

2719 - FloodREADY Homes Study

Application Details

Funding Opportunity:

2337-Virginia Community Flood Preparedness Fund - Study Grants - CY24 Round 5

Funding Opportunity Due Date: Jan 24, 2025 11:59 PM

Program Area: Virginia Community Flood Preparedness Fund

Status: Under Review

Stage: Final Application

Initial Submit Date: Jan 24, 2025 9:16 AM

Initially Submitted By: Doug Fritz

Last Submit Date:

Last Submitted By:

Contact Information

Primary Contact Information

Active User*: Yes

Type: External User

Name*: Ms. Kathie Middle Name Angle
Salutation First Name Last Name

Title: PE CFM, City of Newport News

Email*: anglekk@nnva.gov

Address*: 2400 Washington Avenue
Department of Engineering , 7th Floor

Newport News Virginia 23607
City State/Province Postal Code/Zip

Phone*: (757) 926-8655 Ext.
Phone
###-###-####

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

Comments:

Organization Information

Status*: Approved

Name*: Newport News, City of

Organization Type*: Local Government

Tax ID*: 546022059

Unique Entity Identifier (UEI)*: qr2ga81mjnf3

Organization Website: <https://www.nnva.gov/>

Address*: 2400 Washington Avenue
Department of Engineering , 7th Floor

Phone*: Newport News Virginia 23607-
City State/Province Postal Code/Zip
(757) 926-8655 Ext.
###-###-####

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

Benefactor:

Vendor ID:

Comments:

VCFPF Applicant Information

Project Description

Name of Local Government*: City of Newport News

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

NFIP/DCR Community Identification Number (CID)*: 510103

If a state or federally recognized Indian tribe,

Name of Tribe: N/A

Authorized Individual*: Kathie Angle, PE, CFM
First Name Last Name

Mailing Address*: 2400 Washington Avenue
Address Line 1
Department of Engineering, 7th Floor
Address Line 2
Newport News Virginia 23607
City State Zip Code

Telephone Number*: 757-926-8655

Cell Phone Number*: 757-274-7164

Email*: anglekk@nnva.gov

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*:

The 3-year FloodREADY Homes Study will provide Resilience Assessments and Recommendations to 150 homeowners in low-income, socially vulnerable, and high-flood-risk areas. Homeowners will get a customized list of cost-effective flood mitigation measures to protect inhabitants, property, and the nearby environment. The Study will evaluate the feasibility and cost-effectiveness of offering property-level mitigation strategies and prepare the City to seek federal resourcing for an expanded program.

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*:

There are 175 census blocks under consideration. See CID510103-1_Newport News_Census Blocks.pdf

Is Project Located in an NFIP Participating Community?* Yes

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

Flood Zone(s) (if applicable): A, AE, AO, VE, Zone X (Shaded), Zone X (Unshaded)

Flood Insurance Rate Map Number(s) (if applicable):

Attached. See CID510103-1_Newport News_Flood Insurance Rate Map Numbers

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*:

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*:

CID510103-1_NewportNews_CFPF_SOW.pdf

Comments:

CID510103-1_Newport News_CFPF_SOW

Budget Narrative**Budget Narrative Attachment*:**

CID510103-1_NewportNews_CFPF_Budget.pdf

Comments:

CID510103-1_NewportNews_CFPF_Budget

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

No

Ordinances*:

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*:

Yes

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

Studies and Data Collection of Statewide and Regional Significance. Funding of studies of statewide and regional significance and proposals will be considered for the following types of studies:

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.

**Updating Precipitation Data and
IDF Information*:** No
Select

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

Projections*: No
Select

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

Vulnerability Analysis*: No
Select

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

Flash Flood Studies*: No
Select

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

Stream Gauge Monitoring*: No
Select

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.

**Delineations of Areas of
Recurrent Flooding*:** Yes
Select

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

Regional Flood Studies*: No
Select

Regional Hydrologic and Hydraulic Studies of Floodplains

**Regional Hydrologic and
Hydraulic Studies of
Floodplains*:** No
Select

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

Potential Land Use Strategies*: Yes
Select

Pluvial Studies

Pluvial Studies*: No
Select

Other proposals that will significantly improve protection from flooding on a statewide or regional basis.

Other Proposals*: Yes
Select

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 (More than 1.5)

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

Comments:

Yes. The property mitigation recommendations produced in this study are likely to include runoff reduction practices such as rain gardens, rain barrels, and pavers in place of concrete or asphalt that are on the Chesapeake Bay TDML BMP list.

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*:

The FloodREADY Homes Study will help Newport News address the life safety issues, economic challenges, and social trauma of persistent and significant flooding in low-income residential neighborhoods. As a city with topography ranging from elevations at sea level up to 60 feet, it is susceptible to urban, overbank, and coastal flooding. Flooding reports via the 311 system have been recorded in 90% of Newport News neighborhoods, including in the Stoney Run area near Fort Eustis Army Installation. At least 20 neighborhoods have faced repetitive losses (RL). Most RL properties are in two low-income and high-social vulnerability areas: Salters Creek and Newmarket Creek. Additionally, many more properties in these RL areas are at risk of flooding. These

flooding issues are expected to worsen with changing weather patterns.

The FloodREADY Homes study will identify feasible mitigation measures to protect homes and its residents from flooding. The study will focus on nature-based, light utility, heavy utility, and structural mitigation measures. This study is directly aligned with Newport News' draft Resilience Master Plan, the goals of the Community Flood Preparedness Fund, and Virginia's Resilience Planning Principles. The concept for this Study emerged from community planning and is informed by recent flood and stormwater data gathering and scenario modeling. The Study will be driven by fiscal realities and will provide recommendations for cost-effective solutions for properties that are unlikely to be improved without this study's results. Implementing these solutions will improve safety and stability for residents and the surrounding area, as well as the potential to reduce the need for public assistance during flood events.

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*:

Newport News Department of Engineering will lead the study, assisted by a contractor team, consisting of GKY, Dewberry, and A D Potts & Associates, which have significant expertise in flood resilience, stormwater engineering, community engagement, and similar property-level studies. Newport News Engineering will be responsible for study oversight, contractor management, grant administration, and attending resident outreach events and Assessment appointments. The Engineering Department is leading the City's Stormwater and Climate Change and Resilience master planning effort. Engineering also administers the City's Floodplain Management and Flood Assistance Programs, including regular flood awareness and resilience engagement citywide and with the communities with eligible participants for this study. The City has 3 Certified Floodplain Managers on staff who will provide valuable expertise for this Study.

GKY will provide project management, technical expertise, implementation planning, and ensure continuity between the FloodREADY Homes Study and the City's other resilience initiatives. GKY is one of Virginia's largest consulting groups dedicated to water resources and environmental science; GKY is a current and long-time contractor for Newport News providing stormwater modeling, stormwater engineering, and comprehensive resilience and environmental justice planning services. GKY has partnered with the other proposed contractors on previous local and regional initiatives and is honored to continue providing experienced and efficient services to Newport News.

Dewberry will conduct the community engagement and in-home Resilience Assessments, develop the Recommendations Reports and BCAs, and support implementation planning. Dewberry is a current contractor for Newport News' resilience program and brings considerable experience with similar flood resilience programs, including supporting hundreds of Resilience Assessments through D.C.'s FloodSmart Homes study and NYC's Residential Technical Assistance Program.

A D Potts & Associates will be the survey firm working with Dewberry to complete the in-home Resilience Assessments and providing homeowners with FEMA Elevation Certifications. A D Potts & Associates is a certified small, women- and minority-owned local business that has completed hundreds of FEMA Elevation Certificates.

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 FloodREADY Homes Study will complement and expand citywide resilience efforts by focusing on individual property resilience and producing data to inform future program development and implementation. Newport News' draft Resilience Master Plan informed by community and Stormwater Steering Committee input identifies the need to supplement the City's Flood Assistance Program and to increase local nature-based solutions to reduce stormwater issues. While the city's Flood Assistance Program has removed 84 properties from floodplains since 1999, its current focus on property acquisition limits its broader impact. This Study will expand the City's efforts by providing more options for property-specific resilience measures.

The proposed Study activities are expected to further ongoing resilience and flood management efforts in the City.

The study was designed to align with Community Rating System activities and can contribute towards Newport News' ongoing efforts to improve its CRS standing, mitigate the effects of flooding, and provide the benefit of a decrease in insurance premiums for residents. The 2022 Hampton Roads Hazard Mitigation Plan highlights the need for this study in Mitigation Actions 1, 2, and 6.

Newport News also participates in the HRPDC Coastal Resilience Committee and is a supporting locality for GetFloodFluent. The City is willing to share lessons learned from this study to help advance regional resilience if other communities are interested in adopting a similar model.

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 purpose, approach, and expected outcomes of the proposed FloodREADY Homes Study align with the Virginia Coastal Resilience Master Plan (CRMP). The CRMP establishes 4 goals to: 1) identify priority projects to increase coastal resilience, 2) establish equity-informed financing strategies, 3) program and plan based on climate change projections, and 4) coordinate all resilience initiatives in accordance with CRMP guiding principles. This Study is a priority project identified through community-informed planning and the Hazard Mitigation Plan (CRMP goal 1). The proposed Study area and eligibility to participate are defined by future conditions flood modeling and by equity considerations to support low-income and at-risk residents (CRMP goals 2 and 3). Related to CRMP goal 4, the Study activities are in alignment with the guiding principles of: decision-making on the best available science, addressing socioeconomic inequities, enhancing coastal adaptation and protection efforts, incorporating nature-based solutions, utilizing approaches tailored to local communities, and focusing on the most cost-effective solutions.

The identification of cost-effective property-level mitigation measures is a critical component of maintaining the vibrancy of Newport News amid more extreme weather events and changing future conditions. As the CRMP identifies, Newport News is one of the Commonwealth's largest cities and is the location of key military resources including Newport News Shipbuilding and Fort Eustis. The City aims to maintain a high quality of living for its residents while maintaining realistic and sustainable building and growth strategies. Implementing cost-effective mitigation and drainage measures for homes is a part of that vision.

The in-home Assessments and Recommendations Reports will consider nature-based solutions to improve property and neighborhood drainage. The study will produce valuable data on the cost-effectiveness of these measures at a property-level, which is likely to inform implementation in Newport News and could also be applied to communities throughout Virginia. The CRMP establishes a practice of nature-based solutions. The Study's intended outcomes also include decreased emergency response and repair costs for residents and the City; these benefits will extrapolate to the Commonwealth level, especially for significant weather events.

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 CID510103-1_Newport News Repetitive Flood 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*:

The Study will complete property-level Resilience Assessments, Recommendation Reports, benefit-cost Analyses (BCAs), and Elevation Certificates for 150 properties in low-income and high-flood-risk areas. Additionally, it will generate new data about the cost-effectiveness of property-level mitigation measures, which could inform the development of a new flood protection program. The Study's property-level mitigation measures aim to address residents' requests for flood resilience measures that minimize displacement and protect the social fabric of neighborhoods while mitigating flood risk.

The specific properties will be identified through the Study's community engagement and recruitment outreach

activities. Eligible properties will be one- and two-family dwellings. Low-income, socially vulnerable communities will be prioritized; many of these areas overlap with designated opportunity zones and high-flood-risk areas. These areas are also anticipated to be dense residential neighborhoods that include significant community amenities and critical infrastructure (e.g., schools, hospitals, pump stations).

Based on sea level rise (SLR) modeling from the City's draft Resilience Master Plan, Newport News estimates that Average Annualized Losses will increase by 10 times from the baseline condition to 3 feet of SLR. It is crucial to protect residential structures to prevent life safety issues, economic challenges, and social disruption under these conditions. Low-income, socially vulnerable communities struggle the most with the financial burden from repair costs and lost property following a disaster, which can lead to long-term financial instability for affected individuals and communities.

Based on previous and ongoing resilience and floodplain management community engagement, Newport News anticipates that homeowner interest in participating in the Study will be high. The Study will include the development of a prioritization framework through which candidates will be vetted. Prioritization criteria will include, at minimum: household income, repetitive loss status, FEMA Flood Zone, SVI Score, documented flood risk, and date enrolled in the FloodREADY Homes Study.

The property-level drainage strategies identified through this study are also likely to reduce flooding issues on nearby properties, transportation infrastructure (e.g., sidewalks and roads), and green spaces.

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

Critical Facilities/Infrastructure*:

402 out of the City's 538 critical assets (~75%) are located within the proposed study area. These critical assets include water treatment assets/pumps (242), large medical centers (36), educational facilities (35), public safety assets (32), large industry and commercial structures (21), telecommunications assets (14), federal government assets (9), transportation assets (8), and state and local government assets (5). These assets represent all the FEMA Community Lifelines.

In the City's Vulnerability Assessment, Newport News identified that assets managed by Newport News Airport, Newport News Police, Newport News Parks and Recreation, and the Jefferson Science Associates have been impacted by flooding. In addition to direct physical damages, these impacts include damage to supporting transportation networks and injury, illness, and/or concerns for individual safety that interfered with work duties. The FloodREADY Homes Study will evaluate property-level drainage measures that may help mitigate these flood impacts at local critical assets.

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 + \$1,032,311.63

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

REQUIRED Match Percentage \$103,231.16
Amount:

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: \$929,080.47
Total Match Amount: \$103,231.16
TOTAL: \$1,032,311.63

Personnel

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Fringe Benefits

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Travel

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Equipment

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Supplies

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Construction

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Contracts

Description	Requested Fund Amount	Match Amount	Match Source
FloodREADY Homes Study	\$929,080.47	\$103,231.16	Newport News General Fund
	\$929,080.47	\$103,231.16	

Pre-Award and Startup Costs

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Other Direct Costs

Description	Requested Fund Amount	Match Amount	Match Source
Not Applicable	\$0.00	\$0.00	
	\$0.00	\$0.00	

Supporting Documentation

Supporting Documentation

Named Attachment	Required Description	File Name	Type	Size	Upload Date
Detailed map of the project area(s) (Projects/Studies)	CID510103-1_Newport News Location Map	CID510103-1_Newport News Location Map.pdf	pdf	602 KB	01/23/2025 12:58 PM
FIRMette of the project area(s) (Projects/Studies)	CID510103-1_Newport News_FIRMettes2	CID510103-1_Newport News_FIRMettes2.pdf	pdf	4 MB	01/23/2025 07:33 AM
Historic flood damage data and/or images (Projects/Studies)	CID510103-1_Newport News_Historic Flood Events	CID510103-1_Newport News_Historic Flood Events.pdf	pdf	3 MB	01/23/2025 12:02 PM
A link to or a copy of the current floodplain ordinance	CID#510103-1_Newport News_Floodplain Ordinance	CID510103-1_Newport News_Floodplain Ordinance.pdf	pdf	463 KB	01/22/2025 02:13 PM
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	CID510103-1_Newport News_Hazard Mitigation Plan_Action	CID510103-1_Newport News_Hazard Mitigation Plan_Action.pdf	pdf	820 KB	01/22/2025 02:15 PM
A link to or a copy of the current comprehensive plan	CID510103-1_Newport News_Comprehensive Plan	CID510103-1_Newport News_Comprehensive Plan.pdf	pdf	70 MB	01/22/2025 02:18 PM
Social vulnerability index score(s) for the project area	CID510103-1_Newport News_SVI Map	CID510103-1_Newport News_SVI Map.pdf	pdf	1 MB	01/24/2025 09:11 AM
Authorization to request funding from the Fund from governing body or chief executive of the local government	CID510103-1_Newport News_Funding Confirmation	CID510103-1_Newport News_Funding Confirmation.pdf	pdf	315 KB	01/23/2025 07:24 AM
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	CID510103-1_NewportNews_Flood Insurance Rate Map Numbers	CID510103-1_NewportNews_Flood Insurance Rate Map Numbers.pdf	pdf	72 KB	01/23/2025 11:58 AM

Letters of Support

Description	File Name	Type	Size	Upload Date
CID510103-1_Newport News_Census Blocks	CID510103-1_Newport News_Census Blocks.pdf	pdf	763 KB	01/23/2025 12:07 PM
CID510103-1_Newport News_Letter of Support	CID510103-1_Newport News_Letter of Support.pdf	pdf	315 KB	01/24/2025 08:40 AM