

FLOODACTION

ALEXANDRIA

APRIL 2023 ISSUE 12

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MANAGER'S MESSAGE

Spring means the FY 2024 budget season is in full swing. The proposed budget includes a 5% increase in the Stormwater Utility (SWU) Fee to sustain the Flood Action Alexandria program, including keeping the [large capacity projects and spot improvement projects on track](#) and other efforts to improve the City's flood resiliency.



This proposed increase would change the current fee of \$294 per year to \$308.70 per year, per single-family home. The [City Manager's FY 2024 proposed budget](#) is scheduled for adoption by the City Council on May 3.

The SWU Fee was adopted by City Council and first billed in May 2018 as a dedicated funding source for stormwater quality capital projects to help clean up the Chesapeake Bay. Following flooding in 2019, 2020, and 2021, and since the City had done a good job reducing pollution, the FY 2022 budget shifted focus from water quality to flood mitigation and increased the SWU Fee for the first time. The proposed 5% increase in this year's budget is supported by the City's [Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group](#) to fund continued accelerated capital projects and operating programs to protect people and property from flooding.

April is also when we celebrate [Earth Day 2023](#) with a full month of environmentally focused events, activities, and online initiatives that center on the [Eco-City Alexandria](#) vision. I know sometimes our challenges can seem too big to tackle, but together we can make a difference. Check out the [City's Flood Mitigation Grant Program](#) on ways to floodproof your property with the

help of City funds and [what you can do to protect water quality](#). Remember, you're not required by law to fertilize your lawn, and you'll only have to cut it more. So, check out [things you can do to reduce lawn care pollution](#) like get a soils test first before applying fertilizer so you don't waste money or create polluted stormwater runoff or take the "[No Fertilizer Pledge](#)" to [earn a credit and reduce your SWU fee](#). Let's all do our part to make the City more resilient and protect planet Earth!

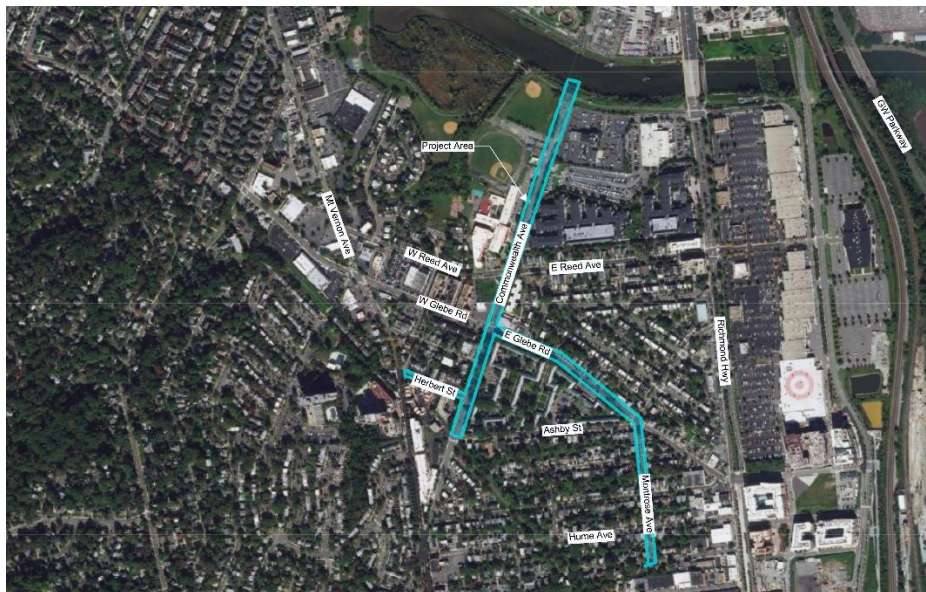
Jesse Maines, Stormwater Management Division Chief

Editor's note: The Manager's Message is a periodic editorial authored by senior leaders of the Flood Action Alexandria program.

PROJECT UPDATES

LARGE CAPACITY PROJECTS

Commonwealth, Ashby, and Glebe Flood Mitigation Project



Areas that will be impacted by the implementation of the Commonwealth, Ashby, and Glebe Large Capacity Flood Mitigation Project.

While the design team has been working on collecting and analyzing data, the first public meeting for the Commonwealth, Ashby, and Glebe Large Capacity Flood Mitigation Project occurred on February 21, 2023, at City Hall. The project is considering new and parallel storm sewers along Commonwealth Ave from the intersection of Ashby St to a new outfall at Four Mile Run, along E Glebe Rd from Ashby St to Commonwealth Ave, along Montrose Ave from E Raymond Ave to E Glebe Rd, and along the Laverne Ave and E Clifford Ave side streets. This project is designed to mitigate flooding for this neighborhood near the intersection of E Glebe Rd and Commonwealth Ave, and at E Glebe Rd and Ashby St.

The public meeting presented an overview of the existing flooding conditions requiring improvement and the preliminary storm sewer alignment. The participants also discussed the construction impacts associated with the project and provided graphics showing pipe trenching operations, support of excavation limits and construction access and traffic mitigation approach.

The project is currently under design, which will last approximately 2.5 years with an estimated completion date of end-of-year 2027. Field survey is currently being performed and geotechnical investigation will start in the spring.

Meeting materials and recording, as well as additional information about the project can be found at the [Commonwealth, Ashby, Glebe, Flood Mitigation Project webpage](#). Civic association members are encouraged to reach out to the City to schedule a project presentation. Please direct any presentation requests or questions to jonathan.whiteleather@alexandriava.gov.

Hooffs Run Culvert Bypass

[The Hooffs Run Culvert Bypass project](#) is the second largest of the large capacity projects. In this project, a new storm sewer will be constructed to divert the waters in Timber Branch away from the culvert, thus reducing the amount of stormwater that the culvert must convey.

Currently the City is finalizing contractual matters with the selected contractor and design activities will start in the spring. Nevertheless, the City has started reaching out to various stakeholders to identify activities where projects may

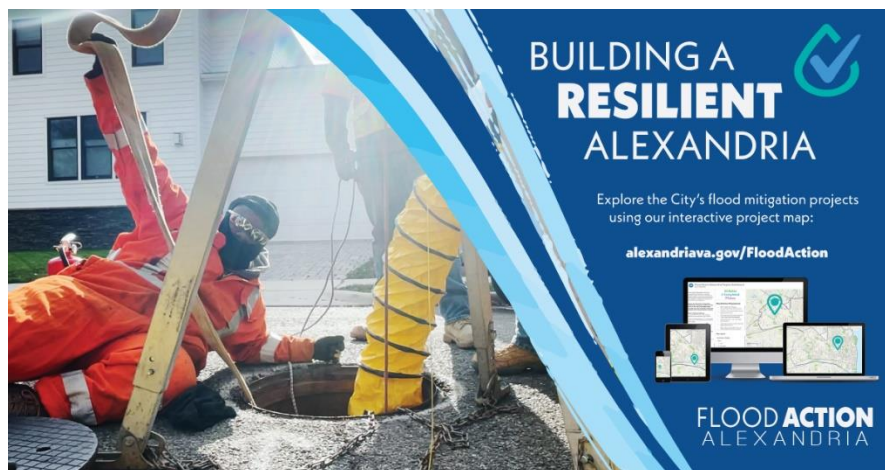
require coordination. These projects include AlexRenew’s Hooffs Run interceptor, Virginia Passenger Rail Authority’s bridge replacement, and the City’s roadway improvements in the King/Callahan/ Russell area. The City has been meeting with the Rosemont Civic Association to share these coordination efforts.

SPOT IMPROVEMENT PROJECTS

Edison Street and Dale Street Early

Thanks to an award of the [Department of Conservation and Recreation’s Community Flood Preparedness Fund Grant](#), field data collection to support design of the first set of flood mitigation projects targeting the Arlandria area is expected to conclude by early April. The three spot projects on W. Reed Ave, Edison St., and Dale St. are intended to help protect parked vehicles and community resources by giving flood waters more outlets to Four Mile Run.

Initially, these projects were expected to be elements of a larger capacity improvement project scheduled to begin design in 2026; however, [funding from the CFPF grant](#) has expedited design of downstream elements of the larger project. The City has dubbed these three projects, collectively “Edison and Dale Phase 1” with the expectation of expediting additional project elements in the future.





Learn about Past, Present, and Future Flood Impacts with the Flood Action Story Map Now Live

If you've wondered how [Flood Action Alexandria](#) came to be, we now have a story map that outlines the City's history, how it impacts today's flooding, and what the City is doing to address it.

Before Alexandria was established, natural waterways collected rainwater, ultimately discharging it into the Potomac River and the Chesapeake Bay. When land is converted from its natural state to farmland, lawns, roadways, and buildings, the ground cannot absorb as much rainwater as it used to. Instead, the rainwater runs off these impervious surfaces and can contribute to flooding.

With an increase in impervious surfaces, the City began to experience more runoff and flooding. Today, the storm sewers that convey runoff are aging and undersized. They cannot handle the increased amount of runoff the City is experiencing from climate change and past development patterns. In addition, the sanitary infrastructure can develop cracks and let groundwater in, which takes up space in the pipes, causing more frequent and intense flash flooding and sanitary sewer backups.

Many factors contribute to Alexandria's current flooding issues, including the alteration of natural waterways, aging infrastructure, and climate change. Each year the City continues to pursue flood mitigation projects to address existing issues identified through resident requests, engineering analyses, and field observations. The City is allocating millions of dollars towards the planning, design, and construction of flood mitigation projects through the Capital Improvements Program.

For more information on [Flood Action Alexandria](#) visit the [story map](#) to learn more about the history/resources and how you can help today.

Virginia Flood Awareness Week 2023



Jesse Maines (center), chief of the Stormwater Management Division, and Dan Medina (right), program manager for Flood Action Alexandria, receive the 2023 Virginia Flood Awareness Week Proclamation from Councilman John Chapman (left). (City of Alexandria)

The City marked Virginia Flood Awareness Week with a [reading of a proclamation](#) during the City Council Legislative session on Tuesday, February 28.

Like other national and global communities, the City has experienced more intense storm events with large volumes of rainfall coming down in short periods of time. These severe storms overwhelm storm sewer systems and cause flash flooding. The City has experienced multiple events in 2019, 2020, and 2021 that have greatly impacted property owners.

The City of Alexandria's Flood Action Alexandria program team commemorated [Virginia Flood Awareness Week 2023](#) from Sunday, March 12th to Saturday, March 18th by encouraging the community to learn about local risks and what they can do to stay safe.

The City of Alexandria, Arlington County, and Fairfax County teamed up for Virginia Flood Awareness Week to get out key messages of being informed and prepared. Check out these informative webinars:

- [Understanding Your Flood Risk](#)
- [How to Reduce Your Flood Risk](#)
- [Cómo Protegerse Contra las Inundaciones](#) - Spanish Flood Awareness Information Session

Earth Month Celebration

As we approach the 53rd anniversary of [Earth Day](#), the City of Alexandria will be celebrating all month long. We encourage residents to participate in environmentally focused events, activities, and online initiatives that provide information and empower residents to make an impact on the environment and drive change.



The theme for this year is “Invest in Our Planet: Practicing Sustainability,” which focuses on the importance of acting and practicing sustainability in our daily habits and activities. These are some Earth Month-related events that residents can participate in:

- Join the City’s Stormwater Management team in cleaning up litter at Four Mile Run Park, in conjunction with the Alice Ferguson Foundation’s Potomac River cleanup, on [Saturday, April 15](#).
- Join the City’s Resource Recovery team and Alexandria Library to learn the importance of reducing food waste and various techniques and alternatives to throwing out this resource on [Monday, April 17](#).
- Watch a local environmental champion receive the 2023 Ellen Pickering Environmental Excellence Award during the Del Ray GardenFest on [Sunday, April 23](#).

- Check out the different electric vehicles in our community – from electric buses and cars to e-bikes and scooters – at the Office of Climate Action’s Electric Vehicle Showcase on [Sunday, April 30](#).

Visit alexandriava.gov/EarthDay for a full list of April events and activities, and for more information about Alexandria's sustainability efforts.

Dave Pearson Watershed Excellence Study Award



City staff and AECOM consultants attended the 2023 Annual Virginia Water Conference and received the Dave Pearson Watershed Excellence Study Award. (City of Alexandria)

Several City Flood Action staff traveled to Richmond, VA, for the [2023 Annual Virginia Water Conference presented by the Virginia Lakes and Watersheds Association](#) which was attended by hundreds of water-focused professionals from across the Commonwealth. Alexandria City staff presented on “Addressing Inland Flooding: An Integrated Approach; Designing for Climate Change – Flood Risk Mitigation Using Optimization; and Green Streets and Sidewalks: Design and Lessons Learned”. The City and its consultant, AECOM, were awarded the Dave Pearson Watershed Excellence Study Award during the Conference for the abstract “Addressing Inland Flooding: An Integrated Approach.”



COMMUNITY MAINTENANCE WORK

Sanitary Sewer Asset Renewal Program Work Completed: December 2022 – February 2023



21,980 Feet of mainline sanitary sewer inspected



197 Stormwater structures inspected

14 Bioretention facilities maintained



348 Sanitary lateral sewers inspected



88 Storm sewers and structures CCTV'd

62 Stormwater trouble spots inspected



91 Stormwater structures cleaned



60 BMPs inspected



FROM THE AD HOC GROUP

Alexandria City Council is encouraging the [Ad Hoc Stormwater Flood Mitigation Committee](#) to produce an annual report on the extent and progress of the City's flood mitigation activities. To prepare this year's report, the Ad Hoc Group spent their February meeting reviewing the proposed stormwater budget for FY 2024 in detail. The meeting focused on four main points:

1. Since 2021, Alexandria has quadrupled its planned investment in stormwater infrastructure. The [Capital Improvement Program lists](#) of all current and future projects Alexandria will undertake over the next ten years.

2. The City Manager's [proposed budget for FY 2024](#) includes \$287 million for stormwater projects and related projects in the combined sewer area of Old Town between now and 2023 – that's up from the \$60 million ten-year plan issued in 2020.
3. Almost 75% of the budget for stormwater is directed toward real construction projects that will increase Alexandria's ability to move stormwater away from flooded neighborhoods. That budget also includes important maintenance activities and the grant program to assist residents in flood-prone areas. But make no mistake – this is a budget that builds stormwater infrastructure!
4. The stormwater fee that residents pay is leveraged two-fold by general obligation bonds. The fee raises about \$19 million. That revenue enables the City to issue another \$34 million in bonds that finance the long-term construction projects.

Residents are encouraged to learn more about how the City is responding to the stormwater flooding in our neighborhoods and [the projects that are underway](#).

RESIDENT SUCCESS STORY

Alexandria's Grant Funding for Flood Mitigation Successfully Assisted Del Ray Resident



Kelsey Davis, Alexandria resident, shows City staff the flood mitigation improvements done to her house. (City of Alexandria)

Intense summer storms are nothing new for this former Florida resident, Kelsey Davis. Upon moving to her Del Ray townhome with her family, that is where she learned first-hand how to mitigate flooding impacting her new home.

In July 2020, rainwater poured down the basement steps, mingling with water from the rooftop downspout, as well as water draining towards the house from the backyard which gushed into their basement spilling into the room they used for their master bedroom. That night, exhausted after trying to hold back the water with sheets and towels and assessing the damage to the newly installed carpet, Kelsey took to her favorite Facebook Group – Buy Nothing Del Ray; and texted her neighbors for help. Graciously, her neighbors came through that night with a shop vac, dehumidifier, and box fan, to help fix some of the damage done.

For a while, Kelsey and her husband stacked up sandbags against the basement door, hoping to evade any future flood waters. However,

eventually, after learning about the [City's Flood Mitigation Grant Program](#), the Del Ray family decided to invest in flood mitigation. The largest improvement was a new deck with "under-decking" which moves the water off the deck and into a system that drains into the yard. They also graded the new patio away from the house whereas before, water was draining directly to the basement steps. The roof downspout was tied into a pipe which exits into the front of the property, and they found a different drain cover to help keep leaves and debris from clogging the drain.

Standing outside on a warm March day, Kelsey noted that the "investment was worth it because it increased the property value, protects the master bedroom from future flooding, and we really enjoy entertaining and being outdoors."



STORMWATER STEWARD

Engineer Ehsanullah Hayat has more than 12 years of professional experience working in numerous civil engineering fields in Afghanistan, specializing in water resources, infrastructure, and international development. He joined the City in May 2022, making it his first job in the United States, and in July completed his Ph.D. from the prestigious Izmir Institute of Technology in Turkey.



Over the past year, Hayat has supported various projects with Parkfairfax and LG Cap to execute numerous improvement projects throughout the City. Currently, he is preparing for his CFM certification exam, which is a national floodplain management program used as a training/continuing education for floodplain management professionals.

The Flood Action Alexandria newsletter is produced by the Flood Action Alexandria staff. Email us at stormwater@alexandriava.gov.