

3754 - Bottom Road Floodplain Restoration and Green Sink Project

Application Details

Funding Opportunity:

3293-Virginia Community Flood Preparedness Fund - Project Grants - CY25 Round 6

Funding Opportunity Due Date: Dec 1, 2025 11:59 PM

Program Area: Virginia Community Flood Preparedness Fund

Status: Under Review

Stage: Final Application

Initial Submit Date: Dec 1, 2025 5:35 PM

Initially Submitted By: Bethany Whitfield

Last Submit Date:

Last Submitted By:

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

Name*: Mrs. Bethany Middle Name Whitfield
Salutation First Name Last Name

Title: Manager, Proposal Management Office

Email*: bwhitfield@res.us

Address*: 1408 Roseneath Rd
Suite B

Richmond Virginia 23230
City State/Province Postal Code/Zip

Phone*: 989-709-8428 Ext.
Phone
###-###-####

Fax: ###-###-####

Comments:

Organization Information

Status*: Approved

Name*: Tazewell County

Organization Type*: Local Government

Tax ID*: 54-6001649

Unique Entity Identifier (UEI)*: K7EPDEL2B141

Organization Website:

Address*: 197 Main Street

Phone*: Tazewell Virginia 24651-
City State/Province Postal Code/Zip
(276) 385-1208 Ext.
###-###-####

Fax: ###-###-####

Benefactor:

Vendor ID:

Comments:

VCFPF Applicant Information

Project Description

Name of Local Government*: Tazewell County

Your locality's CID number can be found at the following link: [Community Status Book Report](#)

NFIP/DCR Community Identification Number (CID)*: 510160

If a state or federally recognized Indian tribe,

Name of Tribe:

Authorized Individual*: Eric Young
First Name Last Name

Mailing Address*: 197 Main Street
Address Line 1
Address Line 2
Tazewell Virginia 24651
City State Zip Code

Telephone Number*: 276-385-1208

Cell Phone Number*: 276-385-1208

Email*: eyoung@tazewellcounty.org

Is the contact person different than the authorized individual?

Contact Person*: No

Enter a description of the project for which you are applying to this funding opportunity

Project Description*:

Tazewell County's Bottom Road Flood Study (CFPF-24-04-61) identified chronic flooding from the Clinch River in the Doran Community along Bottom Road and Raven Road. The proposed Bottom Road Floodplain Restoration and Green Sink Project will restore 1,800 feet of stream, create a flood retention pond with automated controls, and enhance public safety, flood resilience, and habitat, aligning with the 2023 Flood Resilience Plan's mitigation goals.

Low-income geographic area means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

Is the proposal in this application intended to benefit a low-income geographic area as defined above?

Benefit a low-income geographic area*: Yes

Information regarding your census block(s) can be found at census.gov

Census Block(s) Where Project will Occur*: Census Tract 206

Is Project Located in an NFIP Participating Community?* Yes

Is Project Located in a Special Flood Hazard Area?* Yes

Flood Zone(s) (if applicable): Zone AE

Flood Insurance Rate Map Number(s) (if applicable): 51185C0303D and 51185C0304D

Eligibility CFPF - Round 4 - Projects

Eligibility

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)?

Local Government*: Yes
Yes - Eligible for consideration
No - Not eligible for consideration

Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?

Resilience Plan*: Yes
Yes - Eligible for consideration under all categories
No - Eligible for consideration for studies, capacity building, and planning only

If the applicant is not a town, city, or county, are letters of support from all affected local governments included in this application?

Letters of Support*: Yes
Yes - Eligible for consideration
No - Not eligible for consideration
N/A - Not applicable

Has this or any portion of this project been included in any application or program previously funded by the Department?

Previously Funded*: No
Yes - Not eligible for consideration
No - Eligible for consideration

Has the applicant provided evidence of an ability to provide the required matching funds?

Evidence of Match Funds*: Yes
Yes - Eligible for consideration
No - Not eligible for consideration
N/A - Match not required

Scoring Criteria for Flood Prevention and Protection Projects - Round 4

Scoring

Category Scoring:

Hold CTRL to select multiple options

Project Category*:

Floodplain restoration, Restoration of floodplains to natural and beneficial function

Is the project area socially vulnerable? (based on ADAPT Virginia's Social Vulnerability Index Score)

Social Vulnerability Scoring:

Very High Social Vulnerability (More than 1.5)

High Social Vulnerability (1.0 to 1.5)

Moderate Social Vulnerability (0.0 to 1.0)

Low Social Vulnerability (-1.0 to 0.0)

Very Low Social Vulnerability (Less than -1.0)

Socially Vulnerable*: Moderate Social Vulnerability

Is the proposed project part of an effort to join or remedy the community's probation or suspension from the NFIP?

NFIP*: No

Is the proposed project in a low-income geographic area as defined below?

"Low-income geographic area" means any locality, or community within a locality, that has a median household income that is not greater than 80 percent of the local median household income, or any area in the Commonwealth designated as a qualified opportunity zone by the U.S. Secretary of the Treasury via his delegation of authority to the Internal Revenue Service. A project of any size within a low-income geographic area will be considered.

Low-Income Geographic Area*: Yes

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?

Reduction of Nutrient and Sediment Pollution*: Yes

Does this project provide “community scale” benefits?

Community Scale Benefits*: More than one census block

Expected Lifespan of Project

Expected Lifespan of Project*: Over 20 Years

Comments:

Scope of Work - Projects - Round 4

Scope of Work

Upload your Scope of Work

Please refer to Part IV, Section B. of the grant manual for guidance on how to create your scope of work

Scope of Work*: CID510160_Tazewell County_CFPF-6_SOW_Bottom Road.pdf

Comments:

Budget Narrative

Budget Narrative Attachment*: CID510160_CFPF Round 6_Budget Narrative_Bottom Road.pdf

Comments:

Scope of Work Supporting Information - Projects

Supporting Information - Projects

Provide population data for the local government in which the project is taking place

Population*: 2270.00

Provide information on the flood risk of the project area, including whether the project is in a mapped floodplain, what flood zone it is in, and when it was last mapped. If the property or area around it has been flooded before, share information on the dates of past flood events and the amount of damage sustained

Historic Flooding data and

Hydrologic Studies*:

CID510160_CFPF Round 6_Historic Flooding data and Hydrologic Studies_Bottom Road.pdf

Include studies, data, reports that demonstrate the proposed project minimizes flood vulnerabilities and does not create flooding or increased flooding (adverse impact) to other properties

No Adverse Impact*: CID510160_CFPF Round 6_No Adverse Impacts_Bottom Road.pdf

Include supporting documents demonstrating the local government's ability to provide its share of the project costs. This must include an estimate of the total project cost, a description of the source of the funds being used, evidence of the local government's ability to pay for the project in full or quarterly prior to reimbursement, and a signed pledge agreement from each contributing organization

Ability to Provide Share of

Cost*:

CID510160_Tazewell County_Letter of Authorization and Match for Bottom Road Green Sink Project.pdf

A benefit-cost analysis must be submitted with the project application

Benefit-Cost Analysis*: CID510160_CFPF Round 6_Benefit Cost Analysis_Bottom Road.pdf

If applicable, provide the Department with the current floodplain ordinance by link or attachment.

Regulations:

Provide a list of repetitive loss and/or severe repetitive loss properties. Do not provide the addresses for the properties, but include an exact number of repetitive loss and/or severe repetitive loss structures within the project area

Repetitive Loss and/or Severe

CID510160_CFPF Round 6_Rep Loss_Bottom Road.docx

Repetitive Loss Properties*:

Describe the residential and commercial structures impacted by this project, including how they contribute to the community such as historic, economic, or social value. Provide an exact number of residential structures and commercial structures in the project area

Residential and/or Commercial**Structures*:**

Overall 1,996 properties are located within the FEMA 1% Annual Chance (100-year) floodplain, the proposed Bottom Road Floodplain Restoration and Green Sink Project will reduce and potentially remove the 100-year floodplain from 299 properties if implemented. The proposed project will aim to complete design and permitting of the project to confirm the potential floodplain reductions on these 299 properties.

- Agricultural under development 20-99ac: 2
- Commercial/Industrial: 41
- Local government: 3
- Mineral land not under development: 2
- Religious: 8
- Residential: 236
- State government: 7
- Total: 299

The CFPF Round 6 grant funding will be utilized to further study and design and permit the proposed project for future implementation. The project will require acquisition or easements and properties in order to implement the project.

If there are critical facilities/infrastructure within the project area, describe each facility

Critical Facilities/Infrastructure*:

Reoccurring flood events make the Bottom Road bridge impassable which is the only ingress/egress to the Doran neighborhood leaving over 200 properties without emergency access.

Explain the local government's financial and staff resources. How many relevant staff members does the local government have? To what relevant software does the local government have access? What are the local government's capabilities?

Financial and Staff Resources*:

The ability of a local government to develop and implement flood risk reduction projects, policies, and programs is directly tied to its ability to direct staff time and resources for that purpose. As summarized below, County staff currently has limited capacity to implement flood risk reduction. There is a need for staff to implement flood risk reduction measures and for an official to conduct reviews and enforcement of the building code and flood damage prevention ordinance.

If the project proposed does not employ a nature-based or hybrid solution and the total project cost is greater than \$2 million, describe at least one alternative that could reasonably address the issue identified. Please also consider the No Action Option as a third alternative as part of the analysis. Explain these alternatives and the reason the proposed project was selected.

Alternatives:

Identify and describe the goals and objectives of the project. Include a description of the expected results of the completed project and explain the expected benefits of the project. This may include financial benefits, increased awareness, decreased risk, etc.

Goals and Objectives*:

Tazewell County was awarded the Bottom Road Flood Study (CFPF-24-04-61) in 2024 and has nearly completed the work. The study evaluated multiple alternatives to reduce flooding in the Bottom Road and Raven Road area, identifying one floodplain restoration option capable of significantly lowering flood elevations. The County is now proposing to design and permit the Bottom Road Floodplain Restoration and Green Sink Project, which is estimated to reduce 100-year base flood elevations by 2 to 3 feet for properties along both roads. CFPF Round 6 funding will support further analysis, detailed design, and permitting for future implementation, and the project will require acquisition of property or easements.

A baseline 2D hydraulic model was developed for the Clinch River and contributing tributaries and calibrated to historic flooding to understand flood extents and infrastructure constraints. Several upstream properties were evaluated as potential green sink storage areas, but modeling showed they could not provide sufficient flood reduction. One alternative, however, demonstrated meaningful benefits by redirecting flows during storm events exceeding the 1-year return interval.

The proposed solution creates an overflow channel at Kirby Road, upstream of Bottom Road and Raven Road, to capture floodwaters and route them into a wooded property south of Bottom Road. This area will be restored with a series of capture ponds that temporarily store floodwater. Restoring the bypass area will create open water, emergent, and forested wetlands, offering biodiversity and water-quality benefits in addition to flood mitigation. The project's most critical outcome is reducing base flood elevations by 2 to 3 feet, which will protect homes, roads, and infrastructure and improve safe access for residents during flood events.

Based on conceptual modeling results, the County will advance the floodplain restoration and green sink design to obtain local, state, and federal permits. Community engagement will be undertaken to build support, and the County will work with property owners to secure necessary easements or acquisitions. Detailed construction plans and specifications will be developed with grant funds to create a shovel-ready project, and implementation funding will be pursued once detailed costs are established.

Outline a plan of action laying out the scope and detail of how the proposed work will be accomplished with a timeline identifying expected completion dates. Determine milestones for the project that will be used to track progress.

Explain what deliverables can be expected at each milestone, and what the final project deliverables will be. Identify other project partners

Approach, Milestones, and Deliverables*:

CID510160_CFPF Round 6_Approach Milestones and Deliverables_Bottom Road.pdf

Where applicable, briefly describe the relationship between this project and other past, current, or future resilience projects. If the applicant has received or applied for any other grants or loans, please identify those projects, and, if applicable, describe any problems that arose with meeting the obligations of the grant and how the obligations of this project will be met

Relationship to Other Projects*:

The Bottom Road Floodplain Restoration and Green Sink Project is being developed through the Tazewell County (CID#510160) Resiliency Plan funded by the 2022 CFPF Grant Award and the Bottom Road Flood Study (CFPF-24-04-61) funded by the 2024 CFPF Grant Award. Through the resiliency study, re-occurring flood issues were identified and documented through review of historical rainfall and flooding data, analysis of existing flood mapping and studies, and community engagement. The Bottom Road Flood Study developed detailed HEC-HMS and rain on grid hydrologic studies and 2-D HEC-RAS modeling utilizing historic rain and runoff events to calibrate the model with documented flood stage observations. Through communication with the County and Town of Richlands staff and board members, privately owned properties were identified and evaluated for flood storage options to reduce or delay the flood peaks that will result in reduction to base flood elevations and floodplain limits in the Doran Community along Bottom Road and Raven Road. Implementation of the Bottom Road Floodplain

Restoration and Green Sink Project will also add ecologic biodiversity and open water recreational benefits that could be planned as part of the community park and outdoor activity area. The implementation of the project will also provide significant water quality improvements through sediment capture and treatment within the restored open water and wetland cells.

For ongoing projects or projects that will require future maintenance, such as infrastructure, flood warning and response systems, signs, websites, or flood risk applications, a maintenance, management, and monitoring plan for the projects must be provided

Maintenance Plan*: CID510160_CFPF Round 6_Maintenance Plan_Bottom Road.pdf

Describe how the project meets each of the applicable scoring criteria contained in Appendix B. Documentation can be incorporated into the Scope of Work Narrative

Criteria*:

1. Eligible Projects

The Bottom Road Floodplain Restoration and Green Sink Project is a nature-based, floodplain restoration project that includes:

- ? Creation of an overflow channel to divert floodwaters into a restored floodplain storage area.
- ? Construction of a series of capture ponds functioning as floodplain ?green sink? features.
- ? Restoration of open water, emergent, and forested wetland habitat, which directly aligns with wetland and floodplain restoration.
- ? Reduction of 100-year base flood elevations by 2-3 feet for Bottom Road and Raven Road properties through floodplain reconnection.

2. Social Vulnerability Index

The Bottom Road Floodplain Restoration and Green Sink Project is in a low-income geographic area with a moderate SVI score. This corresponds to the ?Moderate Social Vulnerability (0.0 to 1.0)? range.

3. Community Scale of Benefits

The project benefits:

- ? Two census-designated places (Raven and Doran).
- ? Residential neighborhoods (including mobile homes).
- ? Public roadway access, including the only ingress/egress route for many residents.
- ? Regional emergency and transportation connectivity.

4. Expected Lifespan of Project

Nature-based floodplain restoration and the construction of retention ponds generally provide benefits lasting well over 20 years when properly maintained. This project incorporates several long-term features that support such durability, including redesigned bridge and culvert structures, floodplain reconnection and the creation of wetland habitats that function effectively for decades, and hydrologic improvements informed by detailed 2D modeling to ensure long-term stability and performance.

5. Remedy for NFIP Probation or Suspension

The project does not remedy NFIP probation or suspension.

6. Low-Income Geographic Area

Tazewell County is a low-income area with social vulnerability concerns with flood risks posing disproportionate impacts. The project's mitigation directly improves safety and accessibility for these residents.

7. Chesapeake Bay TMDL BMP Implementation

The floodplain restoration will reduce sediment and nutrient runoff through dredging, vegetated buffers, and controlled stormwater release-qualifying as Chesapeake Bay TMDL Best Management Practices (BMPs).

Budget

Budget Summary

Grant Matching Requirement*:

LOW INCOME - Projects that will result in nature-based solutions - Fund 95%/Match 5%

Is a match waiver being requested?

Match Waiver Request No

Note: only low-income communities are eligible for a match waiver.

*:

I certify that my project is in a low-income geographic area: Yes

Total Project Amount (Request + Match)*: \$720,199.00
**This amount should equal the sum of your request and match figures

REQUIRED Match Percentage Amount: \$36,009.95

BUDGET TOTALS

Before submitting your application be sure that you meet the match requirements for your project type.

Match Percentage:

5.00%

Verify that your match percentage matches your required match percentage amount above.

Total Requested Fund Amount: \$684,189.06

Total Match Amount: \$36,009.95

TOTAL: \$720,199.01

Personnel

Description	Requested Fund Amount	Match Amount	Match Source
Personnel hours were estimated to complete the proposed scope of work and personnel budget estimated	\$451,065.34	\$23,288.52	In kind
	\$451,065.34	\$23,288.52	

Fringe Benefits

Description	Requested Fund Amount	Match Amount	Match Source
Fringe benefits associated with the personnel hours were estimated to complete the proposed scope of	\$193,313.72	\$9,980.80	In kind
	\$193,313.72	\$9,980.80	

Travel

Description	Requested Fund Amount	Match Amount	Match Source
Travel expenses were estimated based on mileage and lodging during the proposed scope of work phase.	\$15,100.00	\$2,740.63	In kind
	\$15,100.00	\$2,740.63	

Equipment

Description	Requested Fund Amount	Match Amount	Match Source
Equipment needed for geotechnical, survey, and other field assessments were estimated based on the p	\$15,360.00	\$0.00	In kind
	\$15,360.00	\$0.00	

Supplies

Description	Requested Fund Amount	Match Amount	Match Source
Supplies needed for geotechnical, survey, and other field assessments were estimated based on the pr	\$9,350.00	\$0.00	In kind
	\$9,350.00	\$0.00	

Construction

Description	Requested Fund Amount	Match Amount	Match Source
No Data for Table			

Contracts

Description	Requested Fund Amount	Match Amount	Match Source
No Data for Table			

Maintenance Costs

Description	Requested Fund Amount	Match Amount	Match Source
No Data for Table			

PreAward and Startup Costs

Description	Requested Fund Amount	Match Amount	Match Source
No Data for Table			

Other Direct Costs

Description**Requested Fund Amount****Match Amount Match Source**

No Data for Table

Long and Short Term Loan Budget - Projects - VCFPF

Budget Summary

Are you applying for a short term, long term, or no loan as part of your application?

If you are not applying for a loan, select "not applying for loan" and leave all other fields on this screen blank

Long or Short Term*: Not Applying for Loan

Total Project Amount: \$0.00

Total Requested Fund Amount: \$0.00

TOTAL: \$0.00

Salaries

Description**Requested Fund Amount**

No Data for Table

Fringe Benefits

Description**Requested Fund Amount**

No Data for Table

Travel

Description**Requested Fund Amount**

No Data for Table

Equipment

Description**Requested Fund Amount**

No Data for Table

Supplies

Description**Requested Fund Amount**

No Data for Table

Construction

Description**Requested Fund Amount**

No Data for Table

Description	Requested Fund Amount
-------------	-----------------------

Contracts

Description	Requested Fund Amount
-------------	-----------------------

No Data for Table

Other Direct Costs

Description	Requested Fund Amount
-------------	-----------------------

No Data for Table

Supporting Documentation

Supporting Documentation

Named Attachment	Required Description	File Name	Type	Size	Up D
Detailed map of the project area(s) (Projects/Studies)	Concept map for the Bottom Road Floodplain Restoration and Green Sink Project	CID510160_111835_CFPF_Concept_Map_11x17_updated.pdf	pdf	990 KB	12/04:5
FIRMette of the project area(s) (Projects/Studies)	FIRMette for the Bottom Road Floodplain Restoration and Green Sink Project	CID510160_Bottom Road FIRM 51185C0303D and 51185C0304D.png	png	1 MB	12/04:5
Historic flood damage data and/or images (Projects/Studies)					
A link to or a copy of the current floodplain ordinance	Floodplain ordinance	CID510160_Tazewell County_CFPF-6_Ordinance.pdf	pdf	225 KB	12/04:5
Maintenance and management plan for project					

Named Attachment	Required Description	File Name	Type	Size	Upload Date
A link to or a copy of the current hazard mitigation plan	Hazard Mitigation Plan	CID510160_Tazewell County_CFPF-6_HMP.pdf	pdf	13 MB	12/04/25
A link to or a copy of the current comprehensive plan					
Social vulnerability index score(s) for the project area					
Authorization to request funding from the Fund from governing body or chief executive of the local government	Authorization Letter	CID510160_Tazewell County_Letter of Authorization and Match for Bottom Road Green Sink Project.pdf	pdf	79 KB	12/04/25
Signed pledge agreement from each contributing organization					
Maintenance Plan					
<i>Benefit-cost analysis must be submitted with project applications over \$2,000,000. in lieu of using the FEMA benefit-cost analysis tool, applicants may submit a narrative to describe in detail the cost benefits and value. The narrative must explicitly indicate the risk reduction benefits of a flood mitigation project and compares those benefits to its cost-effectiveness.</i>					
Benefit Cost Analysis					
Other Relevant Attachments					

Letters of Support

Description	File Name	Type	Size	Upload Date
Letter of Support for the Bottom Road Floodplain Restoration and Green Sink Project	CID510160_Tazewell County_CFPF-6_Support Letter from County for Bottom Road Project.pdf	pdf	79 KB	12/01/2025 04:56 PM

Resilience Plan

Resilience Plan

Description	File Name	Type	Size	Upload Date
Tazewell County Resilience Plan	CID510160_Tazewell County_CFPF-6_ResiliencePlan.pdf	pdf	4 MB	12/01/2025 05:09 PM