



# Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group

February 23, 2023 Meeting

# Tonight's Agenda

1. Electronic Meeting Notice (6:00)
2. Approval of Minutes (6:05)
3. Update on Flood Action Alexandria Program - by City staff (6:10)
  - Large capacity projects
  - Spot improvement projects
  - Combined sewer projects
4. Overview of Proposed Stormwater Budget for FY24 – by City Staff & Chair (6:40)
5. Discussion of Committee's Annual Report (7:10)
6. Public Comment (7:30)
7. Adjourn (7:40)

# Electronic Meeting Notice

AGENDA ITEM #1

# Electronic Meeting Notice

Due to the COVID-19 Pandemic emergency, this meeting is being held electronically pursuant to Virginia Code Section 2.2- 3708.2(A)(3), the Continuity of Government ordinance adopted by the City Council on June 20, 2020 or Section 4-0.01(g) in HB29 and HB30, enacted by the 2020 Virginia General Assembly (Virginia Acts of Assembly Ch. 1283 and 1289), to undertake essential business. Members of the Advisory Group can participate from remote locations; however, a quorum of the Group must be physically assembled at the primary or central meeting location.

Note: this meeting is being recorded.

# Approval of Minutes from Last Meeting

AGENDA ITEM #2

# Update on Flood Action Alexandria Program

AGENDA ITEM #3

# Flood Action Progress Report: Schedule and Large Projects

- Master baseline schedule:
  - All Tier 1 projects are on schedule
- Large capacity projects
  - Commonwealth/ E. Glebe & Commonwealth & Ashby (est. \$50M) **Under design. Survey to be completed end of 03/2023.**
  - Hooffs Run Culvert Bypass (est. \$60M) **in price negotiations for design contract**
- Combined sewer system (CSS) area projects
  - Pitt & Gibbon (\$11.5M) **Planning Phase - Reviewing Additional Alternatives**
  - Nethergate (\$5M) **Planning Phase - Alternatives Analysis under review**

# Flood Action Progress Report: Updates to Stormwater Program Schedule

## Project Schedule Extended

- Lloyd's Lane (Design Procurement)
- Oakland Terrace Timber Branch (Design)
- Mt. Vernon Cul-de-sac Inlets & Alley (Design)
- 3000 Mt. Vernon Ave. (Planning)
- F. Hammond Culvert Headwall Mod. (Design)
- T. Branch Headwall Mod. (Design)
- Carlisle Drive Alley (Planning)
- N. Columbus Street Alley (Planning)

## Project Delivery Expedited

- 100 Hume Ave SD Bypass (ARPA\* Funding Secured)
- Edison St. Drainage Improvement (CFPF\* Funding Secured)
- 100 W. Reed Curb Inlets (CFPF Funding Secured)
- 100 Dale Rd. Overland Relief Channel (CFPF Funding Secured)
- 00 E. Linden Ave. Alleyway Improvements
- CFM Green Alley (HUD\* Funding secured)



# Flood Action Progress Report: Updates to Stormwater Program Schedule

## New Projects

- Clifford, Ave. & Manning St. Curb Inlets (Part 2)
- Park Fairfax Inlets (CFPF\* Funding Secured)
- Mt. Vernon and Edison Dual CMP Replacement (CFPF Funding Secured)

## Projects Removed

- 3000 Manning St. Alleyway Extension (Addressed by Inlet improvements)
- Clifford Ave. & Manning St. Check Valve (Addressed by future projects)

## Start Date Adjusted (Dependent on Hoof's Run Culvert Bypass )

- 300 E. Mason Curb Inlets
- E. Monroe Ave. & Newton St. Curb Inlet
- E. Alexandria Ave. & E. Luray Ave Curb Inlets
- 500 E. Alexandria Ave. Alleyway SD Extension
- 300 E. Mason Ave. SD Extension
- 300 E. Mason Ave. & 200 E. Duncan Ave SD Connection

# Overview of Proposed Stormwater Budget for FY24

AGENDA ITEM #4

# How is Alexandria's Stormwater Program Financed?

Stormwater Capital Improvement Program FY 2024 Proposed Budget

*Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group*

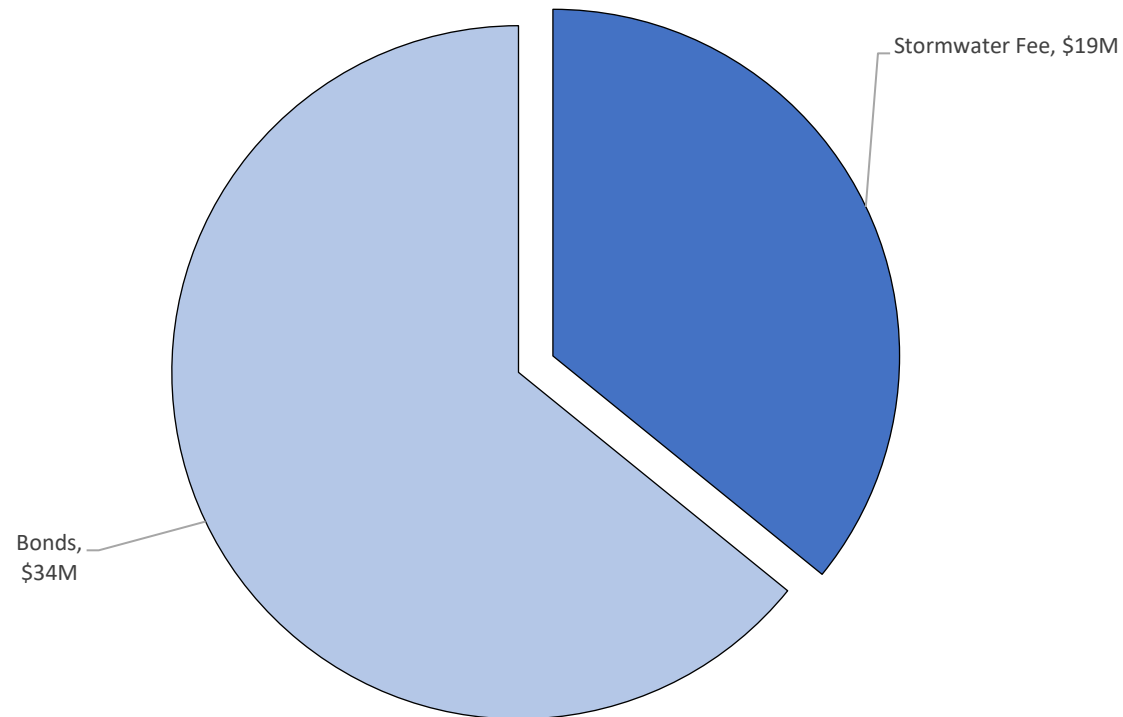
*Alexandria City Hall  
February 23, 2023*



# Stormwater Utility Fee Revenues

- Billing Statistics: 43,326 total properties
  - Detached Single Family – 9,124
  - Townhouses – 14,052
  - Condos – 18,459
  - Calculated – 1,691 (Top 3 below)
    - Commercial – 997
    - Apartments – 350
    - Religious – 153
- Typical single-family home (equal 1 Equivalent Residential Unit (ERU) pays \$294/year
  - Proposed \$308.70/year

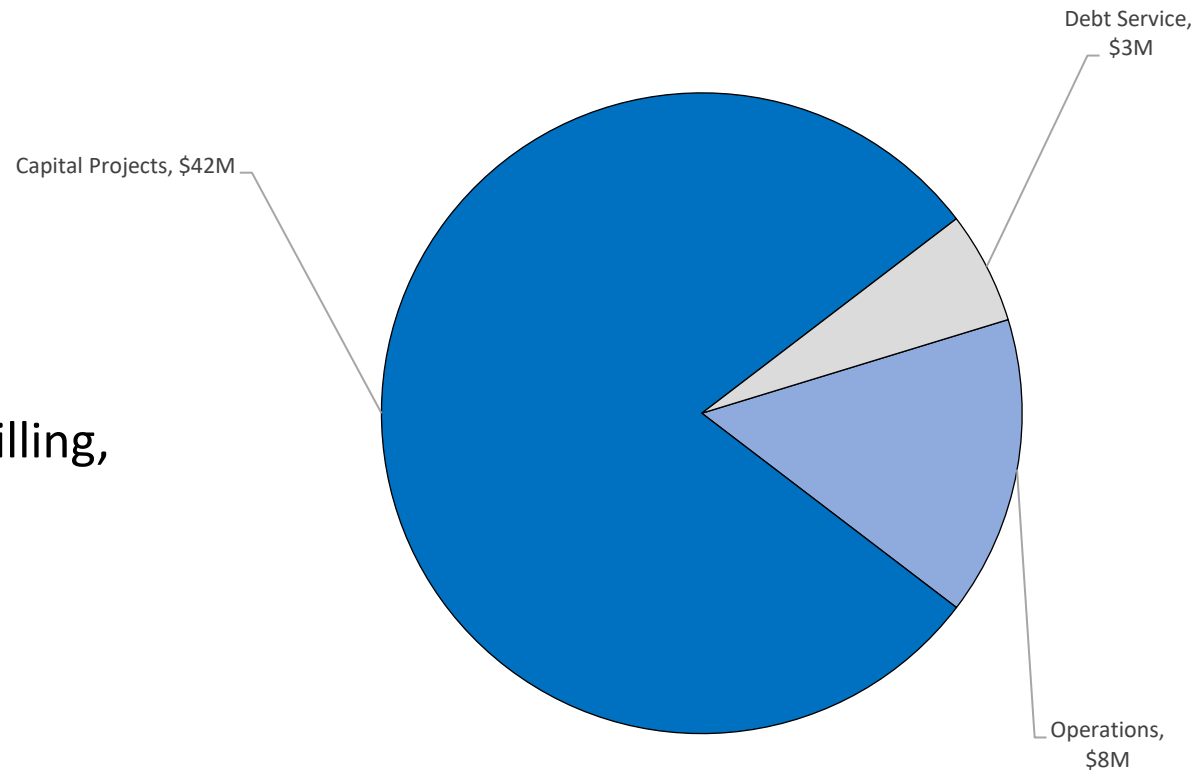
Where the money comes from  
(\$53 Million in FY2024)



# Stormwater Utility Fee Expenditures

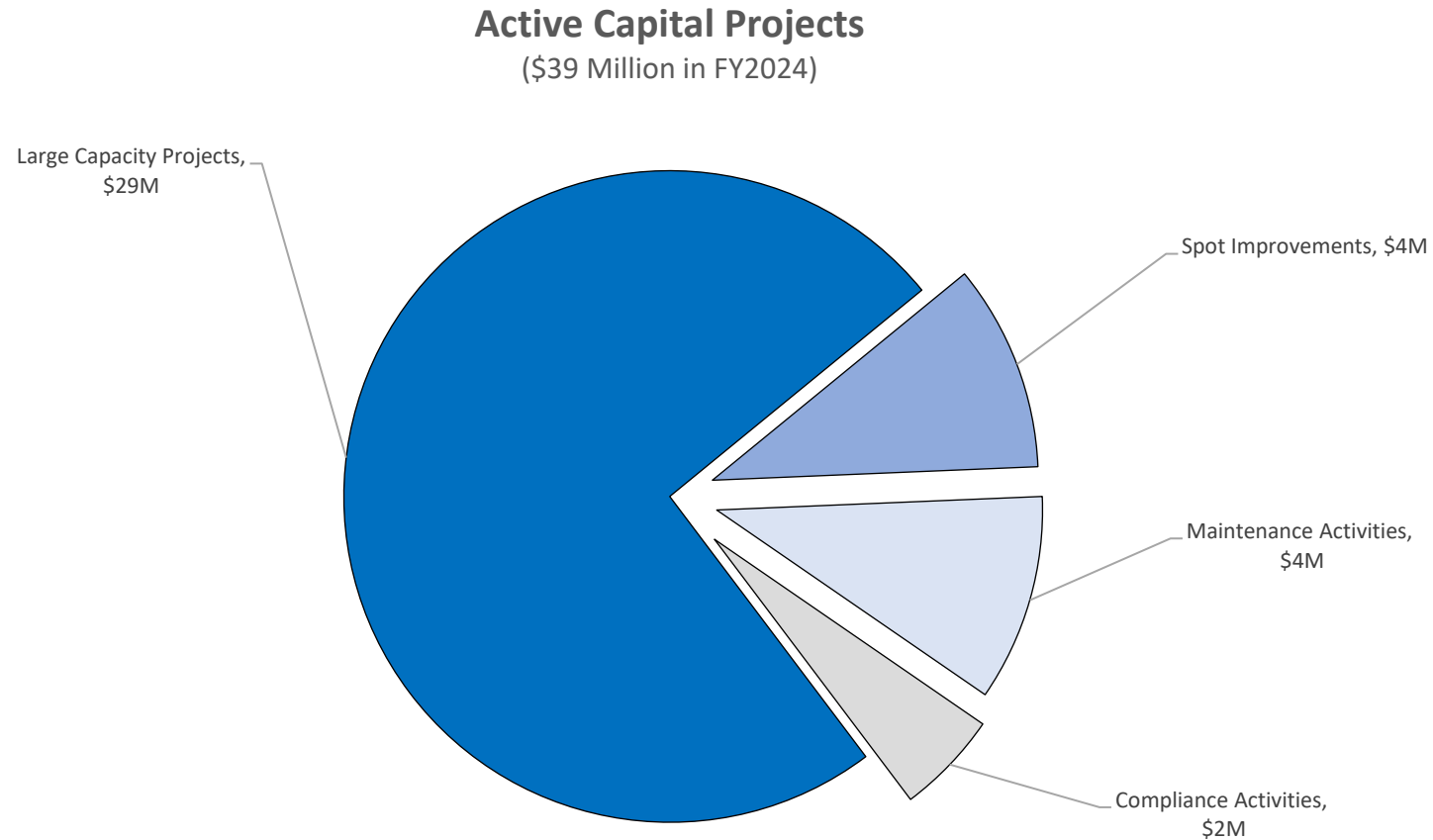
- Operations includes:
  - SW Program Personnel
  - BMP Operations
  - Oronoco Outfall Maintenance
  - Division non-personnel operations
  - Indirect costs (internal billing, GIS, and other support services)

How the money will be spent  
(\$53 Million in FY 2024)



# Active Capital Projects

- Lg Capacity
  - C/A/G
  - Hooffs Run Culvert Bypass
- 14 Spot Projects teed up now through FY2024
- Proactive and reactive maintenance
  - Formalize State of Good Repair
- Lucky Run Stream Restoration and Green Infrastructure planning



# Large Capacity Projects

- Commonwealth/Ashby/Glebe
  - In design: \$9.9M of \$19.9M in FY 2022
  - Construction: \$26.4M in FY 2023 and \$12.6M FY 2024
  - First public meeting 2/21
- Hooffs Run Culvert Bypass
  - Design procurement: \$10M of \$19.9M in FY 2022
  - Construction: \$16.2M in FY 2024 and \$32.3M in FY 2025



Commonwealth/Ashby/Glebe

## Large Capacity (\$29M in FY2024)

Project	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Lg Cap: Commonwealth/Ashby/Glebe	\$12.632	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Lg Cap: Hooffs Run Culvert Bypass	\$16.176	\$16.176	\$32.352	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Storm Sewer Capacity Projects	\$0.000	\$0.000	\$15.950	\$15.200	\$13.675	\$6.700	\$6.350	\$4.000	\$7.000
<b>Sub-Total</b>	<b>\$28.808</b>	<b>\$32.352</b>	<b>\$15.950</b>	<b>\$15.200</b>	<b>\$13.675</b>	<b>\$6.700</b>	<b>\$6.350</b>	<b>\$4.000</b>	<b>\$7.000</b>

In millions of dollars

1  
5

# Spot Improvement Projects

## Completed

- 300 E. Mason
- Hume & Commonwealth Inlets
- Clifford Inlets
- Hume Inlets
- E. Alexandria Check Valve
- E. Mason & Dewitt Check Valve

## Near Complete

- Oakland Terr 100% design
- Mt. Vernon Cul-de-sac 90% design
- N. Overlook 60% design

## Funding

- ARPA #1 Tranche: \$1.9M for “Flash Flooding Spot Projects”
- \$1.4M currently spent or encumbered for FY 2023 (design)
- 14 projects in the works through FY 2024 not encumbered: \$8.2M



## Spot Improvement Projects

(\$4M in FY2024)

Project	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
Storm Sewer Spot Improvements	\$4.011	\$4.122	\$4.228	\$4.337	\$4.540	\$4.606	\$4.688	\$4.812	\$4.937
<b>Sub-Total</b>	<b>\$4.011</b>	<b>\$4.122</b>	<b>\$4.228</b>	<b>\$4.337</b>	<b>\$4.540</b>	<b>\$4.606</b>	<b>\$4.688</b>	<b>\$4.812</b>	<b>\$4.937</b>

*In millions of dollars*



# Maintenance Activities

- Includes stormwater sewer preventative and reactive maintenance funded by the CIP
  - Does not capture staff resources expended
- ARPA #1 Tranche: \$3.852M for structural repairs to include Hooffs Run Culvert maintenance



## Maintenance Activities (\$4M in FY2024)

Project	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33
Stormwater BMP Maintenance CFMP	\$0.304	\$1.575	\$1.623	\$0.317	\$0.327	\$0.336	\$0.347	\$0.357	\$1.792	\$0.365
Small-Midsize Stormwater Mntnce	\$0.614	\$0.649	\$0.686	\$0.724	\$0.766	\$0.809	\$0.854	\$0.901	\$0.923	\$0.945
Flood-proofing Grant Program	\$0.789	\$0.809	\$0.830	\$0.851	\$0.873	\$0.895	\$0.918	\$0.941	\$0.965	\$0.900
Stream & Channel Maintenance	\$0.908	\$0.935	\$0.963	\$0.992	\$1.021	\$1.052	\$1.084	\$1.116	\$1.150	\$1.178
Four Mile Run Channel Maintenance	\$0.000	\$0.300	\$0.300	\$0.000	\$1.251	\$2.900	\$0.000	\$0.300	\$0.300	\$0.300
Inspection & Cleaning CFMP	\$1.457	\$1.578	\$1.695	\$1.835	\$2.006	\$2.220	\$2.496	\$2.862	\$3.304	\$3.766
Hooffs Run Culvert Maintenance	\$0.000	\$0.000	\$1.616	\$0.000	\$0.000	\$0.000	\$0.000	\$2.510	\$0.000	\$0.000
<b>Sub-Total</b>	<b>\$4.072</b>	<b>\$5.846</b>	<b>\$7.713</b>	<b>\$4.719</b>	<b>\$6.244</b>	<b>\$8.212</b>	<b>\$5.699</b>	<b>\$8.987</b>	<b>\$8.434</b>	<b>\$7.455</b>

*In millions of dollars*

# Regulatory Compliance

- MS4-TMDL Compliance: BMP retrofits to meet permit compliance
- Lucky Run Stream Restoration and Pond Rehab: under construction procurement
- Two stream restoration projects ‘paused’ and scope likely to decrease (SLAF grant rescinded)



Ben Brenman pond (above) acts as a stormwater Best Management Practice to help filter pollutants, such as nitrogen, phosphorous and sediment out of the stormwater that enters the pond.

## Green Infrastructure & Compliance Activities (\$4M in FY2024)

Project	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
<b>Green Infrastructure</b>	\$1.550	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
<b>MS4 - TMDL Compliance Improvements</b>	\$2.100	\$1.800	\$2.050	\$1.750	\$2.000	\$2.575	\$1.500	\$1.000	\$1.750
<b>NPDES/MS4 Permit</b>	\$0.170	\$0.172	\$0.174	\$0.175	\$0.177	\$0.179	\$0.181	\$0.182	\$0.186
<b>Sub-Total</b>	<b>\$3.820</b>	<b>\$1.972</b>	<b>\$2.224</b>	<b>\$1.925</b>	<b>\$2.177</b>	<b>\$2.754</b>	<b>\$1.681</b>	<b>\$1.182</b>	<b>\$1.936</b>

*In millions of dollars*

# Discussion of Committee's Annual Report

AGENDA ITEM #5

# Public Comment

AGENDA ITEM # 6

# Adjourn

AGENDA ITEM #7