

Adopted unanimously (33 yeas; 0 nays; 0 abstaining) by ACCF November 19, 2019

ACCF Resolution: Flood Mitigation and Stormwater Management for a Flood-Resilient Arlington

The Arlington County Civic Federation (ACCF) supports whole-community flood planning and mitigation that is designed to establish a sustainable, environmentally sound infrastructure for a “flood resilient Arlington.” ACCF believes that this goal requires a comprehensive, holistic, and systematic watershed approach that cannot be achieved by a patchwork of projects. Sustainable, modern flood mitigation in Arlington’s dense urban community demands smart urban policies integrated throughout the Arlington Comprehensive Plan, multifactor assessment, use of the full range of innovative and science-based strategies, and the combined resources of the community.

Whereas – There is insufficient flood management capacity — Arlington’s traditional stormwater management system, developed 50+ years ago and implemented incrementally over time, lacks sufficient capacity to meet current conditions.

- Arlington’s foundational Stormwater Management Plan was designed to support development of the 1930s–1950s, meeting a standard based on the risk of a “10 to 15-year flood.”ⁱ The system undergrounded existing streams through pipes to permit surface construction that covered waterways.
- Significant population increases and related development with significant projected continuing growth indicates that water flow needs will considerably exceed the current built capacity, under current regulation.
- Development and related policies have continuously reduced the natural environmental infrastructure that reduces stormwater runoff, including a loss of mature tree canopy (providing greater stormwater control), a reduction of permeable land surface that allows precipitation to infiltrate the soil, and the interruption and redirection of natural underground water resources (seeps, springs and streams) through construction.ⁱⁱ

Whereas – There has been repeated flooding and public and private loss. Inadequate infrastructure and stormwater capacity have resulted in repeated and continuing flooding events with environmental damage and significant financial and property losses for the County, its residents, and businesses.ⁱⁱⁱ

Whereas – Changes in the climate can be expected to result in future extreme weather including more frequent intense rainfall (i.e., inches of rain per hour) that increases the risk of flash flooding.^{iv}

Whereas – In the absence of changes in policy and practice, current and continuing development will continue to increase factors that contribute to overland flooding, and potentially further overwhelm individual stormwater projects, with downstream flooding.

Whereas – Compliance with increasingly stringent federal, state, and local laws and regulations will make watershed management and the underlying floodplain and stormwater needs even more complex and challenging in the decades to come.

Whereas – Complex, multifactor solutions are required to develop policies and an integrated plan that can both update and improve old infrastructure and add science-based solutions to meet increased needs with a minimum of disruption to residential and commercial neighborhoods.^v

Whereas – Significant increases in resource investment will be required to fund short-term priorities and long-term strategies for a flood-resilient Arlington. Increasing current funding levels given current budget constraints and competition for resources will require efficient investments, budget reprogramming to meet this need, and potential development of new funding mechanisms and sources.

1. Therefore be it resolved that the Arlington County Civic Federation asks the Arlington County Board or the Manager to create an independent working group comprising staff and citizens who will support comprehensive flood-resilience planning and integrating it into the Comprehensive Plan (including all related Plan components) and existing plans and funding mechanisms, including the Watershed Master Plan, the Capital Improvement Plan, and the General

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Fund operating budget. The working group should include representatives of existing county commissions for the Comprehensive Plan review. The working group also should provide broad geographical representation (for example, civic associations and local businesses) to participate in the review and assessment of plans for their respective watersheds as well as in the establishment of community-level policies, solutions, priorities, and funding strategies and levels. In order to promote broad partnerships, membership should be multisector and multidiscipline. (Milestone: This Floodwater Working Group will be established, and members appointed no later than January 30, 2020.)

2. Be it further resolved that the ACCF urges the Arlington County Board and Manager to initiate a planning process immediately to develop a comprehensive plan for a flood-resilient Arlington. The process and tasks should include, but are not limited to, these tasks:

- **Identify and review key Comprehensive Plan policies that impact watershed management.** Highlight these policies (including those in the imminent updates to the Urban Forest Master Plan and the Natural Resources Management Plan) and identify implementing regulations to codify how these policies will be applied to the systematic review of proposed residential and commercial projects (e.g., site plan review, zoning changes, and other land-use regulations). Where related policies in multiple master plans (transportation, energy, affordable housing, sewage and water, etc.) exist, prioritize the policies with an integrated Flood Mitigation Plan that addresses the impacts of flooding. Examples include measures of density and density allowances and benefits, the extent of impermeable surfaces, mature-tree preservation and canopy restoration. (Milestone: Identify and enumerate policies, policy changes, and needs by March 15, 2020.)
- **Use multidisciplinary science and current best practices to identify, assess and update projects/methods** in the current plans (e.g., environmental review/update of stream-restoration methodology); perform cost-benefit analysis of preventive strategies such as tree/vegetation preservation, low-impact site preparation, and impermeable surface reduction. (Milestone: Identify and enumerate such practices by March 15, 2020.)
- **Develop a process to include flood-management review and updates as part of the regular updating of Comprehensive Plan** components, the Capital Improvement Plan (CIP) and the General Fund budget. (Milestone: Complete the process for inputs to the CIP, budget and Comprehensive Plan by July 30, 2020.)
- **Update the Stormwater Master Plan (2014), Watershed Management Plan (2001), and the Flood Frequency Analysis for Four Mile Run (2004).** Include a review of current best-practice and innovative approaches to update long-term goals and to identify best-practice strategies. Review projects to confirm their consistency with long-term strategies. Ensure that short-term priorities remain consistent with and support long-term goals. (Milestone: Complete the Stormwater Master Plan, Watershed Management Plan and Flood Frequency Analysis draft updates by July 30, 2020.)
- **Review existing** infrastructure, especially where larger upstream stormwater pipes link to smaller downstream stormwater pipes, to identify capacity gaps. Where needed, review updates to the 2013 Storm Sewer Capacity Studies that identified and prioritized problems needing remediation. (Milestone: Already completed review for High Flood Risk Areas per the September 24, 2019, DES presentation to the County Board.)
- **Develop a new stormwater ordinance as soon as possible — at the latest by July 1, 2020.** Regulations should align with the expected 2020 CIP update, proposed and/or adopted site plans, and/or proposed and adopted changes to the Zoning Ordinance. Through new policies and regulations, site plans and by-right development should proportionally support local infrastructure needs (i.e., roads, traffic-calming, stormwater, sanitary sewer, drinking water, schools) to mitigate negative community impacts. (Milestone: Propose changes and updates to stormwater ordinances, site plan ordinances, and other related items by July 2020.)
- **Develop site plan review guidelines that reflect key watershed-management and flood-resilience policies and strategies.** Take immediate action to identify potential opportunities to incentivize in-process site plans to provide supplemental improvements to County environmental infrastructure (water, sewer, stormwater, open space, trees, etc.). Add conditions to future site plans that, where possible, provide new infrastructure that is needed to

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serve the site and surrounding community. (Milestone: By July 31, 2020 integrate these changes into the site plan review process and modify the site plan process for future projects to better meet the public infrastructure needs generated by the development.)

3. Be it further resolved that the ACCF supports budget review and the development of new strategies to increase community investments in flood-resilience and risk-management practices, including these:

- **Review existing CIP priorities and consider substantial strategic increases to accelerate watershed, floodwater and stormwater infrastructure remediation funding in the forthcoming 2020 CIP.** Expedite unfulfilled high- and medium-priority projects and provide additional funding to compensate for unmet and emerging needs as well as to acquire repetitive-loss, high-risk structures on properties that lie in floodplains and flood-prone areas. (Milestone: July 2020.)
- **Consider program options to provide tax credits and other direct financial incentives to property owners who undertake watershed and floodwater improvement projects that align to the County's flood-resilience goals and objectives as outlined in the existing and subsequently updated Watershed Management and Stormwater Master Plans.** (A recent Virginia constitutional amendment now allows such credits and incentives.)^{vi}
- **Identify and pursue new funding through the FEMA mitigation grant program** and other potential sources.
- **Permit civic associations' NCAC projects to include floodwater- and watershed-management** improvements and enable them to share funding with DPR and/or DES floodwater, stormwater and watershed improvement projects.
- **Consider mechanisms for potential private investment and public-private funding partnerships,** such as those identified in the Manager's presentation and initiate the development of additional potential funding methods.
- **Consider and support innovative methods to increase the use of insurance to manage** public and private risk for both residential and commercial properties.

4. Be it further resolved that the Arlington County Civic Federation supports the County's efforts to continue enhancing its outreach, education and technical assistance to strengthen Arlington residents' flood-risk management and mitigation efforts. Programs should continue promoting sensible water use, stormwater-runoff-reduction methods, water- conservation projects, waterwise landscaping, tree preservation and planting, stream restoration, rain barrels, waterproofing and other mitigating adjustments to individual residences, and using insurance to manage risk.

ⁱ <https://www.ArlingtonVA.us/flooding/> Over 66% Arlington streams have been encased in stormwater pipes. with insufficient capacity, accessed 10/10/19.

ⁱⁱ Answer to 2018 Budget Work Session Question re the trend of highly impervious surfaces;

<https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/18/2018/07/F3-Stormwater-Impervious-Surface-Statistics.pdf>;

ⁱⁱⁱ County Recovers from Severe Flooding, Requests Damage Information, <https://newsroom.arlingtonva.us/release/flooding-damage-information-arlington-county-storm/>, accessed 10/10/19.

^{iv} Arlington County Stormwater Master Plan, 2014, p. 6, Strategy 9, <https://projects.arlingtonva.us/plans-studies/environment/stormwater-master-plan/>, accessed 10/10/19.

^v Stormwater Action Plan, Manager's Report, September 24, 2019, <https://www.arlingtonva.us/flooding/>, accessed 10/10/19.

^{vi} Constitution of the Commonwealth of VA, <https://law.lis.virginia.gov/constitution/article10/section6/>, accessed 10/10/19; Article 10, section 6, k) The General Assembly may by general law authorize the governing body of any county, city, or town to provide for a partial exemption from local real property taxation, within such restrictions and upon such conditions as may be prescribed, of improved real estate subject to recurrent flooding upon which flooding abatement, mitigation, or resiliency efforts have been undertaken.