways and entire neighborhoods. County staff are aware of locations throughout the county that have experienced damages or are perceived to be at elevated risk. For instance, a very localized and extremely intense storm occurred in the vicinity of Ivy Creek in 2018 – killing two people and washing out Holkham Road, the only access to the neighborhood of Lewis Hill (see adjacent photo).*

*However, staff don't currently have a good sense of where risks are higher and could lead to greater losses – particularly in the denser Development Areas where risks may be driven by infrastructure deficiencies. One of the first steps in the development of a plan will be identifying knowledge gaps such as this.*

**Stakeholder Identification, Outreach, and Education Strategies**

As mentioned, Albemarle County’s climate resilience planning process – and flood resilience planning component – will involve robust, equitable engagement of community stakeholders, prioritizing engagement of historically marginalized communities who often lack the capacity to participate in traditional, centralized public engagement efforts (e.g., town halls at the County office building). We plan to use the results of our climate vulnerability assessment to engage in a three-pronged stakeholder engagement strategy, described below.

First, we will conduct outreach to and relationship-building with residents in areas of greater vulnerability identified in our climate vulnerability assessment, focusing on reaching residents who are lower income, communities of color, single-parent households, older populations, and other frontline communities. Our engagement of these residents will focus on asking questions about their lived experience in the community, drawing out information that is relevant to flood resilience and other climate resilience strategies. Following the example of Richmond, VA, we will ask questions at the level of people’s daily lives and do the work ourselves of translating answers into more technical information to support our planning and projects. We will leverage partnerships with community-based organizations to help us reach communities who for a variety of reasons may distrust local government.

To support this crucial element of equity-centered community engagement, we will form a group of 10-12 people to serve on an Equity Working Group of grassroots community leaders. This working group will conduct outreach to frontline and underserved communities and will help to define and vet the plan's strategies. Group members will receive stipends to compensate them for their time and ensure diverse participation. Because this approach will be new for Albemarle County, we will reach out to other localities who have used similar working group formats to help develop our protocols for the Equity Working Group (e.g., attendance expectations, compensation).<sup>2</sup>



Second, we will engage key institutional stakeholders whose operations play a role or have a stake in Albemarle County's flood resilience. Examples include Albemarle County Fire Rescue, the City of Charlottesville, Town of Scottsville, Rivanna Water & Sewer Authority, Albemarle County Service Authority, Virginia Department of Transportation, internet service providers, electric utilities, Charlottesville Gas utility, University of Virginia, and others. Our

resilience plan will reflect an understanding of the ways in which our actions to promote flood resilience will have ripple effects on our broader community and its infrastructure, and we will consider the needs, concerns, and ideas of these stakeholders (and the people they represent) when creating our strategies.

Third, we will include a traditional community engagement effort (e.g., town halls, public meetings) to reach a broad swath of interested and concerned residents.

To achieve meaningful involvement for members of the Equity Working Group, focus group participants, partner agencies, and the community as a whole, we need to ensure that participants are sufficiently knowledgeable about climate change.<sup>3</sup>

To this end, our proposed project budget also includes funds to contract with a communications consultant well-versed in climate science who can help develop and support broad community engagement and outreach materials, training activities, and focus groups.



*Photo by Andrew Shurtleff (Daily Progress)*

---

<sup>2</sup> This model was piloted in Virginia by the [Richmond 300 Master Plan](#) and [RVAgreen 2050 climate action planning process](#). Other localities across the country have piloted similar approaches, such as Washington, DC's [Clean Energy Plan](#) and Oakland, CA's Equitable [Climate Action Plan](#).

<sup>3</sup> See the following EPA glossary for a definition of "meaningful involvement": [EJ 2020 Glossary | US EPA](#)

## Implementation Plan and Timelines

Staff estimate that the entire process to develop a flood resilience plan – in coordination with the effort to develop a broader *climate* resilience plan – will take approximately 12 months, based on the following list of tasks and approximate date ranges.

Task	Date
Document existing social, economic, natural, and other conditions present in Albemarle County	completed
Review flood vulnerabilities, risks, and stressors, both natural and social	completed
Inventory & review of existing County and regional plans, policies, & programs that may influence Flood Resilience Plan (e.g., Comp Plan, Hazard Mitigation Plan, ordinances, dam safety program, TMDL Action Plans)	July 2022
Building on CVA, utilize FEMA's Hazus or comparable tool(s) to create model and identify flooding risks and hotspots	July – Sept
Utilize Hazus, GIS, and other tools to identify potential nature-based projects to mitigate flood risks and other adaptation measures	Aug – Oct
Form Equity Working Group (EWG) through an application and review process	Aug – Sept
Train EWG in principles of climate adaptation and resilience and equity-centered community engagement	Sept – Oct
Facilitate focus groups to explore identified risks and potential projects/measures	Oct – Nov
Broad stakeholder outreach & community engagement (town halls, workshops, digital events)	Nov – Jan 2023
Distill themes from community outreach	Jan 2023
Develop <u>SMART</u> goals and actionable strategies that establish parameters for projects and measures	Jan
Refine and prioritize list of projects and measures based on goals and strategies	Feb
Collect feedback from staff, community, frontline community representatives, and EWG on draft goals, strategies, projects, and measures	Feb – Mar
Conduct Equity Impact Assessment for each project/measure	Mar
Revise and finalize goals, strategies, projects, and measures	Apr
Finalize Flood Resilience Plan	May
Present Flood Resilience Plan to Board of Supervisors	May
Submit Flood Resilience Plan to DCR	Jun
Staff training on Flood Resilience Plan	July 2023

## Responsible Party

Greg Harper – working with Gabe Dayley and other Environmental Services staff – will be the designated responsible party overseeing the plan development process.

## Performance Outputs and Measures

The output from this initiative will be a county-wide flood resilience plan that will serve as a major component of a climate resilience plan. These two plans will be developed concurrently. The flood

resilience plan will complement existing programs and initiatives by revealing currently unrecognized flood risks throughout the County and identifying projects, policies, and other mechanisms to effectively mitigate or adapt to these risks.

A successful project will have the following characteristics:

- the plan is consistent with DCR’s guidance on plan elements and is ultimately approved by DCR
- the plan is developed through a process involving key stakeholders and the community at-large, prioritizing the engagement of historically marginalized communities
- the plan development process does not overstretch the current capacity limits of County staff
- the plan development process merges well with the broader process of developing a climate resilience plan
- the plan outcomes (i.e., project and policies) are clear, constructive, and practical and can be easily integrated into existing County programs and plans
- the plan is developed to the satisfaction of the Albemarle County Board of Supervisors

The following table presents a logic model for the County’s flood resilience planning process. This model will guide project design, monitoring, and evaluation. A similar logic model will guide the County’s overall climate resilience planning. Some elements of this logic model (e.g., goals and impacts) will be refined during the planning process through input from additional staff and community engagement.

**Flood Resilience Planning Logic Model**

Inputs	Activities	Outputs	Outcomes	Goals/Impacts
People <ul style="list-style-type: none"> <li>• County staff</li> <li>• broad community</li> <li>• frontline community members</li> <li>• partner and stakeholder organizations</li> <li>• subject matter experts</li> </ul> Funding <ul style="list-style-type: none"> <li>• County funds</li> <li>• grants</li> <li>• partners</li> </ul> Other Resources <ul style="list-style-type: none"> <li>• County plans</li> <li>• model plans</li> <li>• best practices</li> <li>• agency resources</li> <li>• web tools</li> </ul>	<ul style="list-style-type: none"> <li>• vulnerability assessment (quantitative and qualitative)</li> <li>• community engagement (focus groups, town halls, digital)</li> <li>• staff engagement</li> <li>• partner and stakeholder engagement</li> <li>• technical analyses</li> <li>• define goals and impacts based on stakeholder input</li> <li>• draft plan with strategies and projects</li> <li>• seek feedback</li> </ul>	Flood resilience plan (within an overall climate resilience plan) with project-based strategies for building resilience.	Projects, programs, policies, and procedures that build resilience and adaptive capacity among people, the built environment, and local ecosystems to increasingly frequent and severe extreme weather events induced by climate change.	Communities, neighborhoods, infrastructure, businesses, and institutions that are resilient to and able to adapt to the impacts of extreme rainfall and flooding caused by climate change.

**Building and Maintaining Capacity**

While this grant will fill a crucial capacity gap in *developing* an innovative and actionable flood resilience plan, the County has sufficient capacity to *implement* the plan in the long-term – essentially through integrating the plan outcomes into well-resourced existing programs and processes.

Staff capacity-building and training will be an important outcome of the process. Through involvement with this project, the staff identified above – and others as appropriate – will become more knowledgeable regarding community flood risks, the adaptive and resilience measures identified through the process, any tools that may be developed as part of this process, and the policies and other mechanisms put in place to formalize the flood resilience plan. In addition, once the plan is finalized, we will conduct internal training to familiarize appropriate staff with the final Plan and ways to incorporate the elements of the Plan into their roles.

For example, staff anticipate that the resulting plan will be incorporated into existing County and regional plans, including the County’s Comprehensive Plan (currently under revision), the County’s Climate Resilience and Adaptation Plan (to be developed concurrently with the flood resilience plan), and the regional Hazard Mitigation Plan, managed by the Thomas Jefferson Planning District Commission (currently under revision).

Staff also anticipate that the identified capital projects and other outcomes of the plan will be integrated into existing programs, such as the climate protection program, the drainage infrastructure program, the Total Maximum Daily Load (TMDL) program, and small-area planning processes. Through this assimilation, the plan’s resilience and adaptation measures will be sustained by the influence, energy, and funding of these plans and programs.



One example of assimilating the flood resilience plan into an existing program relates to the drainage infrastructure program. If, for instance, a deteriorating culvert needs to be replaced (one such culvert from the recent past is shown in the adjacent image), the flood resilience plan would be referenced to determine whether the culvert is a restriction to sufficient flow and putting areas at increased flood risk. If so, the culvert would be upsized, reconfigured, or augmented with green infrastructure upstream to reduce the flood risk.

Another example relates to the County’s long-standing tradition of incorporating green infrastructure into the built environment when opportunities arise. The adjacent image depicts a project in which a simple detention basin was converted into a constructed-wetland system for better water quality treatment. The County implements projects such as this to meet TMDL-driven pollution reduction requirements but also voluntarily in the spirit of the County’s vision and values relating to environmental protection. The nature-based projects that will be identified in the flood resilience plan will provide additional inspiration for future projects.

While implementation of the flood resilience plan will be sustained through its integration into existing programs, the County also intends to advance implementation by using the flood resilience plan in the future to support grant applications to the CFPF and other external funding sources.

Outside local government, we also expect our equitable and inclusive planning process to build the capacity of our community members to participate in flood and climate resilience efforts. The process will therefore yield ripple-effect benefits in the community beyond the direct outputs of the plan itself.



## Budget Narrative

**Estimated Total Project Cost** – We estimate that the total cost of this project is **\$213,750**. This total includes costs to hire a new temporary staff person, a subject-matter consultant, a communications consultant, and stipends for 12 Equity Working Group members. This total does *not* include any costs associated with existing County staff who will also be working on the project. The level of effort needed to implement each project task is quantified as hours and costs in the table below, divided up among the various project players.

TASKS	HOURS				
	Existing Staff	New Temp Staff	Subject-Matter Consultant	Communi-cations Consultant	Equity Working Group
Document existing social, economic, natural, and other conditions present in Albemarle County	Completed as part of Climate Vulnerability Assessment (CVA)				
Review flood vulnerabilities, risks, and stressors, both natural and social	Nearly complete, as part of CVA				
Inventory & review of existing County and regional plans, policies, & programs that may influence Flood Resilience Plan (e.g., Comp Plan, Hazard Mitigation Plan, ordinances, dam safety program, TMDL Action Plans)	10	40	10		
Building on CVA, utilize FEMA's Hazus or comparable tool(s) to create model and identify flooding risks and hotspots	20	20	250		
Utilize Hazus, GIS, and other tools to identify potential nature-based projects to mitigate flood risks and other adaptation measures	20	20	100		
Form Equity Working Group (EWG) through an application and review process	80	80			
Train EWG in principles of climate adaptation and resilience and equity-centered community engagement	20	80		40	60
Facilitate focus groups to explore identified risks and potential projects/measures	40	100	20	40	200
Broad stakeholder outreach & community engagement (town halls, workshops, digital events)	40	100		100	400
Distill themes from community outreach	10	40		20	100
Develop <b>SMART</b> goals and actionable strategies that establish parameters for projects and measures	10	50	20	20	200
Refine and prioritize list of projects and measures based on goals and strategies	10	50	80	20	200
Collect feedback from staff, community, frontline community representatives, and EWG on draft goals, strategies, projects, and measures	40	80			200
Conduct Equity Impact Assessment for each project/measure	20	40			200
Revise and finalize goals, strategies, projects, and measures	20	40	60		300
Finalize Flood Resilience Plan	40	150			
Present Flood Resilience Plan to Board of Supervisors	8	20			
Submit Flood Resilience Plan to DCR		20			
Staff training on Flood Resilience Plan	120	40			
Additional project management & coordination	20	80	50		
Estimated HOURS	528	1050	590	240	1860
Estimated RATES* (per hour)		\$45	\$150	\$150	
Equity Working Group STIPEND (per member)					\$3,500
# of Equity Working Group members					12
Subtotals	n/a	\$47,250	\$88,500	\$36,000	\$42,000
*New Temp Staff rate includes salary + 30% fringe				<b>Total Project Cost</b>	<b>\$213,750</b>

**Amount of Funds Requested from the Fund** – We request **\$160,313** from the CFPF, which reflects 75% of the estimated total project cost shown above. We propose that these CFPF grant funds be allocated as such:

Budget Category	CFPF Budget	Notes
Salary (New Temp Staff)	\$33,075	CFPF covers New Temp Staff costs
Fringe (New Temp Staff)	\$14,175	
Contractual	\$71,063	CFPF covers <b>portion</b> of consultant costs
Stipends (Equity Working Group)	\$42,000	CFPF covers Equity Working Group stipends
<b>TOTAL:</b>	<b>\$160,313</b>	

**Amount of Cash Funds Available** – Albemarle County will provide **\$53,438** in cash match to cover the 25% remainder of the estimated total project cost. See **Appendix B** for assurance of matching cash funds available. The County’s matching funds will be provided through two budgets – an operating budget associated with the climate protection program and a capital budget associated with the drainage infrastructure program.

## Appendices

Appendix A: Application Form

**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:

County of Albemarle, Virginia

Category of Grant Being Applied for (check one):

Capacity Building/Planning

Project

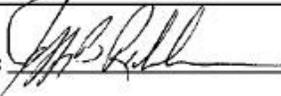
Study

NFIP/DCR Community Identification Number (CID) 510006

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

Name of Authorized Official: Jeffrey B. Richardson, County Executive

Signature of Authorized Official:



Mailing Address (1): Albemarle County

Mailing Address (2): 401 McIntire Drive

City: Charlottesville State: VA Zip: 22902

Telephone Number: (434) 296-5841 Cell Phone Number: ( )

Email Address: jrichardson3@albemarle.org

Application Form CFPPF| 1-A

Contact Person (If different from authorized official): Greg Harper, PE

Mailing Address (1): Albemarle County, Dept. of Facilities and Environmental Services

Mailing Address (2): 401 McIntire Drive

City: Charlottesville State: VA Zip: 22902

Telephone Number: (434) 296-5816 Cell Phone Number: (434) 996-0880

Email Address: gharper@albemarle.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.

Application Form CFPF] 2-A

**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):** extent of Albemarle County

**NFIP Community Identification Number (CID#):**(See appendix F 510006)

Application Form CFPF| 3-A

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): various

Flood Insurance Rate Map Number(s) (If Applicable): plan will cover entire County (+50 maps)

Total Cost of Project: \$213,750

Total Amount Requested \$160,313

Application Form CFPF| 4-A

## Appendix B: Authorization to Request Funding



County of Albemarle  
County Executive Office

Tel: 434-296-5841  
Fax: 434-296-5800

April 6, 2022

Virginia Department of Conservation and Recreation  
Attention: Virginia Community Flood Preparedness Fund  
Division of Dam Safety and Floodplain Management  
600 East Main Street, 24th Floor  
Richmond, Virginia 23219

### **RE: Authorization to Request Funding / Assurance of County Matching Funds**

To Whom it May Concern,

Albemarle County is pleased that Virginia has joined the Regional Greenhouse Gas Initiative (RGGI) and is grateful for the opportunity to submit this application as part of the **third round** of the Community Flood Preparedness Fund grant funding made possible by RGGI.

The enclosed grant application is to seek **\$160,313 in CFPF support** for developing a flood resilience plan for Albemarle County. This funding support is particularly timely. A climate vulnerability assessment for Albemarle County will be completed in the next several months and we intend to promptly move into the next phase of climate resilience planning. We envision the flood resilience plan being a major component of a comprehensive *climate* resilience plan. In addition, our drainage maintenance program – which we have been developing for the last couple of years – will be greatly informed by a flood resilience plan.

Our total estimated project budget is \$213,750. Per the grant application process, I hereby confirm that the County has identified the necessary funds for the required match of \$53,438. This funding presently exists in two budgets – an *operating* budget associated with our climate protection program and a *capital* budget associated with our drainage infrastructure program. These funds have already been appropriated by the County Board of Supervisors and can be utilized at the discretion of staff for uses consistent with the appropriation language.

We look forward to the Virginia Department of Conservation and Recreation's support in moving our community towards greater flood resiliency in a strategic, inclusive, and equitable manner.

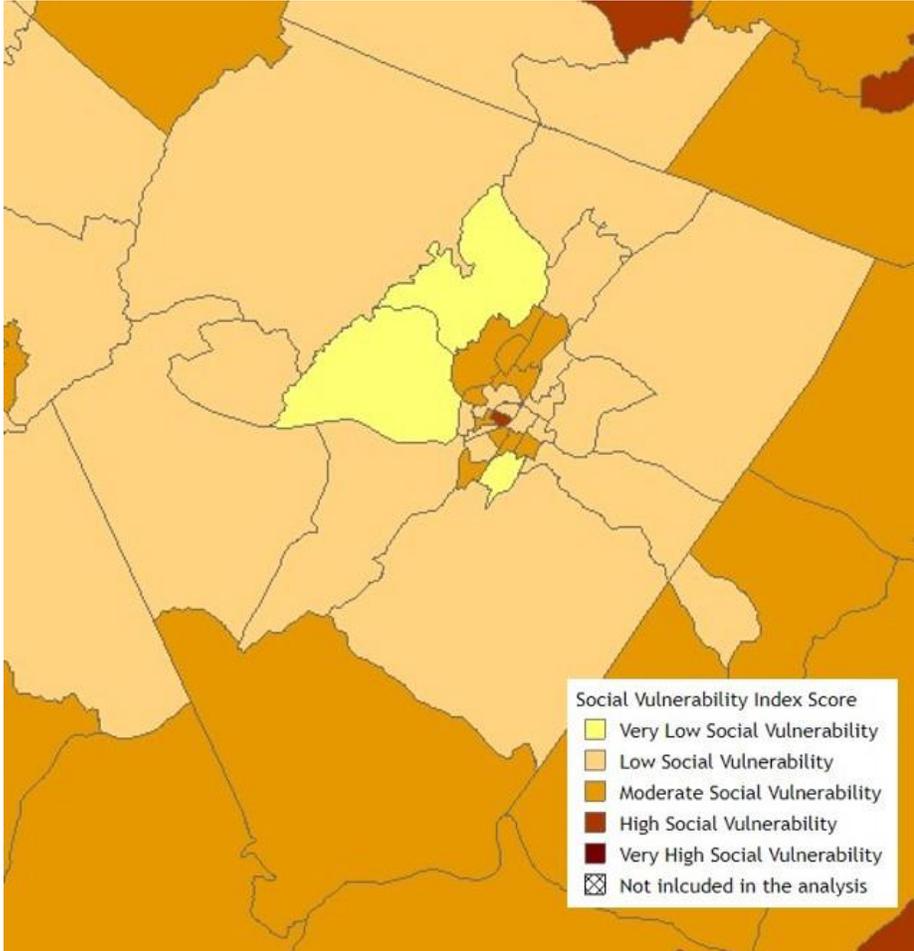
Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey B. Richardson".

Jeffrey B. Richardson  
County Executive

jbr22-003

## Appendix C: Supporting Documentation

<p>Albemarle County Floodplain Ordinance</p>	<p>The County’s floodplain ordinance is codified in the following ordinance sections:</p> <ul style="list-style-type: none"> <li>• <a href="#">Zoning Ordinance Section 30.3</a> – Flood Hazard Overlay District</li> <li>• <a href="#">Subdivision Ordinance Section 14-308</a> - Floodplain and topographic information; information to demonstrate that damage from flooding will be minimized</li> </ul>
<p>Hazard Mitigation Plan</p>	<p>The <a href="#">Natural Hazard Mitigation Plan</a> is developed at a regional level by the Thomas Jefferson Planning District Commission. This Plan was last adopted in 2018 and is currently under revision.</p>
<p>Albemarle County Comprehensive Plan</p>	<p>The County’s <a href="#">Comprehensive Plan</a> was last adopted in 2015 and is currently under revision.</p>
<p>Social vulnerability index score(s) for the project area</p>	<p>The social vulnerability index scores range across the county from <i>very low</i> to <i>moderate</i> (see image below), with the majority of the County being <i>low</i>.</p> 

Appendix D: Scoring Criteria for Capacity Building & Planning

Applicant Name:	County of Albemarle, Virginia	
Eligibility Information		
Criterion	Description	Check One
<b>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)?</b>		
Yes	Eligible for consideration	XX
No	Not eligible for consideration	
<b>2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?</b>		
Yes	Eligible for consideration under all categories	
No	Eligible for consideration for studies, capacity building, and planning only	XX
<b>3. If the applicant is <u>not</u> a town, city, or county, are letters of support from all affected local governments included in this application?</b>		
Yes	Eligible for consideration	N/A
No	Not eligible for consideration	
<b>4. Has this or any portion of this project been included in any application or program previously funded by the Department?</b>		
Yes	Not eligible for consideration	
No	Eligible for consideration	XX
<b>5. Has the applicant provided evidence of an ability to provide the required matching funds?</b>		
Yes	Eligible for consideration	XX
No	Not eligible for consideration	
N/A	Match not required	

Capacity Building and Planning Eligible for Consideration		Yes	No
Applicant Name:	County of Albemarle, Virginia		
Scoring Information			
Criterion	Point Value	Points Awarded	
<b>6. Eligible Capacity Building and Planning Activities (Select all that apply)</b>			
Revisions to existing resilience plans and <u>modifications to existing comprehensive and hazard mitigation plans</u> . (Note: proposed flood resilience plan will be used to inform updates to the County's Comprehensive Plan and the regional Hazard Mitigation Plan.)	55	55	
Development of a <u>new</u> resilience plan.	55	55	
Resource assessments, planning, strategies, and development. (Note: intended to be outcomes of proposed flood resilience planning process.)	45	45	
Policy management and/or development. (Note: intended to be outcomes of proposed flood resilience planning process.)	40	40	
Stakeholder engagement and strategies. (Note: will be part of the proposed flood resilience planning process.)	25	25	
Goal planning, implementation, and evaluation. (Note: intended to be outcomes of proposed flood resilience planning process.)	25	25	
Long term maintenance strategy.	25	25	
Other proposals that will significantly improve protection from flooding on a statewide or regional basis.	15	n/a	
<b>7. Is the area within the local government to which the grant is targeted socially vulnerable? (Based on <a href="#">ADAPT VA's Social Vulnerability Index Score.</a>)</b>			
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	2	
Low Social Vulnerability (-1.0 to 0.0)	0	0	
Very Low Social Vulnerability (Less than -1.0)	0	0	
<b>8. Is the proposed activity part of an effort to join or remedy the community's probation or suspension from the NFIP?</b>			
Yes	10		
No	0	0	

<b>9. Is the proposed project in a low-income geographic area as defined in this manual?</b>		
Yes	<b>10</b>	
No	<b>0</b>	<b>0</b>
<b>10. Does this project provide “community scale” benefits?</b>		
Yes	<b>20</b>	<b>20</b>
No	<b>0</b>	
<b>Total Points</b>		<b>292</b>

**Appendix E: Checklist All Categories**

Scope of Work Narrative	
Supporting Documentation	Included
Detailed map of the project area(s) (Projects/Studies)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
FIRMette of the project area(s) (Projects/Studies)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Historic flood damage data and/or images (Projects/Studies)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Social vulnerability index score(s) for the project area from <a href="#">ADAPT VA's Virginia Vulnerability Viewer</a>	<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

## Appendix F: Letters of Support

CITY OF CHARLOTTESVILLE  
*"A World Class City"*

Post Office Box 911  
Charlottesville, Virginia 22902  
Telephone 434-970-3101  
Fax 434-970-3890  
[www.charlottesville.gov](http://www.charlottesville.gov)



April 7, 2022

Virginia Department of Conservation and Recreation  
Attention: Virginia Community Flood Preparedness Fund  
Division of Dam Safety and Floodplain Management  
600 East Main Street, 24th Floor  
Richmond, Virginia 23219

To Whom it May Concern,

The City of Charlottesville expresses its support of Albemarle County's Community Flood Preparedness Fund (CFPF) grant application to develop a flood resilience plan, as part of its larger climate resilience endeavors.

Local watersheds span across many jurisdictional boundaries and both Albemarle County and the City of Charlottesville are committed stewards of these systems. As such, the City will be an interested and active stakeholder in the development of the County's flood resilience plan and how it may inform our own flood resiliency efforts. The City and County are frequent and seasoned partners, especially when it comes to watershed planning, stormwater management, and climate action. This long history of regional partnership will continue in this new era of flood and climate resilience work.

We believe that Albemarle County has laid out a robust process for developing a flood resilience plan. As it is for the City of Charlottesville, CFPF funding will be crucial for providing the resources necessary to create a thorough and inclusive plan in a timely manner.

We encourage DCR to approve Albemarle County's application for CFPF funding and look forward to working together with the County.

Sincerely,

A handwritten signature in black ink that reads "Andrea Henry".

Andrea Henry, PE  
City of Charlottesville  
Water Resources Protection Administrator



# TOWN OF SCOTTSVILLE

VICTORY HALL  
401 VALLEY STREET  
SCOTTSVILLE, VIRGINIA 24590

*Town Administrator*  
MATTHEW R. LAWLESS  
*Town Clerk*  
JAVIER A. RAUDALES  
*Town Attorney*  
JAMES M. BOWLING IV

TELEPHONE: (434) 286-9267  
FACSIMILE: (434) 286-4237  
[www.scottsville.org](http://www.scottsville.org)

*Mayor*  
RONALD L. SMITH  
*Town Council*  
ALEX BESSETTE  
ZACHARY BULLOCK  
MEREDITH HYNES  
R. DANIEL GRITSKO  
STUART MUNSON  
EDWARD PAYNE

April 4, 2022

Virginia Department of Conservation and Recreation  
Community Flood Preparedness Fund  
Richmond

Dear grant review team,

Please accept for your consideration this letter of support from the Town of Scottsville, with regard to the Albemarle County application for the Community Flood Preparedness Fund. The County's proposal for flood resilience planning has substantial benefits to the Town of Scottsville, and we commend the work of the County staff on this project.

The County proposal applies industry best practices to an urgent need, where existing capacity is weak.

The Town is currently working on a grant from this program, awarded in the December round, to update our obsolete floodplain maps. The County's proposal enhances our work and extends it to a much larger service area, over 700 square miles. The resilience plan takes a wider view of both prevention and response priorities, and it connects the disciplines of emergency management and climate science, which suffer from silo thinking.

The County plan will have direct benefits to the Town of Scottsville. Most notably, it will assess aging urban drainage infrastructure. No such study exists for the historical stormwater system in town. The plan is also notable for its very deliberate equity lens. Infrastructure in town has never before been studied this way. I am eager to support a process of inclusive outreach and community engagement.

Please feel free to contact me with any questions about the project, or if I can be of other assistance.

Respectfully,

Matthew Lawless  
Town Administrator



CFPF, rr &lt;cfpf@dcr.virginia.gov&gt;

---

**Albemarle County - CFPF Application Submittal (Round 3)**

2 messages

**Laurel Williamson** <lwilliamson2@albemarle.org>

Thu, Apr 7, 2022 at 4:49 PM

To: "CFPF, rr" &lt;cfpf@dcr.virginia.gov&gt;

Cc: Greg Harper &lt;gharper@albemarle.org&gt;, Gabe Dayley &lt;gdayley2@albemarle.org&gt;

To Whom it May Concern,

Albemarle County is pleased to submit this application to the Virginia Department of Conservation and Recreation for grant support from the Community Flood Preparedness Fund (Round 3). Attached you will find a PDF document that includes all the necessary elements of a CFPF application in the "Capacity Building and Planning" category, as described in the grant manual.

I wanted to note that we submitted an application in the last round, but it apparently got lost and wasn't reviewed. So to be safe, could you please confirm that you have received the application?

We greatly appreciate this opportunity!

Sincerely,

Laurel

**Laurel Williamson** (she/her)*Watershed Stewardship Manager**Facilities & Environmental Services Department*[Albemarle County](#)[lwilliamson2@albemarle.org](mailto:lwilliamson2@albemarle.org)

434-296-5816 x3411

[401 McIntire Road, Charlottesville, VA 22902](#)

---

 **CID510006\_AlbemarleCounty\_CFPF.pdf**  
2854K**CFPF, rr** <cfpf@dcr.virginia.gov>

Fri, Apr 8, 2022 at 10:31 AM

To: Laurel Williamson &lt;lwilliamson2@albemarle.org&gt;

Received. Thank you for the resubmittal.

[Quoted text hidden]