Appendix A: Application Form for Grant Requests for All Categories

Virginia Department of Conservation and Recreation Virginia Community Flood Preparedness Fund Grant Program

Name of Local Government:

Category of Grant Being Applied for (check one): Capacity Building/Planning Project Study NFIP/DCR Community Identification Number (CID)_____ If a state or federally recognized Indian tribe, Name of tribe_____ Name of Authorized Official: Mailing Address (1): Mailing Address (2): City: _____ Zip: _____ State: _____ Zip: _____ Telephone Number: Cell Phone Number: Email Address: _____

Contact Person (If different from authorized official):			
Mailing Address (1):			
Mailing Address (2):			
City:	State:	Zip:	
Telephone Number: ()	Cell Pho	one Number: ()	
Email Address:			

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

in the Part 1 Definitions? Yes _____ No ____

Categories (select applicable project):

Project Grants (Check All that Apply)

- Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development.
- Wetland restoration.
- □ Floodplain restoration.
- □ Construction of swales and settling ponds.
- □ Living shorelines and vegetated buffers.
- □ Structural floodwalls, levees, berms, flood gates, structural conveyances.
- □ Storm water system upgrades.
- □ Medium and large scale Low Impact Development (LID) in urban areas.
- Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool.
- Dam restoration or removal.
- □ Stream bank restoration or stabilization.
- □ Restoration of floodplains to natural and beneficial function.
- Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.

Study Grants (Check All that Apply)

- Studies to aid in updating floodplain ordinances to maintain compliance with the NFIP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.
- □ Revising other land use ordinances to incorporate flood protection and mitigation goals, standards and practices.
- Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the Federal Emergency Management Agency (FEMA). For example, a local government might conduct a hydrologic and hydraulic study for an area that had not been studied because the watershed is less than one square mile. Modeling the floodplain in an area that has numerous letters of map change that suggest the current map might not be fully accurate or doing a detailed flood study for an A Zone is another example.
- □ Studies and Data Collection of Statewide and Regional Significance.
- Revisions to existing resilience plans and modifications to existing comprehensive and hazard.
- □ Other relevant flood prevention and protection project or study.

Capacity Building and Planning Grants

- □ Floodplain Staff Capacity.
- □ Resilience Plan Development
 - □ Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.
 - □ Resource assessments, planning, strategies and development.
 - Policy management and/or development.
 - Stakeholder engagement and strategies.

Location of Project (Include Maps): _____

NFIP Community Identification Number (CID#):(See appendix

F_____

Is Project Located in an NFIP Participating Community? Yes INO
Is Project Located in a Special Flood Hazard Area?
Flood Zone(s) (If Applicable):
Flood Insurance Rate Map Number(s) (If Applicable):
Total Cost of Project:

Total Amount Requested <u>\$2,000,000/</u> Two Million Dollars-17% Grant Fund / 83% City Match

Appendix B: Scoring Criteria for Flood Prevention and Protection Projects

Virginia Department of Conservation and Recreation Virginia Community Flood Preparedness Fund Grant Program

Applicant Name:		me:		
	Eligibility Information			
	Criterion Description Check One			Check One
1.	 Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)? 			
	Yes	Eligible for consideration		
	No	Not elig	gible for consideration	
2.	2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?			
	Yes	Eligible	for consideration under all categories	
	No	Eligible for consideration for studies, capacity building, and planning only		
3.	3. If the applicant is <u>not a town, city, or county</u> , are letters of support from all affected local governments included in this application?			
	Yes	Yes Eligible for consideration		
	No	Not elig	gible for consideration	
4. Has this or any portion of this project been included in any application or program previously funded by the Department?				
	Yes	Not elig	gible for consideration	
	No	Eligible	for consideration	
5.	5. Has the applicant provided evidence of an ability to provide the required matching funds?			
	Yes	Eligible	for consideration	
	No	Not elig	gible for consideration	
	N/A	Match	not required	

Project Eligible for Consideration			⊠ Yes □ No	
Applicant Name:	Applicant Name: / City of Richmond			
	Scoring Information			
	Criterion	Point Value	Points Awarded	
6. Eligible Projects (Sele	ect all that apply)		-	
Projects may have comp The category chosen mu	onents of both 1.a. and 1.b. below; however, only one categor st be the primary project in the application.	ry may k	oe chosen.	
1.a. Acquisition of property consistent with an overall comprehensive local or regional plan for purposes of allowing inundation, retreat, or acquisition of50 50 structures.				
 Wetland restoration, floodplain restoration Living shorelines and vegetated buffers. Permanent conservation of undeveloped lands identified as having flood resilience value by <i>ConserveVirginia</i> Floodplain and Flooding Resilience layer or a similar data driven analytic tool Dam removal Stream bank restoration or stabilization. Restoration of floodplains to natural and beneficial function. Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events. 		45		
1.b. any other nature-based approach		40		
All hybrid approaches whose end result is a nature-based solution		35		
All other projects		25		
7. Is the project area socially vulnerable? (Based on ADAPT VA's Social Vulnerability Index Score.)				
Very High Social Vulneral	bility (More than 1.5)	15		
High Social Vulnerability (1.0 to 1.5) 12				
Moderate Social Vulnera	bility (0.0 to 1.0)	8		
Low Social Vulnerability (-1.0 to 0.0)	0		
Very Low Social Vulnerat	vility (Less than -1.0)	0		
8. Is the proposed project part of an effort to join or remedy the community's probation or suspension from the NFIP?				

Yes	10		
No	0		
9. Is the proposed project in a low-income geographic area as defined in this manua	al?		
Yes	10		
No	0		
10. Projects eligible for funding may also reduce nutrient and sediment pollution to local waters and th 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?			
Yes	5		
No	0		
11. Does this project provide "community scale" benefits?			
Yes	20		
No	0		
Total Points			

Appendix D: Checklist All Categories

Virginia Department of Conservation and Recreation

Community Flood Preparedness Fund Grant Program

Scope of Work Narrative		
Supporting Documentation	Included	
Detailed map of the project area(s) (Projects/Studies)	□ Yes □ No □ N/A	
FIRMette of the project area(s) (Projects/Studies)	□Yes □No □N/A	
Historic flood damage data and/or images (Projects/Studies)	□Yes □No □N/A	
A link to or a copy of the current floodplain ordinance	□Yes □No □N/A	
Non-Fund financed maintenance and management plan for project extending a minimum of 5 years from project close	□Yes □No □N/A	
A link to or a copy of the current hazard mitigation plan	□ Yes □ No □ N/A	
A link to or a copy of the current comprehensive plan	□ Yes □ No □ N/A	
Social vulnerability index score(s) for the project area from <u>ADAPT VA's Virginia Vulnerability Viewer</u>	□ Yes □ No □ N/A	
If applicant is not a town, city, or county, letters of support from affected communities	□ Yes □ No □ N/A	
Completed Scoring Criteria Sheet in Appendix B, C, or D	□ Yes □ No □ N/A	
Budget Narrative		
Supporting Documentation	Included	
Authorization to request funding from the Fund from governing body or chief executive of the local government	□ Yes □ No □ N/A	
Signed pledge agreement from each contributing organization	□Yes □No □N/A	



REFERENCE: INCLUDE REFERENCES IF APPLICABLE



September 3, 2021

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

RE: **CID510129- City of Richmond Department of Public Utilities- Stormwater Division McGuire & Chapel Drive Drainage Improvements -**2021 Round 1- Community Flood Preparedness Fund Grant Application

The City of Richmond Department of Public Utilities Stormwater Division (DPU/SW) is pleased to submit this Virginia Community Flood Preparedness Fund Grant application for the McGuire & Chapel Drive Drainage Improvements Project. Included in this package are Appendix A & B, scope of work narrative, budget narrative, and supporting documents as outlined in the 2021 Grant Manual for the Virginia Community Flood Preparedness Fund.

Project Overview:

The McGuire & Chapel Drive Drainage Improvements Project is an active DPU/SW capital project located in a Southside Richmond neighborhood, aimed at reducing localized repetitive flooding and improving connectivity and conveyance of stormwater throughout the McGuire and Chapel Drive and Hopkins Road neighborhoods. Extensive new and upgraded stormwater conveyances including replacement of existing undersized piping, new stormwater pipe systems, valley gutter/ curb & gutter, stormwater inlets, and drainage channel restoration is planned in the area with the primary goal of this project being prevention and protection of inland neighborhood flooding including but not limited to the following:

- Reduce/eliminate neighborhood flooding incidents by improving existing infrastructure
- Reduce/eliminate citizen flooding complaints
- Reduce/eliminate public and private property damage due to repetitive flooding
- Increase Public Safety

Population/ Residential-Commercial Structures-Critical Facilities:

The City of Richmond is home to over 225,000 residents. The Stormwater Utility is responsible for stormwater infrastructure improvements in the separate storm sewer system drainage area, which includes approximately two thirds of the City's land area (approximately 24,000 acres), mostly south of the James River. The McGuire & Chapel Drive Drainage Improvements Project is one of many DPU/SW capital projects that has significant potential of providing increased benefit for flood protection and public safety to major areas of Richmond's underserved populations and communities, not only for those residing in the project area, but those traveling through and/or visiting.

This particular project is located in a low-income geographic area as defined in the DCR 2021 Grant Manual. Located in Census tract 709 with a median household income of \$36,497, this project is in a community that has a median household income not greater than 80% of the City of Richmond's local

CID510129- City of Richmond DPU Stormwater-McGuire & Chapel Drive Drainage Improvements -

2021 Round 1- Community Flood Preparedness Fun Grant Application September 3, 2021 Page 2

median household income of \$51,285. In addition this project area also has a very high social vulnerability (More than 1.5), based on ADAPT VA's Social Vulnerability Index Score.

The McGuire/Chapel community that will benefit from this project consists of the following structures and or properties within the project area:

- 184 residential single family houses/properties
- 3 religious structures/properties
- 5 business & retail structures/properties
- 2 multi-unit parcels (40 residences) of Low Income Housing
- 1 non-profit business structure/property
- 1 public service corporation/business.

In addition, the project areas is bounded on the west by a critical facility, the McGuire Veterans Affairs Medical Center which also shares a drainage easement with the McGuire/Chapel community.

Historic flooding data:

This project was prioritized and selected in the DPU/SW capital program as a result of repetitive historic neighborhood flooding. Since 2004 there have been a total of 153 citizen complaints in this McGuire/ Chapel neighborhood. Historic complaints include roadside ditch and street flooding, ponding/standing water days after rain events, property flooding and potential property damage. During storm events, flooding severely limits pedestrian and vehicular travel, and water often enters private property yards and driveways. Standing water after storm events poses a significant health hazard.

Citizen Stormwater Complaints by Street:

- Chapel Drive: 35 complaints
- McGuire Drive: 73 complaints
- Richeson Avenue: 13 complaints
- Hollister Avenue: 7 complaints
- Bundy Avenue: 10 complaints
- Evert Avenue: 9 complaints
- Legion Avenue: 6 complaints

Local Government staff and resources:

DPU/SW leadership and project managers, in coordination with other departments and agencies, are experienced in executing capital projects from the time of inception and scoping to construction and final close-out. DPU/SW has sufficient capacity including staff, external consultants & contractors, and financial resources to adequately manage and facilitate all that is required to bring this project to completion. Any and all reporting requirements, either those of the City or those specific to DCR Community Flood Preparedness Grant Fund will be adequately addressed as may be required.

Alternatives:

The McGuire & Chapel Drive Drainage Improvements project does not employ a nature-based or hybrid solution and the total cost of the project is estimated at approximately <u>\$11,506,973</u> (see Budget Narrative). Given limited existing City drainage easements and no available open/undeveloped parcels or existing City owned land to address the flooding issues in the community, the project limits are generally confined to City right of way. As such, utilizing nature based solutions such as green infrastructure practices or purchasing land to utilize in nature based solutions is extremely limited if not impossible. In addition, Richmond like other older urban communities has limited and aging infrastructure. The



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McGuire/Chapel community like most in Southside Richmond were previously annexed from Chesterfield County. Many of these communities are extremely flat in nature and were built with severely inadequate stormwater infrastructure decades ago. This continues to pose additional flooding problems as climate change and worsening storm events bring unprecedented levels of rainfall to areas that desperately require new infrastructure to adequately convey urban runoff.

The City of Richmond and DPU/SW have regulatory requirements to meet the needs to reduce bacteria, nitrogen, phosphorus, and total suspended solids, and are actively and continually looking for opportunities for projects that employ green infrastructure and nature based solutions. Unfortunately this particular project is not an ideal candidate for that approach, and the only option is to install adequate conventional "grey" stormwater infrastructure to alleviate repetitive flooding throughout the neighborhood.

Goals and Objectives/ Approach, Milestones, and Deliverables/ Program Highlights/ Maintenance:

Scoping and design development for the McGuire/Chapel project took place in summer 2019, and a task order was subsequently issued to Hazen & Sawyer, an on-call engineering consultant with DPU/SW for complete engineering design and permitting for the project. The design is currently at 75% complete, and at this time DPU/SW is working to identify and avoid utility conflicts prior to construction. No easements are required for the project and limited environmental or permitting challenges are expected. Final design and permitting is anticipated for early spring of 2022. The project will be advertised for competitive bid, with construction estimated to start in fall of 2022

Project Milestones:

- Currently 75% complete design phase
- Design/Permitting complete- anticipated early spring 2022
- Construction advertisement for bid- anticipated early spring 2022
- Construction estimated to begin fall of 2022
- Construction estimated to take 18-24 months (TBD after contract award) *Deliverables-Stormwater Assets Installed:*
- Approximately 7,762 linear feet of new concrete stormwater piping
- Approximately 92 new stormwater drainage structures
- Approximately 350 linear feet of drainage channel restoration
- Approximately 1,600 linear feet of new valley gutter/ curb & gutter

SW Capital Program Highlights:

This project is one of (18) eighteen current capital projects underway with DPU/SW in Southside Richmond to address localized repetitive neighborhood flooding and part of the overall approximate **<u>\$60,000,000</u>** in capital projects currently underway in the stormwater capital program throughout the city. These projects and the stormwater capital program are aligned with the goals and initiatives of the Stormwater Utility and the City of Richmond's recently certified **Resilience Plan** (see attached document CID510129_CityofRichmond_CFPF-3).

In addition, DPU/SW has successfully applied and received many grants for past stormwater projects including but not limited to DEQ Stormwater Local Assistance Funding & Virginia Clean Water Revolving Loan Funding for successful implementation of green infrastructure and stream restoration projects.

CID510129- City of Richmond DPU Stormwater-McGuire & Chapel Drive Drainage Improvements -

2021 Round 1- Community Flood Preparedness Fun Grant Application September 3, 2021 Page 2

Maintenance in perpetuity:

All infrastructure and stormwater assets installed as result of this project will be maintained in perpetuity by DPU/SW Operations and Maintenance department. The approved FY 22 Operations and Maintenance budget is **\$12,683,350**. The Department utilizes this funding to currently maintain 35,000 catch basins, 600 miles of ditches, and 180 miles of storm sewer pipe and additional new and improved stormwater assets that are installed yearly with the capital program.

Budget Narrative:

The McGuire & Chapel Drive Drainage Improvements Project cost is estimated at \$11,506,973. Design is approximately \$506,973 (currently 75% complete); and Construction is estimated at \$11,000,000.

- Design (Hazen & Sawyer/ on call engineering consultant)
- Construction (TBD- Competitive Bid Advertisement Spring 2022)

DPU/SW is requesting from the Community Flood Preparedness Fund, (**\$2,000,000**) Two Million Dollars to be allocated 100% towards construction of the project. Given the large scale nature and cost of this project, DPU/SW feels that this request of approximately 17% grant funding with a City match of 83% puts this application in the best possible position to receive the requested funding.

Dedicated Revenue Source for 83% City Match:

This project is funded through the City's Stormwater Utility. No other state, federal, or private funds are anticipated to be allocated for use in this project. The City's Stormwater Utility was implemented in 2009 to ensure that Richmond's stormwater management program receives adequate financial support independent of the City's tax rate and general fund. These funds are used to implement and maintain a comprehensive stormwater quality management plan as required by the US EPA and Virginia DEQ.

The utility fees cover the City's MS4 and surface drainage of the combined sewer system. In FY 22 the Utility has an annual budget of approximately <u>\$21,420,630</u> (O&M <u>\$12,683,350</u> / SW Capital <u>\$8,737,280</u>).

- All owners of developed projects are charged a fee for service
- Bills are sent out on a monthly basis and included with water and wastewater fees
- Current residential rates are shown in the table below

Impervious Surface Area	Monthly Fee
1. Up to 1,000 sq. ft.	\$2.43
2. Between 1,001 and 2,000 sq. ft.	\$4.46
3. Between 2,001 and 3,000 sq. ft.	\$7.25
4. Between 3,001 and 4,000 sq. ft.	\$10.34
5. Greater than 4,0001 sq. ft.	\$14.99

- Non-residential rates are calculated as follows:
 - First, the number of Equivalent Residential Units (ERU) is calculated using the equation: 1 ERU=1,000 sq. ft.
 - A facility having 15,000 sq. ft. of impervious area would have 15,000/1,000 = 15.0 ERU's
 - \circ To determine the fee, multiply the ERU by \$3.00
 - \circ 15.0 ERU x \$3.00 = \$45.00 per month



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Authorization to Request Funding:

DPU/SW has the authority to request this funding from the Flood Preparedness Grant Fund, City Council approval will be required at time of grant execution. Attached with this application is City Council resolution No. 2021-R047 - *To request that the Chief Administrative Officer cause to be prepared and submitted to Council a plan that provides for the grant application to the Virginia Department of Conservation and Recreation's Virginia Community Flood Preparedness Fund for the purpose of seeking funding to reduce the impact of flooding in the city of Richmond. (See attached document CID510129_CityofRichmond_CFPF-5).*

The Department of Public Utilities Stormwater Division greatly appreciates this opportunity to apply for the Virginia Community Flood Preparedness Fund Grant. We look forward to the opportunity to partner with the Virginia Department of Conservation and Recreation on this important project and on future projects. If you have questions or need any additional information, please do not hesitate to contact me at

Sincerely,

W Boston Gr

William "Bill" Boston Capital Improvement Program Manager City of Richmond Department of Public Utilities- Stormwater Division

Attachments: CID510129_CityofRichmond_CFPF-2 (Appendix A&B) CID510129_CityofRichmond_CFPF-3 (DCR resilience plan approval) CID510129_CityofRichmond_CFPF-4 (Population information Map) CID510129_CityofRichmond_CFPF-5 (Resolution No. 2021-R047)



INTRODUCED: June 28, 2021

A RESOLUTION No. 2021-R047

To request that the Chief Administrative Officer cause to be prepared and submitted to the Council a plan that provides for the submission of a grant application to the Virginia Department of Conservation and Recreation's Virginia Community Flood Preparedness Fund for the purpose of seeking funding to reduce the impact of flooding in the city of Richmond.

Patrons – Ms. Larson and Ms. Lynch

Approved as to form and legality by the City Attorney

PUBLIC HEARING: SEP 13 2021 AT 6 P.M.

WHEREAS, pursuant to the document entitled "2021 Grant Manual for the Virginia Community Flood Preparedness Fund," prepared by the Virginia Department of Conservation and Recreation in cooperation with the Virginia Resources Authority, the Virginia Department of Conservation and Recreation will be accepting applications for grant funding for flood control projects from the Virginia Community Flood Preparedness Fund; and

WHEREAS, the Council believes that it is in the best interests of the citizens of the City of Richmond that the Council request that the Chief Administrative Officer cause to be prepared a plan that provides for the submission of a grant application to the Virginia Department of

AYES:	NOES:	ABSTAIN:
ADOPTED:	REJECTED:	STRICKEN:

Conservation and Recreation for the purpose of seeking funding from the Virginia Community Flood Preparedness Fund to reduce the impact of flooding in the city of Richmond;

NOW, THEREFORE,

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF RICHMOND:

That the Council hereby requests that the Chief Administrative Officer cause to be prepared and submitted to the Council a plan that provides for the submission of a grant application to the Virginia Department of Conservation and Recreation for the purpose of seeking funding from the Virginia Community Flood Preparedness Fund to reduce the impact of flooding in the city of Richmond.

BE IT FURTHER RESOLVED:

That the Council hereby requests that the Chief Administrative Officer report to the Land Use, Housing and Transportation Standing Committee on the progress of the plan to submit an application to the Virginia Department of Conservation and Recreation for funding from the Virginia Community Flood Preparedness Fund to reduce the impact of flooding in the city of Richmond within 90 days after this resolution is adopted.

BE IT FURTHER RESOLVED:

That the Council hereby recognizes that funding on the local level for flood mitigation is limited and, therefore, supports efforts to seek additional funding for such infrastructure needs in the city of Richmond.



Richmond City Council

Office of the Council Chief of Staff

Ordinance/Resolution Request

The Voice of the People

TITLE	Apply for the VA Community Flood Preparedness Grant Funding.
PAGE/s	1 of 2
DATE	June 17, 2021
СОРҮ	Kristen Larson, 4 th District Representative Aaron Bond, 4 th District Liaison Tabrica Rentz, Interim Deputy Richmond City Attorney
FROM	Samson Anderson, Council Budget Analyst
THROUGH	Joyce Davis Interim Council Chief of Staff
ΤΟ	Haskell Brown, Interim Richmond City Attorney Richmond Office of the City Attorney

This is a request for the drafting of an Ordinance Resolution

REQUESTING COUNCILMEMBER/PATRON

Kristen Larson, 4th District Representative

Government Operations

SUGGESTED STANDING COMMITTEE

ORDINANCE/RESOLUTION SUMMARY

The Patron is requesting a Resolution for the Chief Administrative Officer (CAO) to create a plan for the City's application to the Virginia Community Flood Preparedness Grant Funding.

City Administration is expected to report progress on this plan to the appropriate Council Committee 90 days following the introduction of this resolution.

This grant funding will support flood prevention and protection projects within the City.

BACKGROUND

Summary:

More details on this fund administered by the Virginia Department of Conservation and Recreation can be found in the 2021 grand manual: <u>https://www.dcr.virginia.gov/dam-safety-and-floodplains/document/2021-CFPF-Manual.pdf</u>.

FISCAL IMPACT STATEMENT

Fiscal Impact	Yes 🛛 No 🖾
Budget Amendment Required Estimated Cost or Revenue Impact:	Yes 🗌 No 🖾

Attachment/s Yes 🗌 No 🔀

Richmond City Council Ordinance/Resolution Request Form/updated 10 5 2012 /srs

Matthew J. Strickler Secretary of Natural and Historic Resources and Chief Resilience Officer

Clyde E. Cristman Director



Rochelle Altholz Deputy Director of Administration and Finance

Nathan Burrell Deputy Director of Government and Community Relations

COMMONWEALTH of VIRGINIA Management and Soil & Water

> Thomas L. Smith Deputy Director of **Operations**

Conservation

Darryl M. Glover

Deputy Director of

Dam Safety & Floodplain

DEPARTMENT OF CONSERVATION AND RECREATION

August 19, 2021

Allen Shue, P.E. Greeley and Hansen 9020 Stony Point Parkway, Suite 475 Richmond, VA 23235-1946

RE: City of Richmond Resilience Plan Submission - CFPF

Dear Mr. Shue:

Thank you for providing an overview of your Resilience Plan, and informing DCR of the various plans that the City of Richmond will be utilizing to fulfill the Resilience Plan submission requirements. After careful review and consideration, the Virginia Department of Conservation and Recreation has deemed the Plan complete and meets all the criteria outlined in the June 2021 Community Flood Preparedness Grant Manual. This approval will remain in effect for a period of three years, ending on August 20, 2024.

The following elements were evaluated as part of this review:

1. Element 1: It is project-based with projects focused on flood control and resilience. DCR **RESPONSE**

Meets criteria as written.

a. Project-based: The city of Richmond lies within the James River Watershed with 24 miles of the James River flowing through the city. This has been subdivided into 4 watershed groupings, each with uniquely defined characteristics. Several projects have been completed or are phased for completion as notated in the Richmond-Crater Hazard Mitigation Plan. Additionally, watershed based projects have been outlined in the RVA Clean Water Plan and flood control and resilience projects are also identified within the **RVA** Emergency Operations Plan.

Element 2: It incorporates nature-based infrastructure to the maximum extent 2. possible. DCR RESPONSE

Meets criteria as written.

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

a. Natural and nature-based flood management measures are identified for use in projects throughout the city in the *RVA Clean Water Plan*.

3. Element **3:** It includes considerations of all parts of a locality regardless of socioeconomics or race. DCR RESPONSE

Meets criteria as written.

- a. All parts of a locality: Entirety of the City of Richmond's stormwater system was evaluated as part of the watershed characterization in the *RVA Clean Water Plan;* and city-wide land use patterns described in the *2017 Richmond-Crater Hazard Mitigation Plan.*
- b. Social vulnerability: FEMA TEIF 2.0 analysis used to evaluate flood risk in the 2017 *Richmond-Crater Hazard Mitigation Plan.*
- c. Demographic Analysis: Community profiles of the city and region-wide demographics captured in the 2017 Richmond-Crater Hazard Mitigation Plan.

4. Element 4: It includes coordination with other local and inter-jurisdictional projects, plans, and activities and has a clearly articulated timeline or phasing for plan implementation. DCR RESPONSE

Meets criteria as written.

a. Coordination with other local and inter-jurisdictional projects, plans and activities: The development of the *Richmond-Regional–Crater PDC Multi-Regional Hazard Mitigation Plan* included coordination with public servants and planning officials from all but three of the 24 localities included in the Crater and Plan RVA PDC's. It also draws from several regional plans and activities as outlined on section 3.3 on page 3-12.

The Technical Workgroup which contributed to the development of *the RVA Clean Water Plan* drew on experience from 30 different entities including state agencies, community associations, conservation and planning organizations, educational and scientific institutions, and other collectives as outlined in Section 2 on pages 6-7.

b. Clearly articulated timeline or phasing plan for implementation: Section 5 of the *RVA Clean Water Program* identifies strategies for green infrastructure, stream restoration and land & water conservation in the City. Sections 4, 7 and 8 Identify a planning framework for the prioritization projects as well as a means by which success will be measured.

5. Element 5: Is based on the best available science, and incorporates climate change, sea level rise, storm surge (where appropriate), and current flood maps.

Meets criteria as written.

a. The *Richmond-Regional–Crater PDC Multi-Regional Hazard Mitigation Plan* references best-available data regarding flood risk from FEMA and the NCDC in sections 5.6.6 and 5.6.9. The RVA *Clean Water Plan* is established on data from the City's 2015 *Watershed Characterization Report* as well as the City's 2017 *Clean Water Modeling Report*, found in Appendix A.

VA DCR looks forward to working with you as you work to make the City of Richmond a more resilient community. If you have questions or need additional assistance, please contact us at cfpf@dcr.virginia.gov. Again, thank you for your interest in the Community Flood Preparedness Fund.

Sincerely,

hady the ver & Coger

Wendy Howard Cooper, Director Dam Safety and Floodplain Management

cc: Darryl M. Glover, DCR