

3817 - Assessing the Economic Value for Hampton Roads Flood Mitigation & Coastal Resilience Natural Assets

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 10:56 PM

Initially Submitted By: Benjamin McFarlane

Last Submit Date:

Last Submitted By:

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

Name*: Mr. Benjamin Middle Name McFarlane
Salutation First Name Last Name

Title: Chief Resilience Officer

Email*: bmcfarlane@hrpdcva.gov

Address*: 723 Woodlake Dr

Chesapeake Virginia 23464
City State/Province Postal Code/Zip

Phone*: (757) 420-8300 Ext.
Phone
###-###-####

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

Comments:

Organization Information

Status*: Approved

Name*: Hampton Roads Planning District Commission

Organization Type*: Local Government

Tax ID*:

Unique Entity Identifier (UEI)*:

Organization Website: rcrum@hrpdcva.gov

Address*: 723 Woodlake Drive

Chesapeake Virginia 23464
City State/Province Postal Code/Zip

Phone*: (757) 420-8300 Ext.
###-###-####

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

Benefactor:

Vendor ID:

Comments:

VCFPF Applicant Information

Project Description

Name of Local Government*: Hampton Roads Planning District Commission

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

NFIP/DCR Community Identification Number (CID)*: 5123

If a state or federally recognized Indian tribe,

Name of Tribe:

Authorized Individual*: Robert Crum
First Name Last Name

Mailing Address*: 723 Woodlake Dr
Address Line 1
Address Line 2

Chesapeake Virginia 23320
City State Zip Code

Telephone Number*: 757-420-8300

Cell Phone Number*: 757-408-7479

Email*: rcrum@hrpdcva.gov

Is the contact person different than the authorized individual?

Contact Person*: Yes

Contact: Benjamin McFarlane
First Name Last Name
723 Woodlake Dr
Address Line 1
Address Line 2
Chesapeake Virginia 23320
City State Zip Code

Telephone Number: 757-420-8300

Cell Phone Number: 757-218-8930

Email Address: bmcfarlane@hrpdcva.gov

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

Project Description*:

The proposed study will improve long-term planning and enhance the effectiveness of regional resilience initiatives by quantifying how natural assets and Nature-based Solutions (NbS) help reduce flood damages and inform stormwater management decisions. The study will produce model guidance, datasets, and decision-support tools that localities can use for floodplain management, stormwater management, and land use planning.

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*: No

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

Census Block(s) Where Project will Occur*: Multiple census blocks

Is Project Located in an NFIP Participating Community*: Yes

Is Project Located in a Special Flood Hazard Area*: No

Flood Zone(s) (if applicable): N/A

Flood Insurance Rate Map Number(s) (if applicable): N/A

Eligibility - Round 4

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*: Yes
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*: HRPDC Study Scope of Work Narrative.pdf

Comments:

Budget Narrative

Budget Narrative Attachment*: 2025-12-01 HRPDC Study 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*: 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*: No

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*:

This study is directly aligned with the goals of the Community Flood Preparedness Fund and Virginia's Resilience Planning Principles. It seeks to improve long-term planning and enhance the effectiveness of resilience initiatives by quantifying how natural assets and Nature-based Solutions (NbS) help reduce flood damages, and inform stormwater management decisions. The project will generate model guidance, datasets, and decision-support tools that localities can apply to maintain NFIP compliance, adopt higher floodplain management standards, update hydraulic risk assessments, and incorporate sea-level rise into local land-use and ordinance updates. In doing so, the study will advance regional consistency by enabling local governments to coordinate through shared datasets, comparable valuation methods, and benefit-cost criteria that support equitable and cost-effective flood-risk reduction across the Hampton Roads region.

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 HRPDC staff working on this project have direct experience with grant management and relevant subject matter expertise in policy development and implementation and evaluation of applied research. The ODU/ICAR and VIMS staff identified for the project include full-time research faculty with experience in natural capital accounting, GIS analysis, and modeling.

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*:

The HRPDC anticipates that this proposal will result in the increased use of nature-based solutions for resilience as more is understood about their overall performance and viability. This could take the form of policy changes at the local or state level or greater rates of implementation by the private sector. In addition, the HRPDC anticipates that the study will be valuable to state policies and initiatives, including the Coastal Resilience Master Plan, the Virginia Flood Protection Master Plan, and the Chesapeake Bay Preservation Act program.

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*:

The HRPDC anticipates that, although the focus will be on Hampton Roads, the findings of the study will be most relevant to communities throughout the coastal zone, since many coastal communities have similar environmental conditions and features. In addition, any evaluations of more typically inland practices will be relevant to the entire state.

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 HRPDC Study Proposal - RepLoss.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*:

N/A

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

Critical Facilities/Infrastructure*:

N/A

Budget

Budget Summary

Grant Matching Requirement*: Flood Prevention and Protection Studies - Fund 50%/Match 50%

Is a match waiver being requested?

Match Waiver Request No

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

*:

Total Project Amount (Request + \$443,136.00

Match)*: **This amount should equal the sum of your request and match figures

REQUIRED Match Percentage \$221,568.00
Amount:

BUDGET TOTALS

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

Match Percentage:

55.21%

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

Total Requested Fund Amount: \$198,460.00

Total Match Amount: \$244,676.00

TOTAL: \$443,136.00

Personnel

Description	Requested Fund	Match	
	Amount	Amount Match Source	
Personnel Costs for Existing HRPDC Staff	\$0.00	\$21,716.00	Locality Dues and Special Assessments
	\$0.00	\$21,716.00	

Fringe Benefits

Description	Requested Fund	Match	
	Amount	Amount Match Source	
Fringe and Indirect Costs for Existing HRPDC Staff	\$0.00	\$18,497.00	Locality Dues and Special Assessments
	\$0.00	\$18,497.00	

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	Match	
	Amount	Amount Match Source	
ICAR/ODU	\$100,000.00	\$100,000.00	ICAR/ODU In-Kind Faculty Labor and Fringe
Virginia Institute of Marine Science	\$98,460.00	\$104,463.00	Salaries and Fringe Benefits for Participating Faculty/Staff
	\$198,460.00	\$204,463.00	

Pre-Award and Startup Costs

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

Other Direct Costs

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

Supporting Documentation

Supporting Documentation

Named Attachment	Required Description	File Name	Type	Size	Upload Date
Detailed map of the project area(s) (Projects/Studies)					
FIRMette of the project area(s) (Projects/Studies)					
Historic flood damage data and/or images (Projects/Studies)					
A link to or a copy of the current floodplain ordinance					
Maintenance and management plan for project					
A link to or a copy of the current hazard mitigation plan	2022 Hampton Roads Hazard Mitigation Plan	2022 Hampton Roads Hazard Mitigation Plan PDF.pdf	pdf	28 MB	12/01/2025 10:45 PM
A link to or a copy of the current comprehensive plan					
Social vulnerability index score(s) for the project area	SVI Values Map for HRPDC Localities and Surrounding Areas	HRPDC SVI Round 6.pdf	pdf	1 MB	12/01/2025 10:46 PM
Authorization to request funding from the Fund from governing body or chief executive of the local government	Letter from HRPDC Executive Director Authorizing Application	2025-12-01 HRPDC CFPPF Authorization Letter - Study.pdf	pdf	217 KB	12/01/2025 10:47 PM
Signed pledge agreement from each contributing organization	Letter of Commitment from ODU/ICAR	Institute for Coastal Adaptation - letter of commitment - CFRF R6_HRPDC.pdf	pdf	196 KB	12/01/2025 10:50 PM
Maintenance Plan					

Named Attachment	Required Description	File Name	Type	Size	Upload Date
<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	HRPDC FY26	HRPDC FY26 Budget	pdf	4	12/01/2025
	Budget	Compendium.pdf		MB	10:51 PM
	Compendium				

Letters of Support

Description	File Name	Type	Size	Upload Date
Detailed Match Commitment from VIMS	Match Commitment_VIMS.pdf	pdf	264 KB	12/01/2025 10:52 PM
HRPDC Approved Indirect Cost Allocation Plan for FY26	ICAP 2025-092 HRPDC_HRTPO FY24.pdf	pdf	488 KB	12/01/2025 10:53 PM
Letter of Commitment from VIMS	Letter of Intent_VIMS.pdf	pdf	264 KB	12/01/2025 10:51 PM
Resolution from HRPDC Board Authorizing Study Proposal	2025-06 HRPDC Resolution Authorizing Study Proposals Sumission to DCR CFPF Studies PDF.pdf	pdf	674 KB	12/01/2025 10:47 PM