

3742 - CID510130_RoanokeCity_CFPF

Application Details

Funding Opportunity:

3294-Virginia Community Flood Preparedness Fund - Study 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 9:22 AM

Initially Submitted By: Marcus Aguilar

Last Submit Date:

Last Submitted By:

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

Name*: Dr. Marcus F Aguilar
Salutation First Name Middle Name Last Name

Title: Civil Engineer II

Email*: marcus.aguilar@roanokeva.gov

Address*: 1802 COURTLAND RD NE

ROANOKE Virginia 24012
City State/Province Postal Code/Zip

Phone*: 540-580-7209 Ext.
Phone

###-###-####

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

Comments:

Organization Information

Status*: Approved

Name*: ROANOKE CITY

Organization Type*: Local Government

Tax ID*: 54-6001569

Unique Entity Identifier (UEI)*: NBFNAEXRHD76

Organization Website:

Address*: City of Roanoke
215 Church Avenue, SW Room 364

Roanoke Virginia 24011-
City State/Province Postal Code/Zip

Phone*: (540) 580-7209 Ext.
###-###-####

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

Benefactor:

Vendor ID:

Comments:

VCFPF Applicant Information

Project Description

Name of Local Government*: City of Roanoke

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

NFIP/DCR Community Identification Number (CID)*: 510130

If a state or federally recognized Indian tribe,

Name of Tribe:

Authorized Individual*: Valmarie Turner
First Name Last Name

Mailing Address*: 215 Church Avenue SW
Address Line 1
Address Line 2

Roanoke Virginia 24011
City State Zip Code

Telephone Number*: 540-853-2333

Cell Phone Number*: 540-852-2333

Email*: valmarie.turner@roanokeva.gov

Is the contact person different than the authorized individual?

Contact Person*: Yes

Contact: Marcus Aguilar
First Name Last Name
1802 Courtland Rd NE
Address Line 1
Address Line 2
Roanoke Virginia 24011
City State Zip Code

Telephone Number: 540-853-5918

Cell Phone Number: 540-580-7209

Email Address: marcus.aguilar@roanokeva.gov

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

Project Description*:

This study has three objectives to be achieved within the three-year period of performance:

- 1) Update stream and stormwater system asset inventory in Ore Branch and Peter's Creek watersheds.
- 2) Develop PCSWMM Models for both watersheds that will be used to simulate impacts of land development and benefits of proposed drainage, stream restorations, and risk mitigation projects.
- 3) Use the watershed models Identify and prioritize flood resilience projects and efforts in both watersheds.

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 Yes

geographic area*:

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

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

Roanoke City - 51770 Tracts - 000100, 000900, 001000, 002200, 002300, 002800, 002900, 003000

Is Project Located in an NFIP Yes

Participating Community?*

Is Project Located in a Special Yes

Flood Hazard Area?*

Flood Zone(s)

(if applicable):

Flood Insurance Rate Map

Number(s)

(if applicable):

Eligibility - Round 4

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

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*: N/A
Yes - Eligible for consideration
No - Not eligible for consideration

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

Scope of Work - Studies - 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*: 2025 - Watershed Modeling - Scope of Work Narrative.pdf

Comments:

Budget Narrative

Budget Narrative Attachment*: Appendix B - Budget Narrative.pdf

Comments:

Scoring Criteria for Studies - Round 4

Scoring

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.

Revising Floodplain Ordinances*: No
Select

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.

Mapping Platform*: No
Select

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).

Hydrologic and Hydraulic Studies*: No
Select

Funding of studies of statewide and regional significance and proposals will be considered for the studies listed below - Up to 45 points

Studies and Data Collection of Statewide and Regional Significance Scoring:

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)

Regional relative sea level rise projections for use in determining future impacts. (45)

Vulnerability analysis either statewide or regionally to state transportation, water supply, water treatment, impounding structures, or other significant and vital infrastructure from flooding. (45)

Flash flood studies and modeling in riverine regions of the state. (45)

Statewide or regional stream gauge monitoring to include expansion of existing gauge networks. (45)

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)

Regional flood studies in riverine communities that may include watershed scale evaluation, updated estimates of rainfall intensity, or other information. (45)

Regional hydrologic and hydraulic studies of floodplains. (45)

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)

Other proposals that will significantly improve protection from flooding on a statewide or regional basis (35)

Studies and Data Collection of Statewide and Regional Significance*:

Studies of potential land use strategies that could be implemented by a local government to reduce or mitigate damage from coastal or riverine flooding

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*: Very High 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*: No

Comments:

Scope of Work Supporting Information - Studies

Scope of Work Supporting Information

Is the proposed study a new study or updates on a prior study?

New or Updated Study*: New Study

Describe the relationship of the study to the local government's needs for flood prevention and protection, equity, community improvement, identification of nature-based solutions or other priorities contained in this manual

Relationship of Study to Priorities Contained in this Manual*:

Climate Change - This study enables the City to model its stormwater system, simulate climate scenarios, and identify flood risks and system deficiencies to support future planning and resilience.

Social Equity - The Peters Creek and Ore Branch watersheds include areas with high social vulnerability. Addressing flood risks here builds community resilience. Accurate modeling and prioritization will enhance trust and safety. Public engagement will help identify solutions and build support. Moving away from complaint-driven project selection promotes equity.

Community Scale Benefits - Peters Creek (9.0 mi²) and Ore Branch (3.8 mi²) cover over 25% of the City and include 7,000+ residences and 500+ commercial properties. With an average household size of 2.2, this equates to about 15,400 residents-over 15% of the City's population. Major roads in these areas mean flood resilience efforts will benefit an even broader population.

Economy and Land Use - With a \$500 million backlog and a \$7 million annual capital budget, this planning effort helps prioritize resources for maximum benefit and informs long-term budgeting. It also guides land use decisions based on flood risk and improves management of flood corridors.

Nature Based Approach - While this grant focuses on watershed modeling, it supports future projects aligned with the City's Flood Resilience and Comprehensive Plans. These emphasize preserving floodplains, restoring riparian areas, and prioritizing green infrastructure. Though traditional engineering is needed in urban areas, the City favors nature-based solutions for their resilience and community benefits.

Describe the qualifications of the individuals or organizations charged with conducting the study or the elements of any request for proposal that define those qualifications

Qualifications of Individuals

Conducting Study*:

The project will be managed by a Civil Engineer II who is responsible for grant compliance and managing schedule/budget risk. The City project team will include a Junior Engineer, the City's Water Quality Administrator, Environmental Specialists and a Business Coordinator who will help assure on-time on-budget delivery. The City will hire qualified contractors for the surveying, modeling, and technical reporting. Modeling will be performed by a consultant using the PCSWMM 2D model, which allows for simulation of the stream, storm drain, and surface flooding depth and extent.

Describe the expected use of the study results in the context of the local resilience plan or, in the case of regional plans, how the study improves any regional approach

Expected use of Study Results*:

This study builds upon work referenced in the City of Roanoke Flood Resilience Plan in Section 6.2.3 and towards gaps identified in the Gap Analysis Section 6.6, and on the grant awarded in the previous Round 5 CFPF grant cycle. The need for a study of this type was outlined in Section 7.4 of the Resilience Plan, in "Watershed Master Plans" and "Evaluate Predicted Precipitation and Design Practices and Standards". This study incorporates both watershed scale planning and simulating current and future rainfall to evaluate the stormwater system and flood risk. This study also addresses needs outlined in Section 7.5, "Enhance Project Selection Tools" and "Increase Inter-Departmental Coordination". For these watersheds, having accurate models of the stormwater system will allow for better project prioritization and greater coordination between other city departmental functions including development regulation and planning for future projects.

If applicable, describe how the study may improve Virginia's flood protection and prevention abilities in a statewide context (type N/A if not applicable)

Statewide Improvements*:

This study would be an example of using watershed scale modeling to make stormwater and flood planning decisions in a smaller, non-coastal city. Statewide, other localities could use this experience to modify their own efforts to improve flood protection and consider a similar process.

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

Repetitive Loss and/or Severe CFPF Round 6 Rep Loss.pdf

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 these structures in the project area

Residential and/or Commercial Structures*:

Both Peters Creek and Ore Branch watersheds contain a variety of important structures that contribute to the community fabric. The Peters Creek watershed includes a heavily travelled local highway and multiple commercial business corridors from the most northwestern point of the City to its confluence with the Roanoke River. Structures of note in the Peters Creek watershed include a prominent manufacturing plant, a day care center, multiple car dealerships, a storage facility, an elementary school, and multiple green spaces including memorial grounds, cemeteries, and public parks. Neighborhoods located within this watershed include Peachtree Norwood, Washington Heights, Westside Terrace, Edgewood, Ridgewood Park, and Wilmont.

The Ore Branch watershed is located in the southwestern part of Roanoke with many important points of business and economic activity as well as large neighborhoods. Neighborhoods located in the Ore Branch watershed include Franklin Colonial, South Roanoke, and Southern Hills. Alongside these neighborhoods, commercial

centers located on Franklin Rd. SW and US-220 BUS promote the local economy. Structures of note in the Ore Branch watershed include an orthopedic surgery center, a metals recycling center, two companion animal hospitals, a mall, and two public parks. Total number of properties in each watershed are described below:

Peters Creek

- 1) Residential: 5745
- 2) Multifamily: 145
- 3) Commercial: 289

Ore Branch

- 1) Residential: 1272
- 2) Multifamily: 151
- 3) Commercial: 220

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

Critical Facilities/Infrastructure*:

The Peters Creek watershed includes 25 critical facilities. Of the 25 critical facilities, 22 are childcare facilities, 1 fire stations, and 2 are Tier-2 facilities. In terms of critical infrastructure, there is an existing sewer interceptor (varying diameter) along the entire length of Peters Creek that is subject to infiltration/inflow and periodic overflows during wet weather events.

Ore Branch watershed includes 8 critical facilities. These include 3 childcare facilities and 5 Tier-2 facilities. In terms of critical infrastructure, there is an existing 24" sewer interceptor that follows the entire length of Ore Branch and has experience issues due to stream bank erosion.

Budget

Budget Summary

Grant Matching Requirement*:

LOW INCOME - Flood Prevention and Protection Studies - Fund 90%/Match 10%

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)*: \$2,434,800.00
**This amount should equal the sum of your request and match figures

REQUIRED Match Percentage Amount: \$243,480.00

BUDGET TOTALS

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

Match Percentage:

10.00%

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

Total Requested Fund Amount: \$2,191,320.00

Total Match Amount: \$243,480.00

TOTAL: \$2,434,800.00

Personnel

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

Fringe Benefits

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

Travel

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

Equipment

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

Supplies

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

Construction

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

Contracts

Description	Requested Fund Amount	Match Amount Match Source
Watershed Modeling Contract	\$2,191,320.00	\$243,480.00 City of Roanoke
	\$2,191,320.00	\$243,480.00

Pre-Award 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			

Supporting Documentation

Supporting Documentation

Named Attachment	Required Description	File Name
Detailed map of the project area(s) (Projects/Studies)	Detailed map of Peters Creek and Ore Branch Watersheds	Detailed Map.pdf
FIRMette of the project area(s) (Projects/Studies)	All firms that contain Peter's Creek or Ore Branch watershed are in this packet, including any updated panels or area from recent LOMRs	CFPF Round 6 FIRMs
Historic flood damage data and/or images (Projects/Studies)	Recent and historical flooding in both watersheds.	CFPF Flood Photos.p
A link to or a copy of the current floodplain ordinance	https://library.municode.com/va/roanoke/codes/code_of_ordinances?nodeId=CORO1979_CH36.2ZO_ART3RESPZODI_DIV5OVDI_S36.2-333FLOVDIF	Sec._36.2_333.____Flo
Maintenance and management plan for project	Management plan for data and models produced by the watershed study.	Watershed Modeling M
A link to or a copy of the current hazard mitigation plan	https://rvarc.org/wp-content/uploads/2023/12/RVAR_Hazard_Mitigation_Plan_2019.pdf	RVAR_Hazard_Mitigat
A link to or a copy of the current comprehensive plan	https://planroanoke.org/city-plan-2040-pdf/	City-Plan-2040-Adopte
Social vulnerability index score(s) for the project area	Map of Social Vulnerability Index in project area(outlined in black)	CFPF SVI Map.png

Named**Attachment****Required Description****File Name**

Authorization to request funding from the Fund from governing body or chief executive of the local government

City Manager Authorization and Signature

Signed Authorization.p

Signed pledge agreement from each contributing organization

Contains signed Appendix A with scope of work attached.

Appendix A - Pledge A

Maintenance Plan

Same document as "Maintance and Management Plan"

Watershed Modeling M

Benefit-cost analysis must be submitted with project applications over \$2,000,000. in lieu of using the FEMA benefit-cost analysis describe in detail the cost benefits and value. The narrative must explicitly indicate the risk reduction benefits of a flood mitigation cost-effectiveness.

Benefit Cost Analysis

Other Relevant Attachments

Letters of Support**Description****File Name****Type****Size****Upload Date**

No files attached.