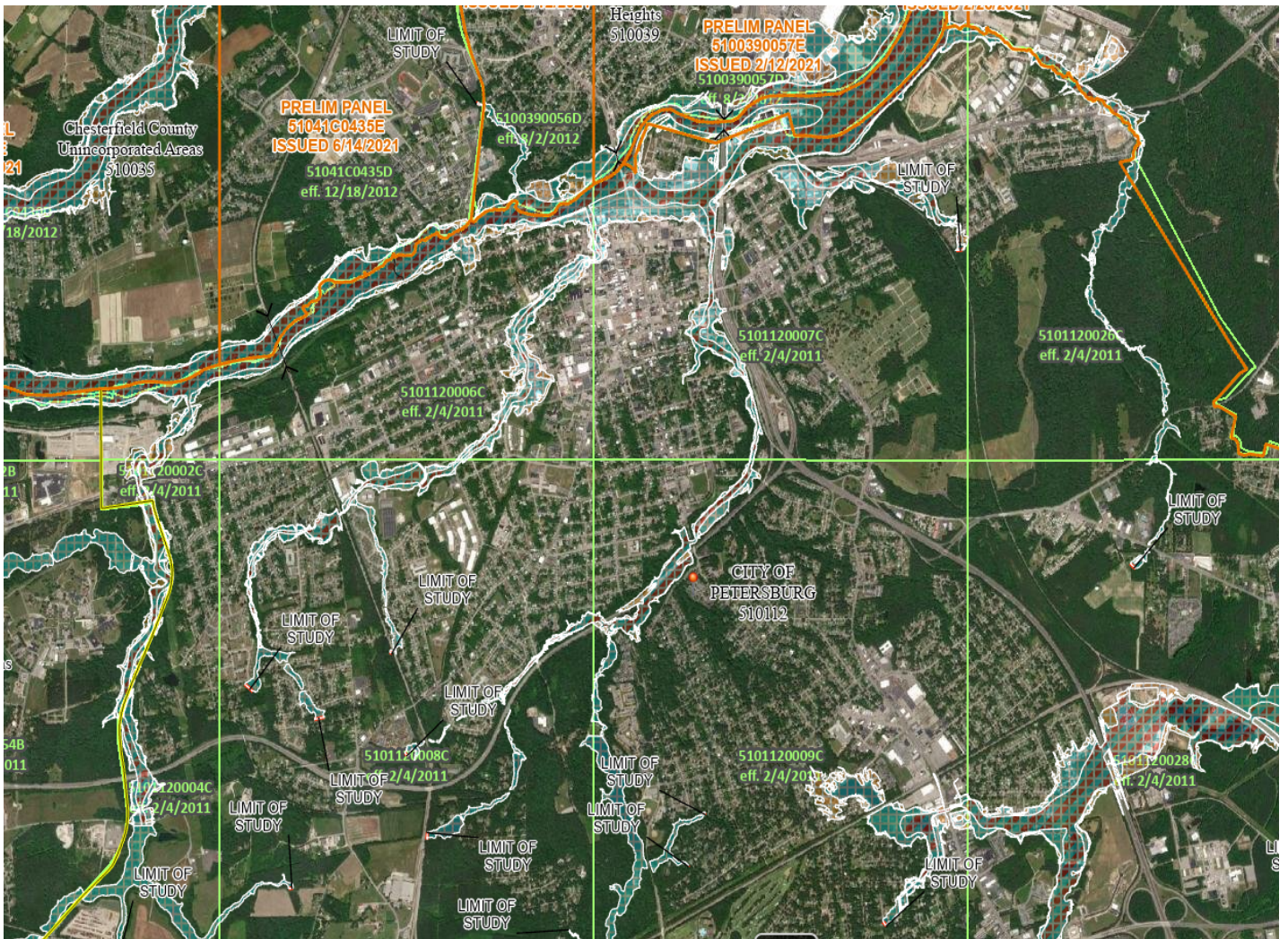


COMMUNITY FLOOD PREPAREDNESS FUND CAPACITY BUILDING & PLANNING GRANT APPLICATION



CITY OF PETERSBURG, VA

COMMUNITY ID #510112

SUBMITTED JANUARY 24, 2025



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CFPF Grant Application: Capacity Building & Planning

1.0. Scope of Work Narrative

Needs and Problems

The City of Petersburg is currently underway with the Citywide Drainage Study and is extraordinarily grateful for the Virginia Department of Conservation and Recreation's (DCRs) Community Flood Preparedness Fund that has enabled this study to proceed (see CFPF Round 2 award, CFPF-21-02-25). The scope of the original study (herein referred to as Phase 1a of the Citywide Drainage Study) provided for: the mapping of all (public and private) stormwater assets in the City, modeling of the existing mapped infrastructure using PCSWMM, and the identification of a prioritized list of conceptual flooding improvement projects to enable planning of future flood improvement projects.

While the City has leveraged the CFPF funding to make substantial progress with the Citywide Study, the number and condition of encountered stormwater assets during the inventory phase required that the City make changes to the scope of work related to the Citywide Drainage Study. As a result, the City has amended the scope of the original study to manage costs, see Scope Change Request submitted separately. The scope change included a number of scope reductions, including the following:

- Prioritize the completion of 1st pass mapping efforts of the inventory phase of the study.
- Exclude structure recovery for those assets not readily accessible for mapping and attribution due to unfavorable encountered conditions.
- Limit detailed existing conditions modeling of mapped stormwater infrastructure to 18 priority neighborhoods, see Appendix 1 of this document.
- Exclude alternatives analysis to improve flooding conditions
- Exclude prioritized project identification.

Currently, the 1st pass mapping of stormwater assets is completed and existing conditions modeling of the 18 priority neighborhoods is underway, of which seven (7) of the priority neighborhoods have been completed (see Appendix 1 of this document). The scope of completed work to date has given the City several immediate next steps which require capacity building and planning to put the developed information to the best use. Given funding limitations locally and with the CFPF grant fund, it is anticipated that this critical next phase of the Citywide Drainage study will be multi-phased.

It is the City's goal to continue progressing Phase 2 of the Citywide Drainage study for all neighborhoods in the City's jurisdiction, as funding allows. This application for grant funding provides for Phase 2a of the Citywide Drainage Study and advances the efforts from Phase 1a of the Citywide Drainage Study. The City is motivated to build on the momentum from the Phase 1a inventory and study efforts by advancing the study of two (2) priority neighborhoods for which existing conditions modeling is complete from Phase 1. For the selected two (2) priority neighborhoods, the City will:

- Complete structure recovery for prioritized assets,
- Update the stormwater inventory GIS database for recovered assets,
- Update the existing conditions neighborhood model to reflect the updated model,
- Perform alternatives analysis modeling to identify flooding improvement strategies

- Develop a prioritized list of conceptual flooding improvement projects to enable planning of future flood improvement projects, and
- Develop Preliminary Engineering Reports (PER) using a project-based approach and document the study findings.

The stormwater inventory and assessment phase of the Citywide Drainage Study (Phase 1) has categorized a significant number (12% overall) of stormwater assets as inaccessible for complete mapping/attribution and identified these structures for revisit due to encountered conditions. Reasons for inaccessibility include issues such as needing sediment/trash removal, access issues (bolted or stuck lids), extensive traffic control needs to access structures, etc. While it was the City's original intent to use its one available maintenance crew to recover these structures, the plan quickly unraveled due to the extensive number of structures and pipes identified for recovery efforts. This issue posed an immediate staffing challenge because the City has limited crew staff who are dedicated to performing a wide range of maintenance issues, and they do not have the capacity to maintain current workload and also complete the structure recovery outlined above. With the current grant request, the City is seeking funding to hire a contractor to work as an extension of the City's staff to perform the necessary structure recovery efforts for prioritized stormwater assets and to update the inventory database to reflect the encountered stormwater systems. The outcomes from the structure recovery efforts will be:

- Restored conveyance capacity of the stormwater assets,
- Identification and abatement of identified safety issues (sink holes, structurally deficient assets, etc) and
- Updates to the infrastructure inventory to reduce data gaps.

This effort will lead directly to improved flooding conditions within the City because the infrastructure will be newly cleaned. In addition, the recovery effort will enable more accurate modeling of the existing conditions due to reduced number of assumptions associated with inaccessible assets and data gaps.

The next phase of the Citywide Drainage study will develop Preliminary Engineering Reports (PERs) which will utilize the updated engineering models, originally developed in Phase 1a of the study, to evaluate flooding improvement alternatives. The PERs will be developed to inform planning efforts that the City will need to undertake in order to budget and implement necessary improvements, including a prioritized list of conceptual flood improvement projects. The PERs will have the following major tasks:

- Update the existing conditions modeling developed in Phase 1a of the Citywide Drainage Study for two (2) neighborhoods to reflect the encountered conditions based on the structure recovery efforts.
- Utilize the updated existing conditions models developed for two (2) neighborhoods to perform an alternatives analysis to identify flooding improvement strategies.
- Evaluate proposed alternatives considering the impacts of climate change
- Prioritize flooding improvement strategies for each neighborhood
- Develop Preliminary Engineering Reports (PERs) with a project-based approach to document study findings.

Grant funding for this critical next step in the Citywide Drainage Study will have community scale benefits for the City's residents. A major outcome of the study is that the City will be able to leverage the project-based PERs to assist the City in making long term plans to obtain funding and complete storm sewer improvement projects, which will ultimately benefit the residents of neighborhoods most affected by flooding in these neighborhoods. The grant funding will enable the City to effectively plan future projects that will protect the citizens and critical public infrastructure within the City from flooding. If the City of Petersburg does not receive the request funding for Capacity Building, the City will not be able to complete structure recovery efforts or complete the PERs. Without grant funding assistance, these critical maintenance and planning tasks will take substantially longer to complete.

All work funded by this application and subsequent projects will be to mitigate current flood risk and improve flooding conditions, particularly for recurring storm events. The City is a low-income geographic area, as defined in the CFPF Grant Manual, as an area where the median household income (\$50,741) is significantly less than 80% of the local median household income (\$90,974 in VA), according to the US Census Data in 2024¹. Further, several areas in the City are designated as Qualified Opportunity Zones, as presented in the supporting documentation

Goals and Objectives

The goal of this initiative is to enable the City to contract qualified 3rd-party contractors to complete structure recovery on prioritized structures identified as inaccessible in the Phase 1 of the Citywide Drainage Study fieldwork in up to two (2) prioritized neighborhoods and contract with an engineering firm to develop PERs for storm sewer improvements in two (2) prioritized neighborhoods in the Citywide Drainage Study model. This work will continue for up to three years or until both the capacity building and planning aspects of this initiative are completed. The funding will provide a bridge for the City to complete necessary structure recovery and to effectively plan future flooding improvement projects reduce flood risk from precipitation events.

Work Plan

The City will complete all requested grant activities within the 36-month window allowable for this cycle of CFPF grant funds. The City of Petersburg, Department of Public Works, will be responsible for overseeing and implementing all grant activities. The following timeline outlines more specifically the City's intended activity schedule:

- January 24, 2025 – CFPF Round 4 Applications due.
- February 19, 2025 – Award announcements anticipated by VA DCR.
- March 31, 2025 – Contracts in place, NTP for Engineering Consultants.
- April 30, 2025 – Engineering Consultants contracted.
- March 1, 2025 – December 31, 2028 – Engineering consultants to conduct structure recovery given information from Citywide Drainage Study fieldwork and to complete preliminary engineering reports based on completed neighborhood models in the Citywide Drainage Study Model.

Evaluation

Success indicators used to evaluate this study are:

1. The completion of structure recovery efforts for prioritized assets in two (2) priority neighborhoods
2. Updated structure attributes and connectivity of the recovered structures in the City's GIS-based stormwater infrastructure inventory dataset
3. Updated existing conditions modeling for two (2) priority neighborhoods to reflect updated GIS inventory
4. Development of a prioritized list of flooding improvement strategies for two (2) priority neighborhoods.
5. Development of PERs that will summarize areas of high flood risk, prioritized conceptual flooding improvement projects, and other relevant information.

The City will establish regular status meetings with the Consultant through the duration of the Phase 2 Citywide Drainage Study to ensure the work meets the requirements of the grant agreement and is delivered on time. Additionally, attendance at relevant public engagement meetings such as Ward meetings, Council presentation(s), *etc.* will be required to gather public feedback on drainage concerns in prioritized neighborhoods and keep the public informed of the study milestones.

¹ <https://www.census.gov/quickfacts/fact/table/petersburgcityvirginia,VA/PST045222>

Appendix 1: List of Priority Neighborhoods from Round 2 Grant Funding

Citywide Drainage Study
Round 2 Grant Funding
Existing Conditions Model Development
Priority Neighborhoods

Lieutenant Run		
	Neighborhood	Modeling Status as of 01/2025
1	Downtown/Wythe Park	Complete
2	Squirrel Level North	Complete
3	Bunker Hill	Complete
4	Whitehill West	Complete
Brickhouse Run		
5	Downtown/Wythe Park	Complete
6	Westview	Complete
7	Rome Street	Complete
Harrison Creek		
8	Timberly Heights	Not Started
9	Whitehill East	Not Started
Poor Creek		
10	Myrick Acres	Not Started
11	Pin Oaks	Not Started
12	Blandford	Not Started
Blackwater Swamp		
13	S. Crater Road Corridor East	In Progress
14	Petersburg Industrial Park South	In Progress
15	Route 460 Corridor	In Progress
Riverfront		
16	Pocahontas Island	Not Started
17	Downtown/Wythe Park	Not Started
18	Blandford	Not Started

Appendix A: Application Form for Grant and Loan Requests for All Categories

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

Name of Local Government:

Category Being Applied for (check one):

☒ Capacity Building/Planning

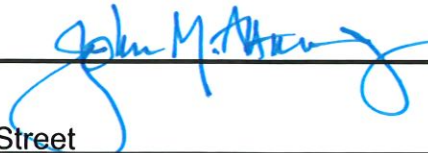
☐ Project

☐ Study

NFIP/DCR Community Identification Number (CID) 510112B

Name of Authorized Official and Title: March Altman, City Manager

Signature of Authorized Official: _____



Mailing Address (1): 135 North Union Street

Mailing Address (2): _____

City: Petersburg State: Virginia Zip: 23803

Telephone Number: (804) 744-2300 Cell Phone Number: (804) 744-2301

Email Address: maltman@petersburg-va.org

Contact and Title (If different from authorized official): Darryl Walker, Stormwater Program Manager

Mailing Address (1): 135 North Union Street

Mailing Address (2): _____

City: Petersburg **State:** Virginia **Zip:** 23803

Telephone Number: (804) 733-2353 **Cell Phone Number:** () _____

Email Address: dwalker@petersburg-va.org

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? Yes X No _____

Categories (select applicable activities that will be included in the project and used for scoring criterion):

Capacity Building and Planning Grants

- ☐ Floodplain Staff Capacity.
- ☐ Resilience Plan Development
 - ☐ Revisions to existing resilience plans and integration of comprehensive and hazard mitigation plans.
 - ☒ Resource assessments, planning, strategies, and development.
 - ☒ Policy management and/or development.
 - ☐ Stakeholder engagement and strategies.
- ☒ Other: Staff augmentation to enable maintenance that will prevent flooding.

Study Grants (Check All that Apply)

- ☐ Revising other land use ordinances to incorporate flood protection and mitigation goals, standards, and practices.

- ☐ Conducting hydrologic and hydraulic (H&H) studies of floodplains. *Changes to the base flood, as demonstrated by the H&H must be submitted to FEMA within 6 months of the data becoming available.*
- ☐ 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.
- ☐ Pluvial studies.
- ☐ 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, freeboard, or other higher standards, RiskMAP public noticing requirements, or correcting issues identified in a Corrective Action Plan.

Project Grants and Loans (Check All that Apply – Hybrid Solutions will include items from both the “Nature-Based” and “Other” categories)

Nature-based solutions

- ☐ 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, and where the flood mitigation benefits will be achieved as a part of the same project as the property acquisition.
- ☐ Wetland restoration.
- ☐ Floodplain restoration.
- ☐ Construction of swales and settling ponds.

- ☐ Living shorelines and vegetated buffers.

- ☐ 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, or the acquisition of developed land for future conservation.

- ☐ Dam removal.
- ☐ Stream bank restoration or stabilization.
- ☐ Restoration of floodplains to natural and beneficial function.

Other Projects

- ☐ Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.
- ☐ Dam restoration.
- ☐ Beneficial reuse of dredge materials for flood mitigation purposes
- ☐ Removal or relocation of structures from flood-prone areas where the land will not be returned to open space.
- ☐ Structural floodwalls, levees, berms, flood gates, structural conveyances.
- ☐ Storm water system upgrades.
- ☐ Medium and large-scale Low Impact Development (LID) in urban areas.
- ☐ 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, and where the flood mitigation benefits will **not be** achieved as a part of the same project as the property acquisition.
- ☐ Other project identified in a DCR-approved Resilience Plan.

Location of Project or Activity (Include Maps): See Supporting Documentation mapping.

NFIP Community Identification Number (CID#): 510112B

Is Project Located in an NFIP Participating Community? ☒ Yes ☐ No

Is Project Located in a Special Flood Hazard Area? ☒ Yes ☐ No

Flood Zone(s) (If Applicable): N/A

Flood Insurance Rate Map Number(s) (If Applicable): N/A

Total Cost of Project: \$650,000

Total Amount Requested \$650,000

Amount Requested as Grant \$650,000

Amount Requested as Project Loan (Long-Term, not including short-term loans for up-front costs)
\$0

RVRF Loan Amount Requested as Project Match (Not including short-term loans for up-front costs)
\$0

Amount Requested as Short-Term loan for Up-Front Costs (not to exceed 20% of amount requested as Grant) \$0

For projects, planning, capacity building, and studies in low-income geographic areas: Are you requesting that match be waived? ☒ Yes ☐ No

For informational purposes only: Supplemental information for loan requests may include but are not limited to the following. This information will be collected AFTER a CFPF award is made, prior to the signing of a grant agreement.

- General Obligation
- Lease, Revenue
- Special Fund Revenue
- Moral obligation from other government entity)
- Desired loan term
- Since the date of your latest financial statements, any new debt
- Pending or potential litigation by or against the applicant
- Five years of current audited financial statements (FY18-22) or refer to website if posted
- Capital Improvement Plan
- Financial Policies
- List of the ten largest employers in the jurisdiction.
- List of the ten largest taxpayers in the jurisdiction

All loan requests are subject to credit review and approval by Virginia Resources Authority.