

Arlington County Civic Federation Public Services Committee Stormwater Management/Flood Mitigation Work Group Stormwater/Flood Mitigation Implementation Resolution 7 January 2022 · DRAFT 2

WHEREAS Arlington County faces continuing and increasing challenges in managing stormwater using infrastructure and practices that do not adequately address current conditions or account for climate change impacts.^{1 2 3 4 5 6 7 8}

WHEREAS Arlington County’s ability and willingness to confront these challenges and flood threats to its citizens and businesses represents one of its greatest present and also future challenges in the decade to come, and effective watershed planning and community support for a FY2023–FY2032 Capital Improvement Plan (CIP) is critical to achieve tangible progress in flood prevention and mitigation.

WHEREAS the Arlington County Civic Federation (ACCF) recognizes the diverse mitigation challenges of each watershed and understands the need to address each watershed plan accordingly, ACCF has facilitated the development of watershed-based groups of civic associations in Westover/Torreyson Run and Lubber Run to foster collaboration on watershed plans, and is currently partnering with the County on watershed plans; the ACCF is ready to help expand these watershed-based workgroups to meet the growing flood threats to the safety and financial security of individuals and businesses throughout Arlington.

WHEREAS an effective plan for dealing with the known and expected dangers of stormwater runoff and flood risk must be holistic, proactive, and a mandatory part of all land-use planning (macro level) decisions and site plan and permitting (project level) proposals. Stormwater flooding impacts many infrastructure systems; personal, business, and environmental security; property desirability, and requires leadership and commitment of resources commensurate with the threat we face and with the ambition of neighboring jurisdictions.

WHEREAS Arlington County does not currently have a system for collecting and reporting on the cumulative changes in the net demand placed on the stormwater system from all actions either funded by the County or otherwise permitted or approved by County authorities.

THEREFORE, BE IT RESOLVED that the Arlington County Civic Federation (ACCF) stands ready to partner with the County Board, County program managers, and executives in engaging the community at the watershed and civic association level to devise a 10-year strategic plan through the CIP that will address the stormwater and flood threat. This CIP document will serve as a Stormwater/Flood Mitigation Roadmap and should explicitly identify the objectives

¹ A Flood Resilient Arlington—Story Map: Challenges and the Path Forward:

<https://storymaps.arcgis.com/stories/d0bb906589d144e5939281b60160b583> and “Waverly Hills Flooding Exposes Flawed CIP Priorities” <https://www.arlnow.com/2018/06/14/peters-take-waverly-hills-flooding-exposes-flawed-cip-priorities/> and FEMA Updating Arlington County’s Flood Insurance Rate Maps (FIRMs): <https://www.arlingtonva.us/Government/Programs/Sustainability-and-Environment/Stormwater/Flood-Insurance-Rate-Maps>

² Land Disturbing Activity/Stormwater Permit Overview web page:

<https://www.arlingtonva.us/Government/Programs/Building/Permits/Land-Disturbing-Activity-Stormwater> and

³ Arlington County Impervious Cover Percentages by Watershed (2007 and 2017): <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/2019/10/Impervious-cover-table.pdf>

⁴ Coaction Arlington calls on county to declare a climate emergency: <https://www.ecoactionarlington.org/its-time-for-arlington-to-declare-a-climate-emergency/>

⁵ 9-16-2021 <https://www.arlnow.com/2021/09/16/flash-flood-watch-issued-for-arlington-9/> and

<https://www.washingtonpost.com/weather/2021/09/17/flooding-dc-alexandria-arlington-fairfax/> and 7-7-2020

https://www.washingtonpost.com/local/virginia-politics/flooded-neighborhoods-in-arlington-urge-storm-water-main-spending/2020/07/10/842a24b4-c242-11ea-9fdd-b7ac6b051dc8_story.html and 7-8-2019 <https://patch.com/virginia/arlington-va/mondays-rainfall-reagan-airport-shattered-record-report> and “Yes, Virginia, we are seeing more — and more intense — rainfall”

<https://www.virginiamercury.com/2021/08/20/yes-virginia-we-are-seeing-more-and-more-intense-rainfall/>

⁶ Arlington County Impervious Cover Percentages by Watershed (2007 and 2017): <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/2019/10/Impervious-cover-table.pdf> and Stormwater and Watersheds web page

<https://www.arlingtonva.us/Government/Programs/Sustainability-and-Environment/Stormwater/Stormwater-Watersheds>

⁷ Stormwater Capacity Analysis for Lubber Run Watershed: <http://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2014/02/DES-Storm-Sewer-Capacity-Lubber-Run-Report.pdf>, January 23, 2013.

⁸ Stormwater Capacity Analysis for Torreyson Run Watershed: Design Iterations, Arlington County, Virginia:

<https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2019/08/Torreyson-Capacity-Study-.pdf>. October 22, 2015

and outcome statements for each major Arlington County watershed, guide execution of effective stormwater/flood mitigation efforts and construction ready-projects and specify how Arlington County will engage with the public. It will stand as a clear, transparent framework so that the community understands how and when projects will be executed, with clear notice of expectations and outcomes.

Accordingly, the ACCF recommends the following actions to Arlington County to assist the county in working with the community to craft follow-up watershed-based stormwater priorities as well as identifying additional needs for the 2023–2032 CIP process:

1. **Provide a readily understandable public explanation and documentation of the stormwater management challenges and potential strategies of the County and for each watershed.** Clear information and education on these topics will provide a critical base to build on previous work for systematic updated planning and to enlist community and watershed level stakeholder participation and support for an effective plan. Background information should include:
 - a. **The prevailing natural conditions** and natural capital (e.g., geography, topography, tree canopy, imperviousness and soil conditions, storm activity, and climate change-related trends), the land use patterns, and the development pressures that are increasing the County’s flooding risk.
 - b. **The gaps in the County’s current stormwater management system**, including its limited capacity to manage existing stormwater demands in some watersheds; the state of repair of existing infrastructure; the increasing and often competing requirements for stormwater management imposed under federal and state regulations, and the future demands climate change will likely place on the system.
 - c. **The County’s priorities, to be shared with residents in open public fora, for maintenance and replacement of aging underground pipe infrastructure**, and its methodology for determining systemic priorities.
 - d. **The County’s plans for continued MS-4 water quality compliance, as well as for minimizing related stream bed erosion.**
 - e. **The County’s approach to implementing storm drainage and overflow improvement remedies at the watershed level**, addressing the following questions:
 - > How will the County incorporate its dual goals of providing protection against the 10-year storm, at a minimum, while also achieving in particularly vulnerable areas protection against the 100-year storm?
 - > What methods or technical solutions are considered for the County stormwater programs’ “blended approach” including the various implementation methods for “distributed detention, overland relief, and addition of tertiary system elements on multi-phase, watershed-scale projects;”⁹
 - > What methods or technical solutions, when feasible, does the County prefer? How does the County employ green infrastructure and preserve existing natural capital, including the preservation of mature trees and natural streams, to achieve its stormwater management objectives?
 - > In certain vulnerable areas, property acquisition for overland relief will be necessary for effective stormwater remediation. When would the County pursue overland relief as a flood remedy? How would this approach be implemented? And what are the practical implications of this strategy for property owners?
 - > How will the County partner with the ACCF, Civic Associations and other stakeholders, by watershed, to consider and apply a coordinated County approach at the watershed level?
 - f. **The County’s approach to setting priorities** (i.e., criteria, process, methodology) for selecting and initiating projects.
 - g. **The proposed actions for consideration at the watershed level** within the FY2023–FY2032 CIP’s timeframe and the additional work required for those watersheds beyond the CIP horizon to achieve the County’s objectives.
 - h. **The funding strategy for the stormwater CIP**, including the County’s existing financial and staffing resources for the program; the anticipated increases in both of these resource categories during the

⁹ Flood Resilient Arlington Proposed FY 2021 Capital Improvement Plan (CIP) Virtual Information Session, <https://arlingtonva.s3.amazonaws.com/wp-content/uploads/2020/07/Public-Presentation-for-CIP-Virtual-Info-Session-July-1-2020.pdf>, accessed 12/21/21.

FY2023–FY2032 CIP to accomplish the County’s stormwater objectives; the primary existing funding sources the County relies upon to support the projects identified in the CIP; and the County’s proposed approach to ensure consistent and dedicated revenue streams that are sufficient to support the stormwater program’s present and future objectives – including new sources of funds from fees, assessments, special taxing districts and other available means.

- i. **The County’s approach to the ongoing evaluation of the stormwater management system** to identify systemic weaknesses and performance gaps in the future.

2. **Move forward with full implementation of the pending stormwater-management and drainage-improvement projects** and related commitments that it has previously made. Specifically, action is needed in the following areas:

- a. **The County should plan to meet or exceed its objectives in all of the identified critical watersheds during FY2023–FY2032 CIP.** The County identified critical watersheds as the locations “most in need of stormwater capacity improvements”¹⁰ including Spout Run, Torreyson Run/Westover Branch, Lubber Run and Crossman Run. The County is making substantial progress in addressing the needs of the Torreyson Run watershed.
- b. **Recommendations from the Lubber Run watershed workgroup should be included in County implementation plans.** A stormwater-flood mitigation collaboration similar to the one in Torreyson Run/Westover is now underway among the Lubber Run watershed’s six primary civic associations—all are ACCF members supported by relevant ACCF committees. The Lubber Run group, which includes leaders from each civic association, has already identified key watershed priorities, soon to be transmitted to the County Board and senior staff.
- c. **The County should undertake assessments for the next tier of critical watersheds, in partnership** with ACCF and watershed based civic association groups, to advance its commitment in the 2014 Stormwater Master Plan to “complete a storm sewer capacity analysis for all of the watersheds in Arlington’s system.”¹¹

3. **Incorporate stormwater considerations into existing planning and implementation processes** to assure that the County government as a whole is looking for opportunities to minimize demands on the limited capacity of the stormwater management system and maximize opportunities for expanding capacity with every project. Specifically, action is needed in the following areas:

- a. **All relevant County departments should be directed to incorporate assessments and metrics** into their planning and implementation activities as to how their activities increase demands on the County’s limited stormwater management capacity and to identify the actions required to reduce those demands. These obligations should apply to all departments engaged in construction, redevelopment and repair of buildings and other infrastructure, as well as departments granting permits or approvals for such activities by other parties, in areas such as housing, schools, transportation, parks and other public spaces, commercial buildings, and County facilities.
- b. **The County should establish an annual accounting system to track the cumulative changes in the net demand** placed on the stormwater system from actions funded by the County or otherwise permitted or approved by County authorities. This information should be assembled into an annual report submitted by the County Manager to the County Board. The annual report, along with the documentation providing the basis for the report and any other analyses that the County views as informative (e.g., by categories of by watersheds), should be made publicly accessible on the County’s website.

¹⁰ Stormwater Capacity Improvements web page: <https://www.arlingtonva.us/Government/Programs/Sustainability-and-Environment/Stormwater/Stormwater-Capacity-Improvements>

¹¹ 2014 Arlington County Stormwater Master Plan, p. 5, https://arlingtonva.s3.dualstack.us-east-1.amazonaws.com/wp-content/uploads/sites/31/2014/05/SWMP_FINAL_Sept2014.pdf