

Policy Briefing Summary

City Council



Regarding:	Resolution to appropriate \$303,660.00 from the Building Resilient Infrastructure and Communities (BRIC) Grant Program for the City of Charlottesville - Rock Creek Watershed Management Plan (1 of 2 readings)
Staff Contact(s):	Taylor Harvey-Ryan, Grants Program Manager
Presenter:	Donald Schrager, Stormwater Utility Administrator
Date of Proposed Action:	December 15, 2025

Issue

Appropriate grant funds from the Virginia Department of Emergency Management and execute the grant agreement to support the Rock Creek Watershed Management Plan.

Background / Rule

The Department of Public Utilities was notified of a grant award from the Virginia Department of Emergency Management's Building Resilient Infrastructure and Communities (BRIC) Grant Program in the amount of \$303,660 to support the Rock Creek Watershed Management Plan for February 17, 2024, to February 16, 2027.

Analysis

The City of Charlottesville was awarded \$231,360 in FEMA funds through the Virginia Department of Emergency Management to support the Rock Creek Watershed Management Plan. The grant requires a 25% match in the amount of \$72,300. These funds will be used to develop a Watershed Management Plan (WMP) to investigate options, identify solutions, and optimize benefits regionally. Potential techniques to be evaluated for the WMP include, but are not limited to the following:

- Programmatic solutions for flood resiliency including:
 - Stream monitoring
 - Floodplain ordinance recommendations
 - Strategy for participating in the Community Rating System (CRS) program
- Infrastructure improvements to reduce flooding and increase flood resilience:
 - Floodplain storage/ Reconnected floodplains
 - Existing stormwater management facility retrofits
 - New stormwater management facilities on public and undeveloped land
 - Site-scale stormwater management for local drainage issues
 - Property buyouts
 - Improved conveyance of the local drainage system, primarily culverts
 - Reduced or disconnected impervious cover
 - Increased tree canopy
- Infrastructure improvements that improve conveyance and reduce nutrient removal efficiency in existing systems will be offset with nature-based solutions such as:
 - Stream stabilization and restoration
 - Green infrastructure integration into traffic calming devices
 - Public land retrofits

In addition to building flood resilience across the watershed, the above suite of solutions will improve ecological function of the City's waterways, create and connect habitat corridors, and improve public health and safety. The WMP will be developed in seven distinct phases, as described below:

1. Data Development

Existing FEMA and City of Charlottesville stormwater models (1D/2D SWMM, HEC-RAS) will be modified to expand coverage areas and refine input data. The updated models will allow the City to assess flood risk across the watershed using regulatory design storms and climate-influenced events represented with Chesapeake Bay Watershed IDF Curve data developed by MARISA. The models will also consider potential increases to impervious cover by incorporating the City's recently developed future land use maps.

Other data to be reviewed and integrated into the management plan include the City's floodplain ordinance and the Thomas Jefferson Planning District Commission (TJPDC)'s Natural Hazard Mitigation Plan.

2. Pilot Project Field Investigations

Site surveys will be conducted to verify site conditions and eligibility for potential improvements. This may include topographic survey, boundary survey, photographs, geotechnical investigation, environmental impact assessments, and field work reports, as necessary.

3. Conceptual Design and Modeling

Desktop GIS investigations, field investigations, and the City's Streets that Work plan will be used to identify locations and techniques across the watershed to address known drainage and erosion issues, ranging from site-scale to watershed-scale.

4. 2D Model Verification

The proposed improvements included in the conceptual design will be added to the City's 2D SWMM model (draft available in Summer 2023) to verify the cumulative effects across the Rock Creek watershed. Based on the results of the 2D model, an iterative approach between 1D and 2D modeling may be necessary.

5. Permitting/Cost/Phasing Recommendations

Any improvements proposed in public right of way will require coordination with City staff and a preliminary review of permitting requirements. Conceptual designs will be shared with Public Works and Neighborhood Development Services to address feasibility issues not identified during field investigations and conceptual design.

6. Public Engagement / Stakeholder Identification

Community meetings will be scheduled to communicate the conceptual watershed management plan with a focus on how the plan is integrated with goals from the City's comprehensive plan and applicable small neighborhood plans. Depending on the locations of the proposed improvements, stakeholders may include the City of Charlottesville Parks Department, the University of Virginia, neighborhood associations, and private property owners.

7. Final Report and Model

Models will be revised based on feedback from public and stakeholder engagement, resulting in a final model, final reports, and preliminary construction documents.

Developing a watershed management plan prior to constructing improvements in the watershed is the most cost-effective approach to building flood resiliency in the City's systems and operations. This

approach avoids band-aid solutions that will not provide prolonged or comprehensive flood mitigation and resilience. It allows the City to assess the cumulative effect of watershed-scale and site-scale solutions and integrates watershed management with neighborhood and transportation planning. The result of this work will prepare the City for the next phase of FEMA funding for design and build.

Financial Impact

There is no financial impact to the City, as the match funds will be paid using previously appropriated funds in the Stormwater CIP budget.

Recommendation

Staff recommends the appropriation of the grant funds in the amount of \$231,360 from FEMA and the local match of \$72,300 to support the City of Charlottesville- Rock Creek Watershed Management Plan project. Staff recommends the City Manager execute the grant agreement between VDEM and the City of Charlottesville to support the Rock Creek Watershed Management Plan project.

Recommended Motion (if Applicable)

I move to approve the resolution appropriating \$303,660.00 to support the City of Charlottesville Rock Creek Watershed Management Plan project.

I move to approve the City Manager execute the grant agreement between the Virginia Department of Emergency Management and the City of Charlottesville and any subsequent amendments for the Rock Creek Watershed Management Plan.

Attachments

1. BRIC Resolution
2. BRIC 2022 Charlottesville Award Package (3)