



## CITY OF COVINGTON

333 W. LOCUST STREET, COVINGTON, VIRGINIA 24426

Thomas H. Sibold, Jr., Mayor  
David S. Crosier, Vice-Mayor  
William E. Carson Jr., Councilman  
Raymond C. Hunter, Councilman  
S. Allan Tucker, Councilman

Krystal M. Onaitis, City Manager  
Mark C. Popovich, City Attorney

April 8, 2022

Ms. Wendy Howard-Cooper  
Director of Dam Safety and Floodplain Management  
Virginia Department of Conservation and Recreation  
600 East Main Street, 24<sup>th</sup> Floor  
Richmond, VA 23219

RE: Authorization of City of Covington CFPF Capacity Building and Planning Application

Dear Ms. Howard-Cooper and Members of the CFPF Review Team:

Please accept this written correspondence as signed documentation authorizing the City of Covington's request for funding from Round 3 of the 2022 Virginia Community Flood Preparedness Fund (CFPF). As the City only recently became aware of this funding and does not have funding established in our currently budget, we respectfully request the Department of Conservation and Recreation waive our match requirement for Capacity Building and Planning.

The CFPF grant would enable to City of Covington to commence Resilience Planning and Capacity Building through the development of a Resilience Plan and funding of Certified Floodplain Manager (CFM) training for one City employee to ensure that the City has a Floodplain Administrator on staff. The Resilience Plan would pull together both local and regional initiatives in a project-based, City-wide effort to address both riverine and pluvial flooding issues. A Community Outreach Plan would be developed to solicit input on flooding concerns and proposed projects from residents and stakeholders. The City is also submitting a separate CFPF grant application to fund a City-wide Drainage Study, as the current undersized and aging storm sewer infrastructure contributes to recurrent flooding issues throughout the City.

Thank you for your consideration of this grant proposal. If you have any questions about this proposal, please contact Patrick Madigan at (540) 965-3911 or [pmadigan@covington.va.us](mailto:pmadigan@covington.va.us).

Sincerely,

Krystal M. Onaitis  
Covington City Manager  
(540) 965-6300  
[konaitis@covington.va.us](mailto:konaitis@covington.va.us)

# Appendix A: Application Form for Grant Requests for All Categories

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

Name of Local Government:

City of Covington, VA

Category of Grant Being Applied for (check one):

Capacity Building/Planning

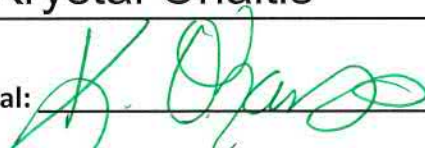
Project

Study

NFIP/DCR Community Identification Number (CID) 510040

If a state or federally recognized Indian tribe, Name of tribe N/A

Name of Authorized Official: Krystal Onaitis

Signature of Authorized Official: 

Mailing Address (1): 333 W. Locust Street

Mailing Address (2): \_\_\_\_\_

City: Covington State: VA Zip: 24426

Telephone Number: (540) 965-6300 Cell Phone Number: (540) 958-3837

Email Address: konaitis@covington.va.us

Contact Person (If different from authorized official): \_\_\_\_\_

Mailing Address (1): \_\_\_\_\_

Mailing Address (2): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone Number: (\_\_\_\_) \_\_\_\_\_ Cell Phone 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    No

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

**Flood Zone(s) (If Applicable):** \_\_\_\_\_

**Flood Insurance Rate Map Number(s) (If Applicable):** \_\_\_\_\_

**Total Cost of Project:** \_\_\_\_\_

**Total Amount Requested** \_\_\_\_\_

## Appendix D: Scoring Criteria for Capacity Building & Planning

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

<b>Applicant Name:</b>		
<b>Eligibility Information</b>		
Criterion	Description	Check One
<b>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)?</b>		
Yes	Eligible for consideration	
No	Not eligible for consideration	
<b>2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?</b>		
Yes	Eligible for consideration under all categories	
No	Eligible for consideration for studies, capacity building, and planning only	
<b>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?</b>		
Yes	Eligible for consideration	
No	Not eligible for consideration	
<b>4. Has this or any portion of this project been included in any application or program previously funded by the Department?</b>		
Yes	Not eligible for consideration	
No	Eligible for consideration	
<b>5. Has the applicant provided evidence of an ability to provide the required matching funds?</b>		
Yes	Eligible for consideration	
No	Not eligible for consideration	
N/A	Match not required	

<b>Capacity Building and Planning Eligible for Consideration</b>		<input type="checkbox"/> Yes	<input type="checkbox"/> No
<b>Applicant Name:</b>			
<b>Scoring Information</b>			
<b>Criterion</b>	<b>Point Value</b>	<b>Points Awarded</b>	
<b>6. Eligible Capacity Building and Planning Activities (Select all that apply)</b>			
Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.	55		
Development of a new resilience plan.	55		
Resource assessments, planning, strategies and development.	45		
Policy management and/or development.	40		
Stakeholder engagement and strategies.	25		
Goal planning, implementation and evaluation.	25		
Long term maintenance strategy.	25		
Other proposals that will significantly improve protection from flooding on a statewide or regional basis.	15		
<b>7. Is the area within the local government to which the grant is targeted socially vulnerable? (Based on <a href="#">ADAPT VA's Social Vulnerability Index Score.</a>)</b>			
Very High Social Vulnerability (More than 1.5)	15		
High Social Vulnerability (1.0 to 1.5)	12		
Moderate Social Vulnerability (0.0 to 1.0)	8		
Low Social Vulnerability (-1.0 to 0.0)	0		
Very Low Social Vulnerability (Less than -1.0)	0		
<b>8. Is the proposed activity part of an effort to join or remedy the community's probation or suspension from the NFIP?</b>			
Yes	10		
No	0		
<b>9. Is the proposed project in a low-income geographic area as defined in this manual?</b>			
Yes	10		
No	0		
<b>10. Does this project provide "community scale" benefits?</b>			
Yes	20		
No			
<b>Total Points</b>			



## Appendix D: Checklist All Categories

Virginia Department of Conservation and Recreation

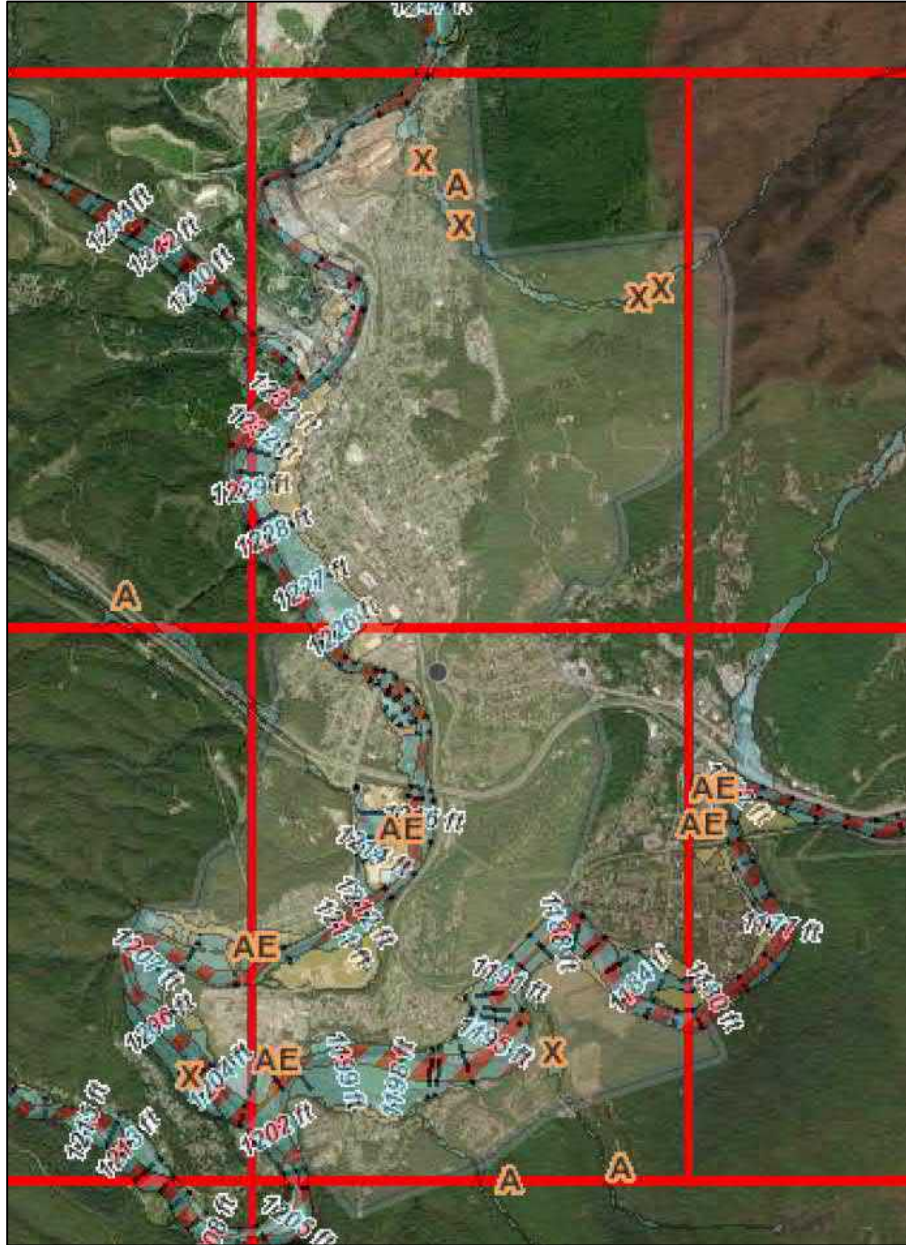
Community Flood Preparedness Fund Grant Program

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



# Community Flood Preparedness Fund Capacity Building and Planning Grant Application



City of Covington, VA  
Community Identification Number: 510040  
Submitted: April 8, 2022



## 1.0 Scope of Work Narrative

The City of Covington, Virginia is subject to riverine flooding from the Jackson River as well as pluvial flooding due to inadequate and antiquated storm sewer systems. The recurrence of higher intensity storms in recent years has stressed the stormwater conveyance system throughout the City causing local urbanized flooding that is detrimental to the residents and critical infrastructure. **Attachment 1** contains additional links, photos, and other documentation of flooding issues within the City.

The City plans to implement flood prevention and protection projects in areas that are subject to recurrent flooding as confirmed by a local floodplain manager. However, before these projects can be implemented, the City must first develop a Resilience Plan and provide training to a City employee to become a CFM. A Stakeholder Engagement and Community Outreach Plan will be implemented as part of the Resilience Plan development to capture input from the public about flooding concerns. Because of the lack of known information about the City's stormwater system, a City-wide Drainage Study is also needed to identify portions of the storm sewer system that must be upgraded or replaced to alleviate recurrent pluvial flooding from rainfall. The City has submitted a separate CFPF grant application to aid in the development of a Drainage Study, which will inform the Resilience Plan.

Limited resources in the City and a focus on sanitary sewer infiltration and overflow issues have prevented the City from investing in flood mitigation planning and project implementation. The City is a low-income geographic area, as defined in the CFPF Grant Manual, as an area where the median household income (\$41,024) is significantly less than 80% of the local median household income (\$76,398 in Virginia), according to the US Census Data in 2020<sup>1</sup>. Further, portions of the City are classified as Moderately Socially Vulnerable, according to the ADAPT Virginia's Virginia Vulnerability Viewer (see Figure 1 in **Attachment 2**). Finally, several areas in the City are designated as Qualified Opportunity Zones (see Figure 2 in **Attachment 2**).

The City understands that the CFPF grants must be used in accordance with the following guiding principles:

- Acknowledge climate change and its consequences; and base decision making on the best available science.
- Identify and address socioeconomic inequities and work to enhance equity through adaptation and protection efforts.
- Utilize community and regional scale planning to maximum extent possible, seeking region-specific approaches tailored to the needs of individual communities.
- Understand the fiscal realities and focus on the most cost-effective solutions for the protection and adaptation of our communities, businesses, and critical infrastructure. The solutions wilt, to the extent possible, prioritize effective natural solutions.

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<sup>1</sup> <https://www.census.gov/quickfacts/fact/table/covingtoncityvirginia,VA,US/PST045221>

- Recognize the importance of protecting and enhancing nature based-solutions in all regions, natural coastal barriers, and fish and wildlife habitat by prioritizing nature-based solutions.

## 1.0 Assess Capacity Needs and Assets

The City of Covington has identified the following resource needs:

- Financial – both a Resilience plan and an in-house Floodplain Administrator/Certified Floodplain Manager are required for any project implementation funding through the CFPF. Although there is a clear and documented need, the City does not have these items specified in the FY2021-2022 budget.
- Human – the City does not currently have a CFM on staff, but the City is planning to hire a new staff member that could be enrolled in CFM training. Therefore, the City is requesting funding to train a new City employee to become a Floodplain Administrator.
- Technical Assistance – The City is seeking a CFPF grant to execute a contract with a Consultant to develop a Resilience Plan. Once adopted, the Resilience Plan will be incorporated into the City’s Comprehensive Plan and elements of the Resilience Plan will be included in the next update to the regional Hazard Mitigation Plan.
- Training – The City is requesting funds to provide CFM training for a City employee. In addition, the Community Outreach Plan will include public education on flood risks and mitigation measures.

The City plans to train new staff and utilize the expertise of Consultants to develop, increase and strengthen the floodplain management knowledge and skills in the City. The City plans to build internal resources through continuing partnerships with the Roanoke Valley-Alleghany County Regional Commission and utilizing grants, loans, and other funding sources. Under the separate, Drainage Study CFPF grant application, the City plans to review and revise the City’s floodplain ordinance and related policies.

## 2.0 Goals and Objectives

The goals of this project include:

1. Enable the City to provide training and certification for a new employee to become a Certified Floodplain Manager.
2. Utilize a Consultant to develop a community-wide Resilience Plan to lay the planning framework needed to address riverine and pluvial flooding throughout the City limits.
3. Engage and educate the public that are impacted by flooding in the City.

### 3.0 Stakeholder Identification, Outreach and Education Strategies

The City plans to work across departments to identify key stakeholders that need to be engaged during the development of the Resilience Plan. While the Department of Public Works will be leading the effort, representatives from other City departments will be engaged throughout the Resilience Plan development effort. The City plans to retain a Consultant to develop an Outreach Plan as part of the overall Resilience Plan development. Outreach strategies include inclusion of a Resilience Plan website, a survey to collect information from the public on flooding concerns and public meetings (in person and virtual) to solicit input from the public on proposed flood mitigation strategies and to provide general flood resilience education.

### 4.0 Implementation Plan and Timelines

The City will complete all requested grant activities within the 36-month timeline allowable for this cycle of CFPF grant funds. The completion of a City-wide Drainage Study is necessary to complete the Resilience Plan, as the stormwater improvement projects recommended in the Drainage Study will be incorporated into the Resilience Plan. The following timeline outlines the intended activity schedule:

- Round 3 CFPF Grant Applications Due: April 8, 2022
- Announcements anticipated by DCR: June 17, 2022
- Contracts in place for Consultant to Develop Resilience Plan: August 1, 2022
- New City employee to be enrolled in CFM Training within twelve (12) months of grant award announcement.
- Public Meeting #1 to be held by October 3, 2022 to solicit input from the public and key stakeholders
- Public Meeting #2 to be held within four weeks of the completion of the project identification effort (to be coordinated with the Drainage Study), estimated to be complete within one year of the project kickoff (August 2023).
- Final Resilience Plan to be submitted to DCR for review by February 1, 2024.

## 5.0 Responsible Parties for Capacity Building and Plan Development Process

The City of Covington, Department of Public Works, will be responsible for overseeing and implementing all grant activities.

## 6.0 Performance Outputs and Measures

Success will be measured by the presence of a new Floodplain Administrator/CFM at the City and the development of a Resilience Plan that will serve as a roadmap for the City to plan future projects and activities with a goal to improve the City's flood resilience.

## 7.0 Plans for Maintaining Capacity Over the Long Term

The City plans to maintain capacity over the long-term through the establishment of a Floodplain Administrator position. Projects identified in the Resilience Plan will be funded through the City's budget and supplemental grants and loans.

## 8.0 Supporting Documentation

- City of Covington Current Floodplain Ordinance:  
[https://library.municode.com/va/covington/codes/code\\_of\\_ordinances?nodeId=PTIICOOR-APXBZO-ARTXIII-AFLDI](https://library.municode.com/va/covington/codes/code_of_ordinances?nodeId=PTIICOOR-APXBZO-ARTXIII-AFLDI)
- Current Hazard Mitigation Plan: <https://rvarc.org/community/hazard-mitigation/>
- Current Comprehensive Plan:  
<https://public.3.basecamp.com/p/UmJw2ghsfpj3enw4RDLGN43f>

## Budget Narrative

Per the CFPF Grant Manual, the following budget narrative was created for the activities contained in this grant application.

Task	Project Budget	Source of Estimate
<b>CFM Training. Exam and Annual Dues</b>	\$165 – ASFPM Yearly Dues (3 years) \$185 – ASFPM CFM Exam Fee (Member Rate) \$120 – Biennial Renewal Fee (Member Rate) <b>TOTAL: \$800</b>	ASFPM Certification Fee Schedule <sup>2</sup>
<b>Resilience Plan Development</b>	<b>\$139,790</b>	Consultant Cost Estimate (see <b>Attachment 3</b> )
<b>Total Requested Grant Amount</b>	<b>\$140,590</b>	

<sup>2</sup> <https://www.floods.org/certification-program-cfm/getting-certified/#cfm-fee-schedule>

The total amount of funds requested is \$140,590. Per the instructions in the Grant Manual (page 24), “for local governments designated as low-income geographic areas, 100 percent of the estimated total project costs should be included.” The City does not have cash funds available for a match, and requests full funding of this project, per the authorization letter signed by the City Manager.

## Attachment 1

Evidence of Historic Flooding



## Attachment 1 – Evidence of Historic Flooding in the City

News articles and videos documenting flooding:

June 2016:

<https://www.wdbj7.com/content/news/Several-roads-washed-out-in-Alleghany-County-384157931.html>

<https://www.youtube.com/watch?v=lk3jenZ9Cjk>

<https://www.counton2.com/news/historical-flooding-in-covington-causes-garage-fire/>

September 2018:

<https://www.youtube.com/watch?v=M3bCQ7zrPmk>

Repetitive Loss Claims in City Due to Flooding:

**Table 12: Repetitive Loss Statistics City of Covington**

Number of Properties	6
Number of Losses	16
Total Payments	\$196,675.92
Total Building Payments	\$122,174.32
Total Contents Payments	\$74,501.60
Average Claim	\$12,292.25

Source: FEMA, 2019.





Underpass Flooding (Source: <https://www.facebook.com/HighlandsMediaGroup/posts/1209223899532307> )

## Attachment 2

Virginia Vulnerability Map and  
Qualified Opportunity Zone Map



# Attachment 2 – Social Vulnerability Mapping and Qualified Opportunity Zone Map

Figure 1: Social Vulnerability Map for Covington, VA

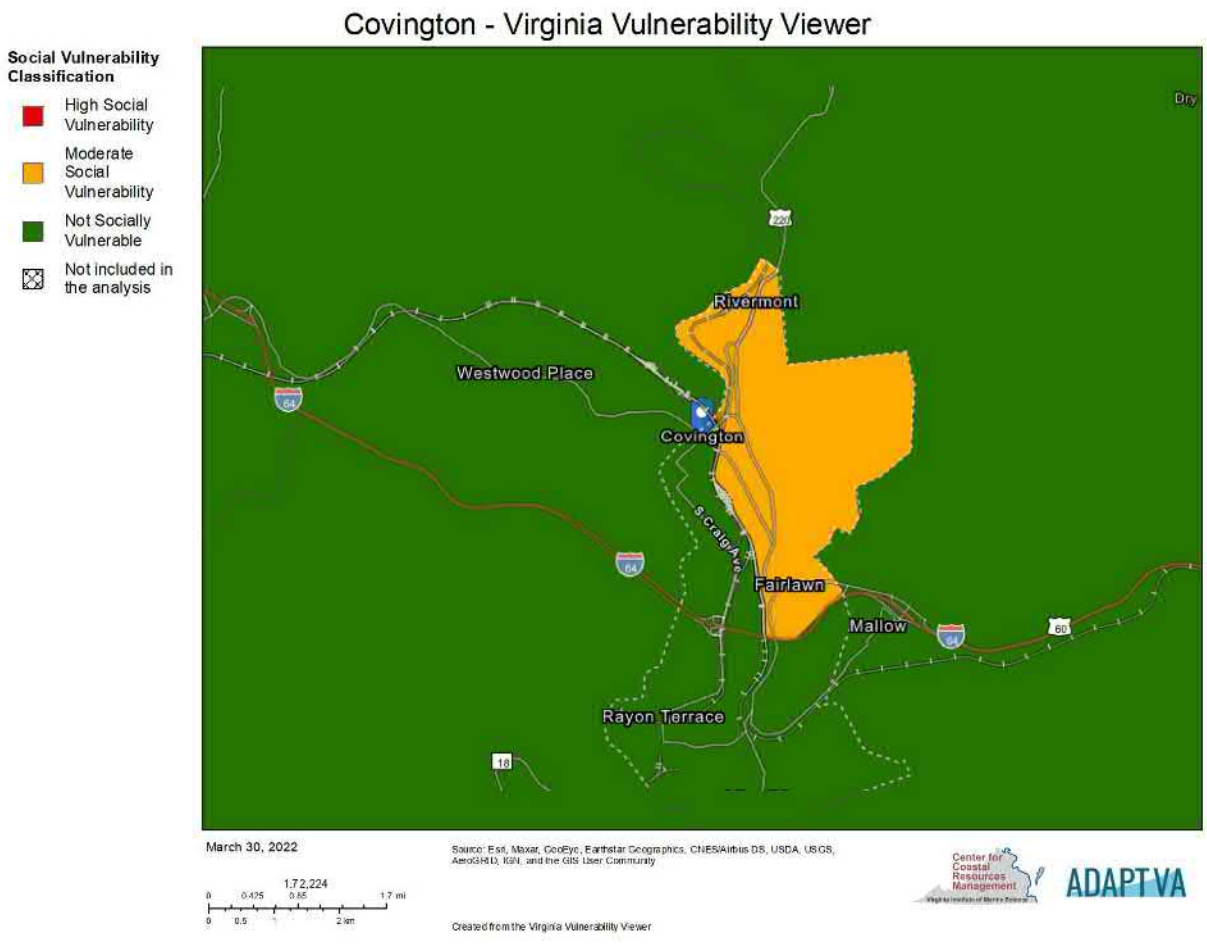
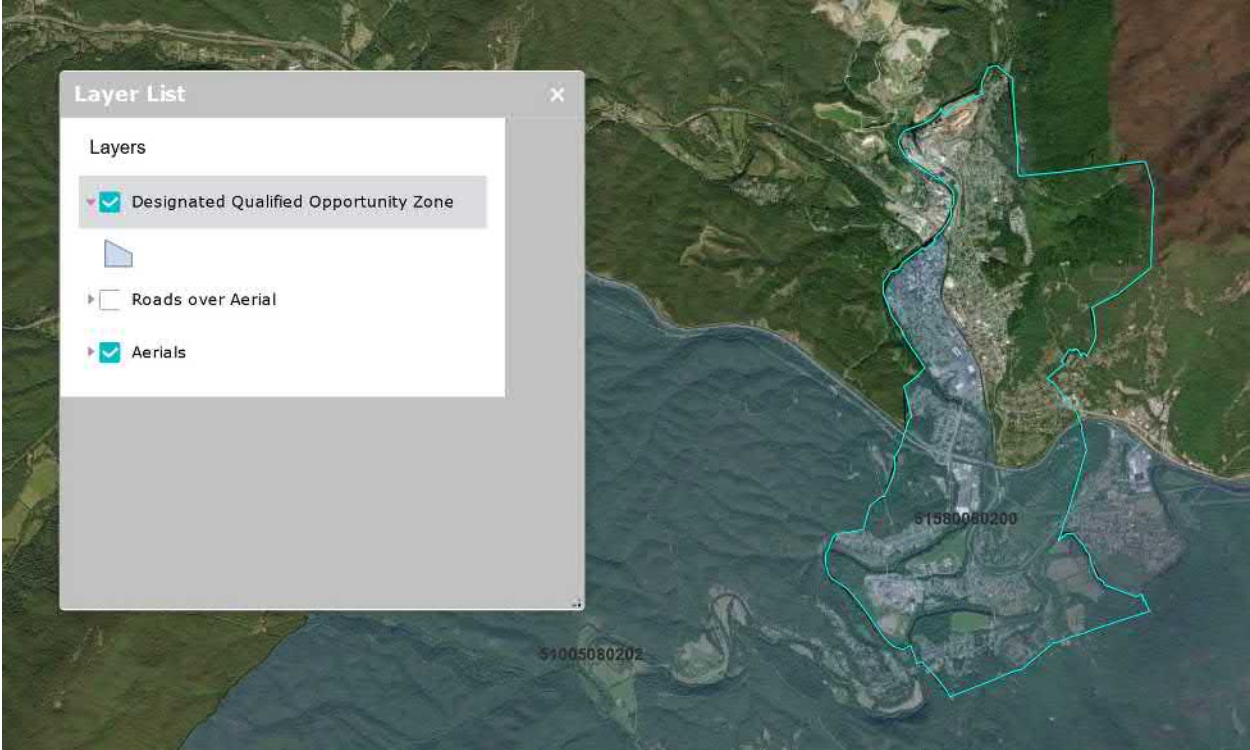


Figure 2: Qualified Opportunity Zones Map for Covington



## Attachment 3

Consultant Proposal to Develop Resilience Plan



April 1, 2022

Ms. Krystal M. Onaitis, MPA  
City Manager  
City of Covington  
333 W. Locust Street  
Covington, VA 24426  
[konaitis@covington.va.us](mailto:konaitis@covington.va.us)

## **Proposal to Develop Resilience Plan for City of Covington, VA**

Dear Krystal,

AECOM Technical Services, Inc. (AECOM) is pleased to provide you this proposal for select A/E services to support the development of a Resilience Plan for the City of Covington (City), to be funded by a Round 3 Community Flood Preparedness Fund (CFPF) Grant administered by the Virginia Department of Conservation and Recreation (DCR). The focus of this project is to work closely with the City to evaluate the vulnerability of public assets, utilities, roads and structures within the City to flooding from both the Jackson River and pluvial flooding caused by undersized and damaged drainage systems. The Resilience Plan will focus on the City's floodplains, current and planned gray and green infrastructure, and stormwater management, evaluate flood mitigation options and provide a path forward to allow the City to plan for improvements in the future.

### **Background**

Areas within the City of Covington, Virginia have historically flooded, including over two dozen roadways<sup>1</sup> in the City. This flooding is a health and safety concern for citizens of the City as emergency access routes are impacted by flood waters. In addition, Riverine flooding of the Jackson River has occurred at all times of the year and during all major floods creating high velocity flood flows and hazardous conditions to exist in the main stream channel and in some parts of the flood plain.

Utilizing the proposed Resilience Plan, the City will have a strategy that will focus on upgrading, modifying, and installing new stormwater and flood control practices in strategic locations within the City. The development of the Resilience Plan will be guided by social equity data and principles as it related specifically to this effort. The development of a City-wide Drainage Study is also needed to help inform the Resilience Plan. The City is applying for a separate CFPF grant to fund this Drainage Study. The Resilience Plan will aim to implement nature-based

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<sup>1</sup> Source: Table 48 from the RVAC Regional Hazard Mitigation Plan

solutions to the maximum extent practicable to mitigate current flooding as well as increase resilience to future flooding situations.

The City, in conjunction with AECOM, will develop the Resilience Plan. The City currently lacks the capacity or in house expertise to undertake this effort singularly and thus outside resources are required for the completion of this task.

## **Scope of Services**

AECOM will assist the City in preparing and adopting a Resilience Plan in accordance with the 2022 Grant Manual for the Virginia Community Flood Preparedness Fund<sup>2</sup>. The Plan will include the five Commonwealth Planning Principles established by the Virginia Coastal Resiliency Master Planning Framework, which was published in October 2020. This proposal has been divided into seven tasks. Each task is outlined below with a brief summary of services.

### ***Task 1 – Publications/Documents Review and Vulnerability Analysis***

As part of Task 1, existing documents will be reviewed including the Roanoke Valley-Alleghany Regional Commission (RVARC) Hazard Mitigation Plan (August 2019)<sup>3</sup>, existing GIS datasets, the City of Covington Comprehensive Plan (2015-2035)<sup>4</sup>, Covington Municipal Code, Covington Floodplain Management Ordinance, existing utility mapping and other relevant documents. This task also includes a discussion with City personnel to identify specific locations where flooding regularly occurs and where projects are planned that should be included in the Plan. Finally, this task will include a review of the current and available revised FEMA Flood Insurance Studies (FIS) and Flood Insurance Rate Maps (FIRMs), repetitive loss data (if available) and information related to social and economic vulnerability.

### ***Task 2 – Stakeholder Engagement and Community Outreach Plan***

AECOM will assist the City with stakeholder identification, engagement, and community outreach. This task is broken into two phases:

- Phase 1 will focus on initial engagement, education and soliciting feedback from the public and key stakeholders on flooding concerns throughout the City. A survey will be prepared, and a public meeting will be held to collect information from the public on flooding concerns, potential strategies and general flood resilience education.
- Phase 2 will focus on obtaining input from key stakeholders and the public on proposed resilience strategies through a series of three public meetings and informational brochures/flyers.

These strategies will include the development of a Resilience Plan website as well as public meetings/workshops to present potential flood mitigation projects and solicit input from the public on the Resilience Plan and their personal experiences with flooding within the study area. AECOM will develop display boards, handouts and provide up to two staff members for the two public meetings. In addition, AECOM will develop digital content for inclusion on the Resilience Plan website (to be developed by the City).

### ***Task 3 – Adaptation Alternatives Analysis***

AECOM will utilize the information collected and developed in Tasks 1 and 2, as well as the outcome of the City-wide Drainage Study to identify a list of conceptual flood mitigation and stormwater drainage projects that will provide a holistic approach to improving resilience

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<sup>2</sup> <https://www.dcr.virginia.gov/dam-safety-and-floodplains/document/Round-3-2022-CFPF-Manual-final.pdf>

<sup>3</sup> <https://rvarc.org/community/hazard-mitigation/>

<sup>4</sup> <https://public.3.basecamp.com/p/UmJw2ghsfpi3enw4RDLGN43f>

throughout the City. Projects that provide community-wide benefits while utilizing nature-based solutions will be prioritized and additional focus will be given to areas of social and economic vulnerability as defined in the 2022 Grant Manual for Virginia Community Flood Preparedness Fund. The following project types are anticipated for evaluation as part of this effort:

- Regional ponds
- Stormwater system improvements
- Floodwall implementation
- Residential and commercial building floodproofing
- Urban green infrastructure installation
- Restoration of floodplains
- Site specific nature-based solutions
- Acquisition of flood-prone properties

AECOM will conduct a feasibility analysis for each potential project identified to determine its viability. These evaluations are intended to serve as a planning level exercise and the conceptual projects are not intended to be used as engineering documents. Each conceptual project will include a project summary, potential benefits and constraints, estimated timeline for implementation, and preliminary Engineer's Opinion of Probable Construction Costs (EOPCC). AECOM will develop up to eight potential projects to include as part of the Resilience Plan.

#### ***Task 4 – Development of Draft and Final Resilience Plan***

AECOM will develop the Resilience Plan in accordance with the guidance provided in the 2022 Grant Manual for the Virginia Community Flood Preparedness Fund. The Plan will utilize information collected, identified and developed in Tasks 1-3 as well as the City-wide Drainage Study to provide a flood mitigation approach for the City that is in accordance with the following principles:

1. It is project-based with projects focused on flood control and resilience.
2. It incorporates nature-based infrastructure to the maximum extent possible.
3. It includes considerations of all parts of a local government regardless of socioeconomics or race.
4. It includes coordination with other local and interjurisdictional projects, plans and activities and has a clearly articulated timeline or phasing for plan implementation.
5. Is based on the best available science and incorporates climate change and current flood maps.

AECOM will prepare a Draft Resilience Plan in electronic and hard copy format for review and comments by the City. Any necessary revisions from the draft submittal will be included in the Final Resilience Plan, to be submitted to DCR at the conclusion of this task. AECOM will address up to one round of City comments on the Draft Plan as well as one round of comments from DCR on the Final Plan.

#### ***Task 5 – Project Management, Coordination and Meetings***

This task includes the following:

- Recurring communication between the City and identified stakeholders including biweekly project status calls, emails and virtual meetings.

- Project management tasks include monthly invoicing and the development of progress reports.
- Quality control reviews of all deliverables and products prepared as part of this project.
- Assistance with the development of CFPF progress reports.
- Attendance at milestone meetings, including the following:
  - Kick-off Meeting (assumed to be virtual, one hour in length)
  - Public Meeting #1 – goal of soliciting information from the public on the locations, severity and type of flooding that has been experienced in the study area.
  - Modeling Results & Resilience Projects Identification Meeting – Present the results of the stormwater modeling efforts and preliminary list of identified resilience projects to City personnel and identified stakeholders.
  - Public Meeting #2 – present potential project information and solicit input from public on the list of projects.
  - Resilience Plan Development Meeting – discuss the Draft Resilience Plan submittal and comments and develop strategy for Final Plan development and submittal.

Deliverables for this task include meeting agendas, meeting summaries, invoices, and progress reports.

## **Assumptions**

1. City to provide GIS data available. The City does not currently have GIS data for the stormwater system.
2. The Resilience Plan is a planning level document and will not be stamped and sealed by a Virginia Professional Engineer (PE).
3. AECOM will not be providing site plans, landscaping plans or detailed design for any of the identified flood mitigation measures contained in the study in this phase of the project.
4. Environmental permitting will not be performed.
5. LiDAR data is available for the study area.
6. Phase I, II, III Archeological Investigations are not included.
7. FEMA CLOMR or LOMR applications are not included.

## **Schedule**

The notice to proceed is dependent on the timing of the CFPF grant awards. AECOM is prepared to commence work within two weeks of NTP from the City, and it is believed that all work include in this scope can be completed within one year from NTP. It is noted that this work will be coordinated with the City-wide Drainage Study, as information collected during that effort will inform the Resilience Plan. The estimated schedule for project milestones is as follows:

- Kick-Off Meeting - within two weeks of NTP

- Public Meeting #1 – within eight weeks of the Kick-Off Meeting
- Publications and Documents Review – approximate 5-week effort, to commence upon receipt of all requested information.
- Resilience Projects Identification Meeting – within two weeks of completion of project identification effort (to be coordinated with Drainage Study).
- Public Meeting #2 – within four weeks of the Resilience Projects Identification Meeting.
- Draft Resilience Plan Submittal to City – within two months of the Public Meeting #2.
- Final Resilience Plan Submittal to DCR – within 4 weeks of receipt of comments from City.

**Additional Services** (available upon request)

1. FEMA CLOMR or LOMR application support
2. Grant Writing and Grant Administration Support

**Fee**

AECOM will provide the above-described services for the lump sum fee of **\$139,790**, as shown in the Task Breakdown table below.

Task	Labor Cost	Expenses
Task 1 - Publications Review and Vulnerability Analysis	\$17,410	
Task 2 - Stakeholder Engagement and Community Outreach	\$31,620	\$1,080
Task 3 - Adaptation Alternatives Analysis	\$31,300	
Task 4 - Draft and Final Resilience Plan Development	\$31,300	
Task 5 - Project Management and Meetings	\$26,080	\$1,000
<b>Sub-Total</b>	\$137,710	\$2,080
<b>Total Fee</b>	\$139,790	

We are eager to begin serving you on this unique project.

Yours sincerely,



Ronald Smith  
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 AECOM  
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CFPF, rr &lt;cfpf@dcr.virginia.gov&gt;

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**Final CFPF Applications - Ready to Submit (EMAIL 2 of 2)**

1 message

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**Patrick Madigan** <pmadigan@covington.va.us>  
To: "cfpf@dcr.virginia.gov" <cfpf@dcr.virginia.gov>  
Cc: Rebecca Nuckols <Rnuckols@covington.va.us>

Fri, Apr 8, 2022 at 1:02 PM

Sir/Madam,

Attached to this email is the second of two applications for the City of Covington.

This application package is for the Resilience Plan.

Please don't hesitate to contact me with any questions.

Respectfully,

Patrick J. Madigan, Sr.

Director of Public Works

City of Covington

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