

ABOUT US

ADVISORY GROUP

ENEWS

## Manager's Message

*A message from the Deputy Director of Infrastructure & Environmental Quality.*

Last summer, we began the first-of-its-kind program in Virginia designed to install flood mitigation practices on private properties by partially reimbursing residents for the cost of the practice.

We launched the pilot phase of the [Flood Mitigation Grant Program](#) feeling hopeful people would take advantage – and we've been blown away by the tremendous number of applications submitted to the City.

It's taken us a bit longer than expected to process applications and issue payments.



I apologize for the delays you've experienced and can promise you we're working on ways to speed up the application process to make it easier for you. Please bear with us as we streamline our process.

John Perlman, a resident who lives on East Maple Street, was one of the applicants for the grant program. He installed a flood door, flood gate and sump pump. In fact, he believed about seven households in his neighborhood have applied to the grant program and installed devices on their properties.

After an extreme storm in August 2021, he reported most – if not all – of his neighbors were protected and dry. You'll read about his story in this newsletter.

We understand climate change will continue bringing intense storms that wreak havoc on our region. However, residents can take back some control by taking steps to mitigate flooding on their properties with financial assistance from the City.

These private flood mitigation practices will augment public infrastructure projects designed to store and convey excessive runoff through our City's flood-prone neighborhoods. We're accelerating projects when we can and, in the meantime, encouraging residents to take steps to help mitigate flooding on their properties.

The pilot phase of the grant program opened to residents in August 2021 after City staff helped change the Code of Virginia to allow municipalities to provide grant funding on private property. Under the program, residents can receive reimbursement up to 50%, up to \$5,000, for installing eligible flood mitigation devices or practices on their properties.

We've received more than 175 applications and reimbursed nearly \$300,000. The feedback we've received from applicants will help us shape the future of the grant program to benefit property owners for years to come.

*Bill Skrabak, Deputy Director of Infrastructure & Environmental Quality*

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

# Project Updates

Updates on Capacity and Spot Improvement Projects.

## Large Capacity Projects



Combined two projects to streamline design



Design for top 3 projects funded in FY 22: \$19.9 million



Construction estimates for FY 23, FY24, FY25: \$87.6 million

### Design 1 & 2

#### East Glebe Road and Commonwealth Avenue and Ashby Street and East Glebe Road

Request for Qualifications: Jan. 21, 2022  
Estimated Contract Award: Spring 2022  
Design Completion Target: Spring 2025

*Awarded Community Flood Preparedness Fund Grant*

### Design 3

#### Hooffs Run Culvert Bypass

Request for Qualifications: April 2022  
Estimated Contract Award: Spring 2022  
Design Completion Target: Spring 2025

## Spot Improvement and Combined Sewer Projects

**INVESTIGATION**

**PLANNING**

**DESIGN**

**CONSTRUCTION**

**East Mason**  
Inlet capacity

**East Monroe & Wayne Street**  
Inlet capacity

**North Columbus Street**  
Alley

**Carlisle Drive**  
Alley

**Walleston Court**  
Bank stabilization

**Key Drive**  
Channel stabilization

**Hume Avenue**  
Bypass

**South Jordan Street**  
Inlet capacity

**North Overlook Drive**  
Drainage

**Clifford Avenue & Manning Street**  
Green alley

**Pitt Street & Gibbon Street**  
Combined sewer

**Mount Vernon Avenue**  
Cul-de-sac inlets and drainage

**Oakland Terrace**  
Channel stabilization

**Clifford Avenue, Fulton Street & Manning Street**  
Inlet capacity

# News

*News to know about the City's flood mitigation efforts.*



Jesse Maines (right), chief of the Stormwater Management Division, presents an update on the Flood Action Alexandria initiative during an Alexandria City Council legislative meeting on March 22. Listening are Bill Skrabak (left), deputy director for Infrastructure and Environmental Quality, and Dan Medina (center), program manager for Flood Action Alexandria. (City of Alexandria)

## City Secures Grant Funding for Spot Improvement Project in Flood-prone Neighborhood

A spot improvement project to help alleviate flooding in the area of Clifford Avenue, Fulton Street and, Manning Street in the Arlandria neighborhood has received a federal grant worth \$420,000.

The project was one of 10 infrastructure projects in Northern Virginia to receive funding as part of the Omnibus spending bill passed by a bipartisan vote in Congress in March. The grant supports a project to increase the capacity size of inlets in low spots of the neighborhood where flooding tends to occur during small- to medium-sized storms.

"We are steadily initiating flood mitigation projects to bring relief to the neighborhoods across the City," said Jesse Maines, Chief of the Stormwater Management Division overseeing the project along with DPI providing project management.

“Securing grants to complete these projects helps the City to stretch funding further and ultimately aid more property owners. We appreciate the support lawmakers have shown by ushering grants for us to get the job done.”

The Clifford, Fulton, Manning project is one of the City’s spot improvement projects designed to address localized flooding. Spot improvement projects are one aspect of the City’s comprehensive approach to address flooding, including capacity projects, maintenance and sanitary sewer inspections and rehabilitation.

Rep. Don Beyer (D-VA), who helped secure the grant for Alexandria, said funding for all 10 infrastructure projects will translate to significant, beneficial projects.

“These projects will make a real, positive difference in our region,” Beyer said.

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## City Council Approves Grant Proposals Aimed to Establish Inlet Program, Accelerate Pipe Replacement Project

Members of City Council approved a request to submit two grant proposals to the state for flood mitigation efforts that include accelerating a dual corrugated metal pipe culvert replacement project and launching an inlet program dedicated to increasing the size and/or number of neighborhood inlets.

The proposals submitted to the state Department of Conservation and Recreation’s Community Flood Preparedness Fund (CFPF) for 50/50 matching funds are \$1,250,000 to replace a dual corrugated metal pipe at Mount Vernon Avenue and Edison Street and \$764,000 for a new inlet capacity program in Park Fairfax. If approved, the grants would cover about 50% of the total cost for each project.

The corrugated metal pipe replacement project was identified through on-the-ground neighborhood investigations and supported by the [City’s Storm Sewer Capacity Analysis \(CASSCA\)](#). The project will replace the existing, deteriorating, undersized dual corrugated metal pipes leading from Mount Vernon Avenue under the Potomac West apartments and leading to the outfall east of Edison Street, which drains into Four Mile Run. The pipes will be replaced with a larger culvert to safely convey large water flows to an outlet.

The total project cost is about \$2.5 million. The City will use about \$1.25 million from the FY 2022 Stormwater Management CIP under the Storm Sewer Spot Improvement program for the project, aiming to secure the grant to cover the other half.

The Inlet Capacity and New Inlet Program was identified as a strategy to improve drainage in stormwater inlets by enlarging existing inlets and building new inlets that lead to pipes with adequate conveyance capacity. This strategy will allow more surface stormwater runoff to enter the pipe system faster. The inlet program will cover inlet identification, design and implementation in the Four Mile Run watershed.

Inlet capacity projects were previously identified as small-scale projects and funded through the CIP Stormwater Sewer Spot Improvement program. The grant would allow the City to save funds from the Spot Improvement program and redirect them to offset planning costs for a different stormwater project.

Grants secured from the CFPF grant program total about \$3.8 million for three other flood mitigation projects in the City.

The other grants will support the Waterfront Implementation Project, the above-mentioned project in Arlandria and the large capacity project in the Four Mile Run watershed.

Funding for the Community Flood Preparedness Fund grant program comes from the Regional Greenhouse Gas Initiative (RGGI) proceeds. RGGI is a partnership among 11 Eastern states that regular emissions through an allowance program that collects funds from power plants. Since its inception, the initiative has reduced power plant emissions by 50% and raised more than \$4 billion to invest in communities in the 11-state region.

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## Alexandria, Arlington to hold public meeting on dredging Four Mile Run

Members of the community are invited to a [virtual public meeting on May 17](#), about a project to dredge Four Mile Run.

Dredging Four Mile Run is an important federal flood control measure. [Alexandria and Arlington have partnered to dredge Four Mile Run](#) since 1974.

Periodic dredging of significant accumulated sediment in the channel that borders the municipalities is required to maintain conveyance capacity and freeboard for the channel as set by the U.S. Army Corps of Engineers.

Project work will be conducted in an environmentally sensitive area.

In addition to periodic dredging, the municipalities share maintenance, including clearing debris, monitoring vegetation growth and shoaling, as required by the U.S. Army Corps of Engineers annual inspection program.

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## What Do You Know About Stormwater? Meet the City's Experts During Earth Day Celebrations

Get an up-close look at how the City monitors water quality and manages stormwater runoff by visiting Stormwater Day at the Park to close out the [City's Earth Day celebrations](#) from 9 a.m. to noon on April 30 at Ben Brenman Park.

City staff will be at the park to lead a do-it-yourself rain gauge workshop (bring an empty 2-liter bottle), games for kids, tours of stormwater management practices at the Ben Brenman and a rain barrel giveaway.

Experts will discuss grants you are eligible for and flood mitigation practices you can take on your property.



### JOIN US FOR AN EARTH DAY CLEANUP!

9 a.m. to 11 a.m., Saturday April 9

All Veterans Park, 4725 Duke St., hosted by Recreation, Parks & Cultural Activities

Windmill Hill Park, 501 S. Union St., hosted by Stormwater Management Division

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## May is Building Safety Month



# 2022

## Safety for All:

### BUILDING CODES IN ACTION



#### Week 1:

May 1–8  
Energy and  
Innovation



#### Week 2:

May 9–15  
Building Safety  
Careers



#### Week 3:

May 16–22  
Disaster  
Preparedness



#### Week 4:

May 23–31  
Water Safety

The City of Alexandria will kick off its [10th Annual Building Safety Month](#) with a pop-up event in Market Square at 301 King Street on Friday, May 6.

Cindy Davis, deputy director of the Department of Housing and Community Development and president of International Code Council, will share a keynote address. There will also be a six-hour training class on Residential Energy Codes for people who need subject matter information and additional continuing education units.

Lunch will be offered by a local barbecue vendor with a free raffle and networking opportunities.

## FLOOD-PROOFING VENDORS

The City of Alexandria is seeking flood-proofing vendors and service providers for a vendor fair on May 6 at Market Square. For more information, email [jonathan.whiteleather@alexandriava.gov](mailto:jonathan.whiteleather@alexandriava.gov).



## From the Ad Hoc Group

*Action from the Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group.*

The [Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group](#) provided updates on the status of state legislation on flooding, stormwater and flood mitigation issues. For information, visit the [Virginia General Assembly website](#).

- [House Bill 516 Flood Resiliency and Protection](#) passed in the House and Senate and sent to Governor for signature. The bill implements recommendations from the first Virginia Coastal Resilience Master Plan. It provides guidelines for developing a Virginia Flood Protection Master Plan for the commonwealth and requires the plan to be updated by Dec. 31 and every five years.

- [House Bill 847 Virginia Resiliency Authority](#) passed the House and referred to the Senate Finance and Appropriations Committee. The bill establishes the Virginia Resiliency Authority as a political subdivision of the commonwealth. The authority is governed by a 17-member Board of Directors.

- [House Bill 448 Land Disturbances](#) failed in chamber in January. The bill would have directed the Department of Environmental Quality to convene a workgroup to review and make recommendations concerning existing law regarding limits

# Community Maintenance Work

*Stormwater and Sanitary sewer work performed by City crews and contractors.*



**205**

Structures cleaned,  
inspected, repaired



**810**

Sanitary siphons  
inspected



**34,053**

Linear feet of  
sewer cleaned

*Work performed in January and February.*

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A crew uses a vacor truck to suction debris from in a storm drain as part of specialized cleaning operations on King Street on March 29. (City of Alexandria)

## **WATERFRONT IMPLEMENTATION PROGRAM: Crews to Clean Stormwater Structures**

An extensive, multi-year project intended to [mitigate flooding along Alexandria's waterfront](#) has reached a new milestone as crews undertake specialized cleaning operations.

The City's Public Works Services will be overseeing operations to clean six outfall structures, 31 manholes or inlets and 1,275 feet of pipe in the core area of the waterfront – Union Street and the waterfront from Duke Street to Queen Street. Inspection and cleaning operations help ensure that the City's stormwater system is managing and conveying stormwater as intended and minimizes any localized flooding caused by loss of system capacity.

"This is a critical piece of the Waterfront Implementation Program," said Dave Kurtz, chief of the Public Works Services Division overseeing the cleaning contract. "Once our crews and contractors have been able to get in and clean this infrastructure, it will be able to continue serving the community as people gather to enjoy Alexandria's waterfront."

The cleaning operation is expected to last about two weeks, concluding on April 7. Some road closures will occur as crews work in manholes and require access to underground structures. Once the work is complete, the City will add two "backflow preventers" to help manage tidal backup into the stormwater system which is responsible for the most frequently occurring "sunny day flooding" at the Prince Street and King Street stormwater outfalls during high tide events in the Potomac River.

The Waterfront Implementation Program, which is traced back to 2007, is a comprehensive effort to implement the City's Waterfront Small Area Plan. A key goal of the first phase of the project is to mitigate flooding within the "core area" of the waterfront from Duke Street to Queen Street while also addressing the public amenity goals of the Small Area Plan. The project anticipates incorporating natural, blue-green and traditional civil infrastructure to manage stormwater, maintain a resilient floodplain, stabilize the shoreline and enhance public amenities and recreational areas.

The project continues to advance with a preliminary flood mitigation analysis prepared in 2019. Contract development is underway for use in selecting a Progressive Design Build team to prepare a final design and construct the Flood Mitigation Project.

# SANITARY SEWER ASSET RENEWAL PROGRAM: Crews to inspect structures west of Commonwealth Avenue

Inspections of sanitary sewer and manholes west of Commonwealth Avenue were scheduled to begin in March as part of the [Sanitary Sewer Asset Renewal Program](#), which will help extend the life of City-owned sanitary sewer infrastructure.

City staff will review the inspection reports to determine which sewers, City-owned laterals and manholes require repair or rehabilitation. The inspections follow those of the eastern structures completed in 2021.

The asset renewal program is part of the City's 10-year, \$33 million Sanitary Sewer Capital Improvement Program. The program will help to preserve and protect existing City-owned sewer infrastructure, extend its life and help reduce the amount of infiltration and inflow (I&I) into the sanitary sewer system that can cause sanitary sewer backups into homes and businesses.

The asset renewal program builds on a previous 20-year program to rehabilitate infrastructure. To date, the City has invested about \$30 million in the rehabilitation of more than 60 miles of sanitary sewer and has repaired about 3,200 manholes.

[Get an inside look at a sanitary sewer inspection in Alexandria.](#)

## Resident Success Story

*How residents found success with flood mitigation.*

Each time John Perlman and his family waded through floodwaters on the first floor of their home on East Maple Street, they had the same conversation about moving.

The sandbags they often put out couldn't save their cars from being totaled or the walls in their living room from being ripped out. Yet, when their house was restored and insurance claims were filed, the Perlman family recognized they didn't want to leave their home in Alexandria.

"We were talking after a flood and said if the city can't do anything about 100-year rainfalls, wouldn't it be nice if we could just protect our homes?," Perlman said, recalling the August 2021 storm.



That's when he learned about the City's [Flood Mitigation Pilot Grant Program](#) which would reimburse him 50% – up to \$5,000 – if he installed flood mitigation devices on his property. Alexandria is the first municipality in the state to successfully work with lawmakers to change the state code allowing public funding to be spent on private property to launch the grant program.

Perlman installed a flood door, flood gate and sump pump. He also had a three-foot brick wall constructed just outside the flood gate for an extra layer of protection.

"We haven't had any problems," Perlman said, noting his property is near the Hooffs Run culvert, a serial flooding nuisance during severe storms. "You guys helped us stay where we are."

At least six of Perlman's neighbors have also installed flood mitigation devices and applied for the grant. The devices augment

the City's maintenance work and infrastructure plan to construct the Hooffs Run culvert bypass, which should significantly reduce flooding.

"We encourage people to apply for the grant," Perlman said. "We're really pleased. Hopefully, the City will continue to offer the grant."

# Stormwater Steward

*Gratitude for those who go above and beyond the call of duty.*


Engineer Qais Ayubi carefully traversed land behind homes on Summers Drive as a wood chipper crew set up equipment that would transform a debris-clogged channel to its former free-flowing glory.

It was just one of the maintenance projects to improve stormwater runoff operations managed by Ayubi, an engineer with Publics Works Service. A few weeks earlier, Ayubi helped design a road repair project incorporating water-resistant cement after a damaged stormwater cover leaked, causing erosion and a sinkhole.



On a separate project, his work managing a bioretention cleaning project to mitigate flooding has been noticed by residents.

"The bioretention (area) looks cleaner than I have seen it in years," a resident shared. "I appreciate your attention, follow-through and willingness to find a solution to this long-standing issue. My hope is that the weeds will not return this summer. If they do, I know I have a partner to help find a long-term solution."



**Do you know someone who works on stormwater or flood mitigation efforts?**

Send nominations for Stormwater Steward to Amanda Dolasinski at [amanda.dolasinski@alexandriava.gov](mailto:amanda.dolasinski@alexandriava.gov).

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