



JUNE 2023 ISSUE 13

ABOUT US

ADVISORY GROUP

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MANAGER'S MESSAGE

As we approach the end of fiscal year 2023, it is helpful to our team to take account of what we have accomplished and use that to guide our upcoming work. While our large capacity projects will take a few years to design and construct, we are focused on providing quick improvements, wherever feasible. Four of our spot improvement projects completed construction during the last year and nine more are in active design. We want to continue identifying and delivering these “quick wins” whenever possible, to help improve the stormwater infrastructure in our City.



Our efforts have been bolstered by the investment of \$3.7 million from state and federal grants. Additionally, the Stormwater Utility Fee increase that was passed on May 3 as part of the [fiscal year 2024 budget](#), will provide the funding needed to continue moving forward on these critical projects.

I wish all our flooding issues could be resolved with quick wins, but unfortunately, many are quite complex and can have major impacts on our communities. These large capacity projects require significant above- and below-ground surveys and investigations to determine interferences and constraints that could affect our potential solutions. Some problems can seem simple to solve when analyzed on an aerial map, but once we begin learning about the web of utilities, existing critical services, environmental and soil conditions, and examine the full impact of construction activities, the true complexity of the problem is revealed.

This year, our project delivery teams have made progress on the Commonwealth-Ashby-Glebe project (the combined top two large-capacity projects), Hooffs Run Culvert Bypass, and Pitt and Gibbon Combined Sewer project. These projects usually start with a range of potential alternatives. We then examine each to determine the best solution. At a recent public meeting, we were asked about this alternative examination process. It would be great if our alternatives were like those one might come across while undertaking a home renovation project: multiple paths forward, each ending in a positive result. Unfortunately, these alternatives in infrastructure projects tend to result in a lot more findings of what is “not feasible,” “causes too great of an impact,” or “doesn’t achieve the objectives.” But we keep innovating, collaborating, and modeling new options, and we eventually find the best solution. We value the opportunity to share this process and learn from our residents.

Over the past year, we have hosted 11 public meetings and know that this will continue to grow as our projects progress. If you have not had a chance to speak with us, please [reach out](#) or attend a meeting. Your first-hand experience with our infrastructure challenges helps us design the right solutions.

Terry Suehr, Director, Department of Project Implementation

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

Hooffs Run Culvert Bypass



Existing Hooffs Run culvert opening near W. Glendale Ave. and Junior St.

The City of Alexandria is proud to announce that the Hooffs Run Culvert Bypass project contract for design has been awarded to [Arcadis](#). This is a critical project that targets a high-priority area of flooding in the City. The project design stage is set to kick off in early June. Under this contract, the design team will analyze multiple alternatives for improvements, perform detailed site surveys and data collection, perform storm sewer modeling, and develop construction drawings.

The Hooffs Run Culvert Bypass project will alleviate flooding where Timber Branch transitions from an open stream to an underground pipe (also known as a culvert) near the intersection of W. Glendale Ave. and Junior St. The existing culvert is not large enough to handle the stream and stormwater flow during intense storm events, which also causes flooding in surrounding areas. The City plans to construct a new, large-capacity storm sewer under Russell Rd. and King St. to add capacity to the existing culvert.

The design stage is estimated to last 2.5 years. Construction is targeted for fall 2026, with project completion in summer 2028.

SPOT IMPROVEMENT PROJECTS

Mount Vernon Dual Culverts



Dual culverts at headwall

The City has initiated a [spot improvement project](#) to optimize the Mount Vernon Culverts. These culverts are storm drainpipes located between Mount Vernon Ave. and the outfall east of Edison St. The project proposes several actions, including relocating the Edison St. storm drain inlets further north to the low point in the road. Additionally, the sanitary sewer line will be relocated between Mount Vernon Ave. and Edison St. to improve the twin culverts' hydraulic alignment. The project will also relocate the Mount Vernon storm sewers to a more central position between two existing buildings, allowing for safer installation and future maintenance access.

Additionally, storm sewer upgrades will enhance the safety and efficiency of the Mount Vernon culverts. The outfall pipes will be upgraded from the existing corrugated metal arches to larger reinforced concrete ellipses. These enhancements will significantly improve the overall functionality of the culverts. Notices went out to the community at the end of May to announce the start of survey and utility location work, followed by geotechnical work being conducted in the City right-of-way and the easement to determine soil conditions.

Parkfairfax Neighborhood Inlets



[Watch a video](#) about the inlet capacity projects in Parkfairfax

Last month, the City completed inlet capacity projects in the Parkfairfax neighborhood. Part of the City's spot improvement project efforts, the inlet work will help alleviate flooding in this area of Alexandria. After receiving comments from residents who experienced damage to their homes and vehicles during heavy storms, City engineers conducted a thorough study to determine the root cause of the problem. The study revealed several drainage issues and a limited number of inlets causing flooding in the area.

Inlets play a crucial role in collecting stormwater from the streets and directing it to the storm sewer system. By increasing the capacity of these inlets, stormwater can move more quickly and efficiently. This seemingly small but essential part of the stormwater management network can make a big difference in protecting our communities from the dangers of heavy rainfall. Thanks to the swift actions of City engineers, the neighborhood is now better protected against future flooding. If you're interested in learning more about spot improvement projects and how they're making a difference in areas affected by flooding in Alexandria, visit the City's [spot improvement project page](#).

Edison and Dale Geotechnical Work



[Watch a video](#) of crews at work on W. Reed Ave.

Mitch Dillon, a civil engineer and project manager for the Department of Project Implementation, recently discussed the completed geotechnical work at [Edison and Dale Streets](#) to reduce the occurrence of flooding on W. Reed Avenue. The project proposes to install a new storm sewer on a portion of W. Reed Ave that is currently unserved by the City storm sewer system. The new sewer will permit the installation of inlets along the road to collect more runoff and reduce downstream flooding. The geotechnical work for the project was completed last month.



Holmes Run Vegetation Removal

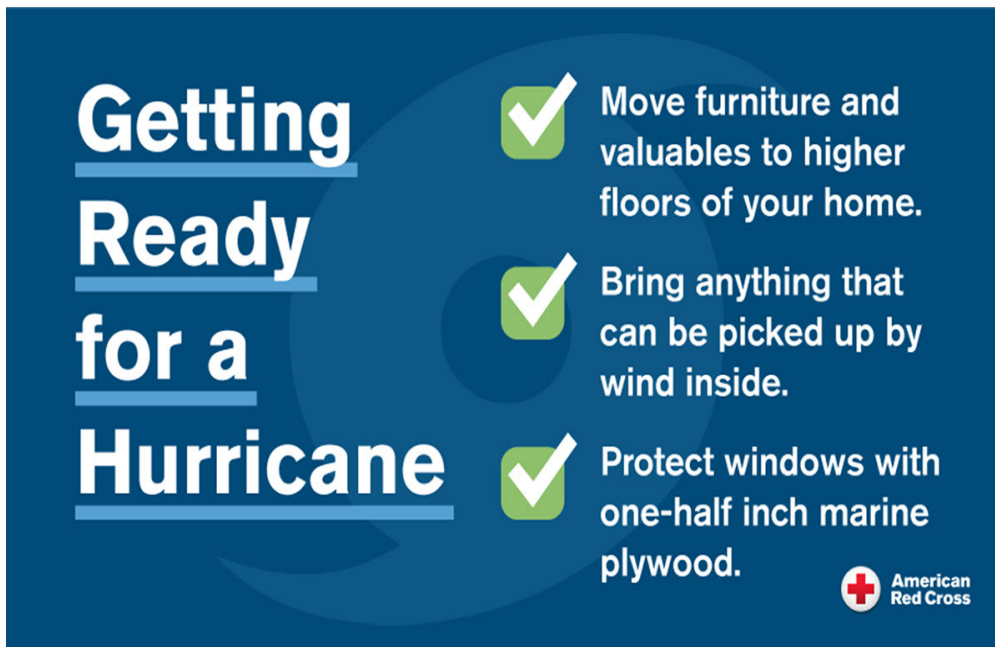


[Watch a video](#) of vegetation removal along Holmes Run

As part of the City's work to reduce flooding and improve Alexandria's stream channels, the City performs channel maintenance every few years. This maintenance includes removing nuisance vegetation to maintain the 100-year floodwater capacity in the stream. The City's approach involves targeted vegetation removal rather than a "clear-cutting" method that removes all vegetation from the stream bank. This practice is consistent with the approved [2002 Holmes Run Maintenance Policy and Plan Document](#).

The City has successfully removed vegetation from the bottom third of the Holmes Run stream bank to improve safety and reduce nuisance vegetation near stormwater infrastructure. The approach has led to a steady increase in the [urban riparian forest buffer](#) for Holmes Run over the past 20 years. For more information, visit the City's [Stream and Channel Maintenance page](#).

Summer Storm Season Awareness



Hurricane preparedness image courtesy of the American Red Cross

The 2023 Atlantic hurricane season runs **from June 1 to November 30**, and the heavy rains produced by hurricanes can overwhelm Alexandria's drainage infrastructure and waterfront areas, causing flooding in some neighborhoods. Check out the [Hurricane Preparedness webpage](#) to learn more about staying safe and being prepared if disaster strikes.

The City prepares for summer weather through proactive maintenance to identify and address potential flooding and drainage issues. Due to the increasing frequency of extreme storm events, flooding and drainage issues are becoming more common. Small capital projects are designed to support the functionality of the City's storm sewer system and address localized flooding problems. Additionally, the City's [Flood Mitigation Grant Program](#) assists residents who have taken steps to floodproof their properties by reimbursing 50% of the eligible completed project costs (up to \$5,000).

The City also encourages residents to begin preparing for hurricane season by stocking up on emergency supplies and making sure their home systems are in good, working order. Preparing for severe weather now can help you and your family safely and comfortably make it through the summer storm season. Some tips to consider:

Prep emergency supplies: Gather flashlights, extra batteries, a portable radio, non-perishable foods, bottled water, cash, blankets, clothing, and toiletries.

Clean your gutter systems: Properly maintaining your gutters will not only help protect homes during inclement weather, but it will also help prevent water damage, offer roof protection, reduce pests, and protect your home's foundation.

Maintain your sump pump: Sump pumps are essential to homes with basements. Consider installing a sump pump with battery backup in case of power outages.

Power up: Fill your car's gas tank, charge your cell phone, test your generator, and have plenty of fuel ready in case of power outages.

Identify a shelter room: This enclosed area should be on the first floor, in the central part of the house, with no windows. Avoid all unprotected windows and doors until the storm passes.

Plan to stay connected: Stay in the know by signing up for Alexandria's [eNews](#) service – select "Severe Weather Warnings" and "Emergency Management News & Tips" for timely alerts. Residents can also use the [Alex311](#) system to report storm sewer blockages or issues on public property.

Planning can make a huge difference when preparing for hurricane season. Check out [additional resources](#) to help you stay safe and remember to keep an eye on the City's [rain and stream flow gauges](#) to remain informed about any potential risks. Stay safe!



2023 Fiscal Year in Review



**72,675 LINEAR FEET
OF SANITARY
SEWER INSPECTED**



**42 BACKFLOW
PREVENTORS
INSPECTED AND
SERVICED**



\$27,383

**REIMBURSED THROUGH BACKFLOW
PREVENTOR PROGRAM**



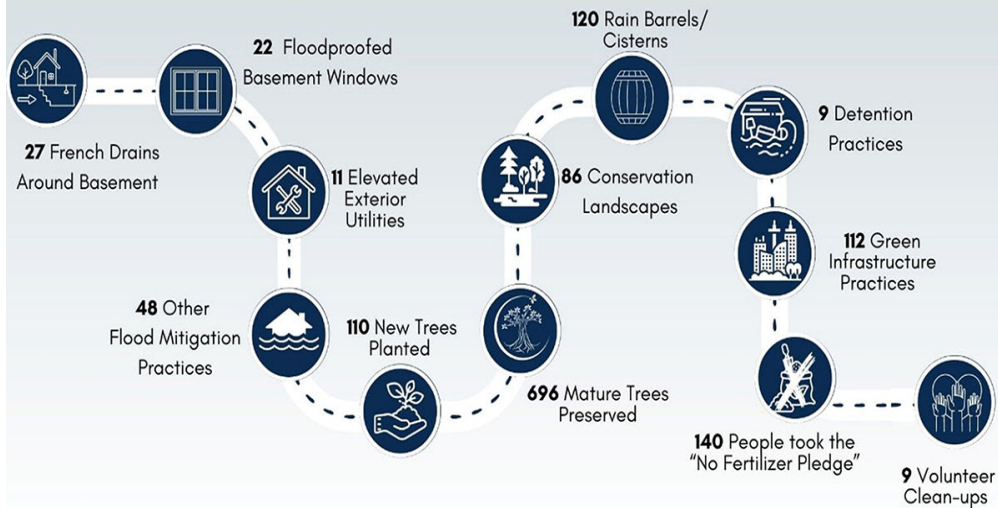
\$140,400



**REIMBURSED THROUGH THE FLOOD
MITIGATION GRANT PROGRAM**

STORMWATER UTILITY CREDIT PROGRAM

2023-2024 CREDITED PRACTICES FROM 290 TOTAL APPLICATIONS



The infographic above shares information from the most recent Stormwater Utility Credit Program application window. Please review the [credit manual](#) to see how you can apply for credits this upcoming December. For more information, visit the City's [Stormwater Utility Fee page](#).

FROM THE AD HOC GROUP

The past few months have been busy for the [Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group](#)!

The advisory group recently completed an annual report compiling its feedback on flood mitigation efforts and presented that information to City Council during the spring budget season.

To prepare the report, the advisory group spent its last three meetings taking a hard look at Alexandria's proposed investment in stormwater flood mitigation as outlined in the City's proposed budget for fiscal year 2024. The annual report was developed with input from residents who attended the meetings, presentations by City staff, and the advisory group's analysis of the proposed budget and Flood Action program.

General findings of the report were presented by the group's chair to City Council at both public hearings on the proposed fiscal year 2024 budget. Other group members submitted written testimony to City Council regarding the impact of flooding in their neighborhoods.

Read the [annual report](#) for a concise summary of what Alexandria has done – and plans to do – to combat flooding. It recognizes the considerable progress the City has made in its flood mitigation efforts to date while encouraging City Council to continue investing in stormwater infrastructure to “stay the course” in the City’s 10-year Capital Improvement Program.

STORMWATER STEWARD



Gavin Pellitteri (center) at Taylor Run, leading an event to educate young volunteers on water quality monitoring and storm drain markings.

Gavin Pellitteri has always had a passion for environmental science, so he was thrilled to join the City as a Stormwater Quality Compliance Specialist in 2019. Having grown up in the Chesapeake Bay region, Gavin feels a real sense of responsibility to help improve the water quality in his home area. Before joining the City, Gavin worked on Pennsylvania water quality projects related to abandoned mine reclamations.

In April, Gavin was promoted to Stormwater Principal Planner. In his new role, he uses his background and knowledge to help shape development sites to ensure they are complying with state and City regulations, ultimately helping to improve water quality in our waterways.

Gavin, a Roanoke College graduate, enjoys collaborating with different departments and engaging with the community through public outreach. He finds it rewarding to talk to people and help them improve water quality around their neighborhoods and businesses. Currently, he is working on several exciting projects, including the redevelopment of the Landmark Mall and the Potomac River Generating Station. These sites will be held to modern stormwater management standards, which will help increase water quality as stormwater runoff leaves these sites.

Gavin enjoys coming to work every day knowing that his efforts will positively impact the environment, and he's proud to be part of the team working to make a difference in the community.

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

