

# Annual Report To Alexandria City Council

April 15, 2024



Homes along Commonwealth Avenue, August 14, 2023

## Stormwater Utility and Flood Mitigation

### Advisory Group

Council Member John Chapman

Mr. John Hill, Chair

Ms. Katherine Waynick, Vice Chair

Mr. Brian Sands

Ms. Cheryl Leonard

Mr. Chris Ferrara

Ms. Christine Thuot

Mr. Dino Drudi

Mr. Howard "Skip" Maginniss

Ms. Janette Shew

## Question 1: Is the City's investment in stormwater mitigation directed to the most urgent problems?

### The Facts



On July 29, 2023, Alexandria received one inch of rain in 15 minutes. On August 14, 1.6 inches fell in 20 minutes\*. These storms flooded the areas around the intersection of Glebe Road and Commonwealth Avenue and along Hooff's Run between Linden and Duke streets.

The majority of 311 assistance calls during the two storms came from homes along Hooff's Run. In addition, the flooding along Four Mile Run, at the intersection of Glebe Road and Commonwealth Avenue (seen at left) received considerable media attention.

Major capacity-building projects are well underway in these two areas. The Commonwealth/Ashby/Glebe project is nearing the completion of its 60% design; the Hooff's Run Culvert Bypass project is assessing multiple design alternatives. Both projects are fully funded for FY 2025 and their out-year costs are included in the 10-year Stormwater Capital Improvement Plan.

### Opinion of the Committee

The Committee agrees that the Flood Action Program is starting with the most urgent flooding problems facing Alexandria. The CASSCA study of 2016 identified the Four Mile Run (East) and Hooff's Run watersheds as the city's most flood-prone areas. That was evident during the severe rainstorms of 2020 and 2021; the storms of last summer confirmed that yet again.

The Committee members from these watersheds acknowledged that the Flood Action Program is making visible progress in their neighborhoods. They cited the public meetings on the Commonwealth/Ashby/Glebe project in the Lynnhaven neighborhood. In Rosemont, residents approve of the considerable maintenance improvements to the existing culvert.

The Committee did, however, suggest that city engineers look beyond the CASSCA Study to identify the next set of large capacity-building projects. The Committee noted that the 2016 study focused solely on sewer pipe diameters and not actual flooding patterns. In identifying future projects, the City should evaluate areas that were not included in the CASSCA Study, such as the area around the Braddock Metro Station and in the Combined Sewer Area.

In addition, the impact of the most recent projects such as Commonwealth/Asby/Glebe, Hooff's Run, and the River Renew tunnel will invariably change how stormwater drains in Alexandria. The impact of the entire program should also be monitored to ensure that fixing the flooding in one area does not produce unintended consequences in other areas nearby.

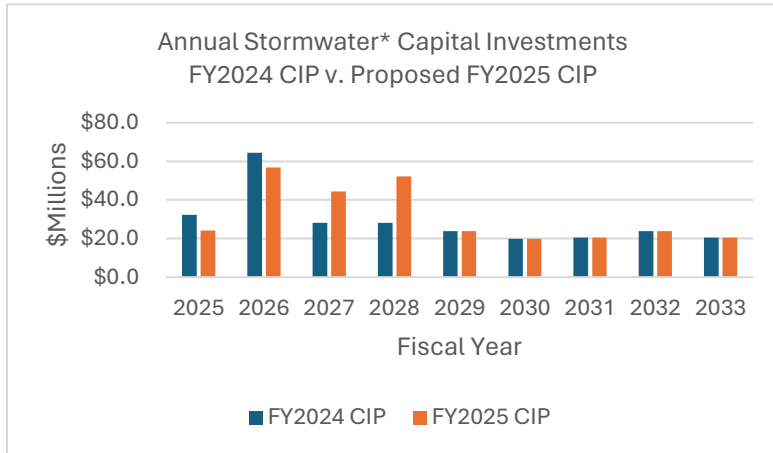
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\*Rainfall measured at the Mt Vernon School weather station.

## Question 2: Are the planned expenditures adequate to address the stormwater flooding problem?

### The Facts

The proposed budget for FY 2025 includes an increase in Alexandria’s investment in stormwater infrastructure over last year’s ten-year Capital Improvement Program (CIP).



\*includes Wet Weather projects from the Sanitary Sewer CIP

The CIP in the FY 2024 budget called for a total of \$262 million in stormwater capital projects for the period FY 2025 through FY 2033. The proposed CIP in the FY 2025 budget calls for a total of \$286 million over the same period.

This \$24 million increase is due to the inclusion of a new stormwater mitigation project at the intersection of Pitt and Gibbon in the Combined Sewer Area.

### Opinion of the Committee

When the Flood Action Alexandria Program was launched in 2021, it proposed a ten-year \$260 million investment in stormwater infrastructure. The Committee acknowledges that the proposed budget for FY 2025, together with the previously planned yearly fee, continues to honor that commitment. In fact, the Committee applauds the addition of funding for the project at Pitt and Gibbon in the ten-year Sanitary Sewer CIP, as well as the City’s use of federal funds from the American Rescue Plan for stormwater projects.

At this stage of the Flood Action program, the Committee believes that Alexandria is adequately funding the correct level of construction activity. The large projects, especially, are disruptive to the neighborhoods and traffic of Alexandria. More than two concurrent large projects may be more disruptive than Alexandria residents are willing to accommodate.

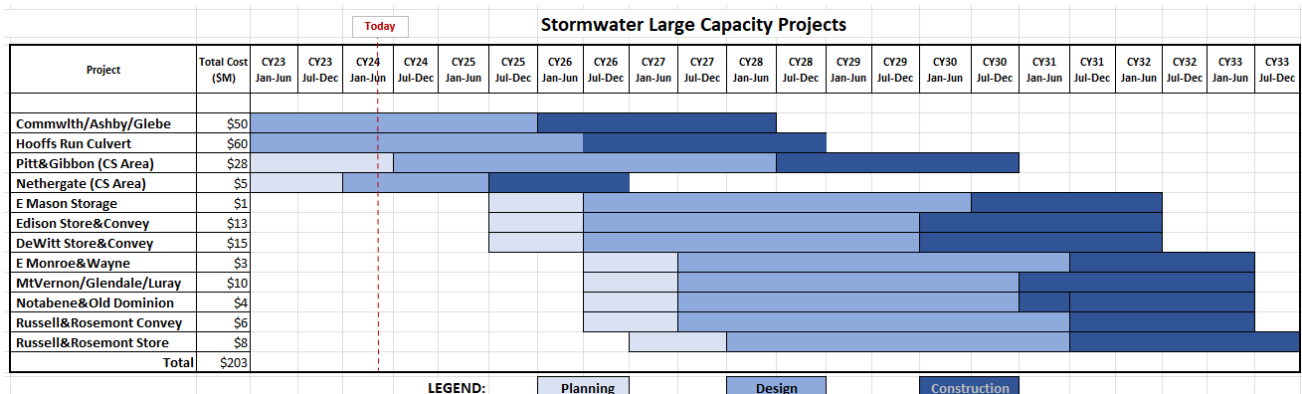
The Committee acknowledges, however, that the ten-year CIP is based on estimates of the future cost of large stormwater projects. As such, the Committee understands that the total cost of these projects may increase as designs are further developed and total construction costs are better understood.

### Question 3: Is the City making sufficient progress in addressing the problem?

#### The Facts

The City has made considerable progress in addressing the backlog of smaller “spot improvement” projects. At the start of the Flood Action Program, twenty-seven spot improvements were identified. As of March 2024, eight of these have been completed and eleven are actively under design and construction.

Two of the longer-term large capacity projects are currently being designed. The Commonwealth/Ashby/Glebe project will reach its “60% design” milestone later this spring. The Hooff’s Run Bypass project will reach “30% design” later this summer. The two large projects in the combined sewer area, at the intersection of Pitt and Gibbon and at Nethergate, are in the planning stage, with design contracts to be awarded later this year.



#### Opinion of the Committee

The Committee recognizes that the Flood Action Program is at a critical juncture in the way that it engages Alexandria residents. The orderly completion of the smaller “spot improvement” projects over the past three years gave residents tangible evidence of progress. We are now entering a period where progress will be less visible.

The large capacity projects are slow-moving. Actual construction for the first large project will not begin until April 2026 – a full two years from now. And, unlike the smaller spot improvements, the large projects bring with them traffic disruption and noise – making community engagement essential.

The Committee strongly urges the City to incorporate a comprehensive public outreach program with the large capacity projects. Using the Commonwealth/Ashby/Glebe project as the prototype for best practice communication, the City should:

- Conduct widely publicized and multi-channel public engagement around the critical design reviews to inform residents of the reasons for, and impact of, the large projects that will disrupt their neighborhoods;
- Establish an easy-to-follow method of reporting progress so that public support does not wane in the long periods between the start of design and project completion.

The Committee stands ready to assist the City in designing an outreach program and engaging the residents in the neighborhoods most impacted by the construction of the large capacity projects.