

MANAGER'S MESSAGE



Over the past three years, the Flood Action Alexandria program has made significant strides in tackling pluvial flooding—a problem worsened by Alexandria's aging drainage system and the impacts of climate change. The program's key accomplishments include:

- **Addressed Critical Flooding Issues:** Targeted the top three flooding hotspots identified among the 1 large capacity projects outlined in the City of Alexandria Storm Sewer Capacity Analysis.
- **Built a Robust Project Pipeline:** Advanced 25 large-capacity and spot-improvement projects through various stages of planning, design, and construction. These projects are featured on the City of Alexandria Infrastructure Projects Map, alongside other City projects.

- **Diversified Funding:** Secured \$1.7 million in Federal Community Project Funding for the Flood Action Alexandria program with assistance from Congressman Don Beyer. Also secured over \$6 million in Virginia Community Flood Preparedness Fund (CFFP) grants.
- **Enhanced Project Management:** Integrated all stormwater projects into AlexPM, the City's advanced project management tool, and established a schedule tracking system to monitor all active projects.
- **Increased Community Engagement:** Launched a community engagement initiative to keep residents informed about flood mitigation efforts, project milestones, and program updates.
- **Community Education:** Developed a StoryMap to educate residents on the causes of flooding, available mitigation technologies, and flood prevention measures for homeowners.
- **Supported Residents with Floodproofing Grants:** Launched the Flood Mitigation Grant Program, providing financial support for residents investing in floodproofing measures.
- **Collaborated Regionally:** Participated in the NOVA Flood Mitigation and Resiliency Workgroup, sharing insights and lessons learned from regional partners.
- **Maintained FEMA Compliance:** Fulfilled FEMA requirements for up-to-date flood mapping.
- **Supported Rainfall and Stream Flow Monitoring:** Sustained the City's Rain Gauge and Stream Flow tool to monitor flood risks in real-time.

Looking forward, the City has secured a grant from the Community Flood Preparedness Fund to develop a citywide Flood Resilience Plan, which will serve as a roadmap to guide future efforts in strengthening Alexandria's flood resilience through the Flood Action Alexandria program.

We are steadily moving forward, however, we have much work to do in the future. We look forward to continuing implementation of the program in partnership with the Stormwater Utility and Flood Mitigation Committee and the community.

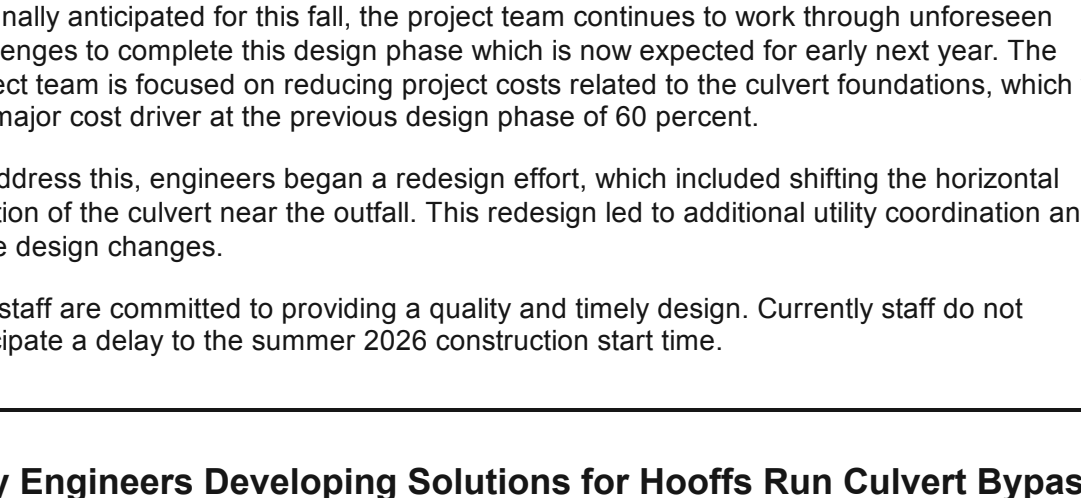
Dan Medina, Program Manager of Flood Action Alexandria

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

Ninety Percent Design on Commonwealth, Ashby, Glebe Flood Mitigation Project Anticipated Early Next Year



The virtual open house is available on the project webpage.

City staff and its contractor are working to complete the 90 percent design phase on a project to bring flood relief near Four Mile Run.

This flood mitigation project is a combination of the top-two priority large capacity projects to flooding near the intersections of Commonwealth Avenue, E. Glebe Road, and Ashby Street.

The proposed project includes installing new parallel relief sewers to increase stormwater capacity, and install a new outfall to discharge flow to Four Mile Run. Green infrastructure will assist stormwater water quality as well.

Originally anticipated for to start, the project is now continuing to work through unforeseen challenges to complete this design phase which is now expected for early next year. The project team is focused on reducing project costs related to the culvert foundations, which was the major cost driver in the previous design phase of 50 percent.

To address this, engineers began a redesign effort, which included shifting the horizontal base of the culvert near the Commonwealth Ashby and Glebe and likely coordination and more design changes.

City staff are committed to providing a quality and timely design. Currently staff do not anticipate a delay to the summer 2026 construction start time.

City Engineers Developing Solutions for Hooffs Run Culvert Bypass Project



The Hooffs Run culvert runs beneath the Rosemont neighborhood.

The planning phase continues on the Hooffs Run Culvert Bypass Project as City engineers work to mitigate flooding near the Hooffs Run and Timber Branch culverts.

The current culverts, which are located underground and carry stormwater beneath local roads, overflow during intense rain events.

The project team is exploring solutions for several challenges involved in project development:

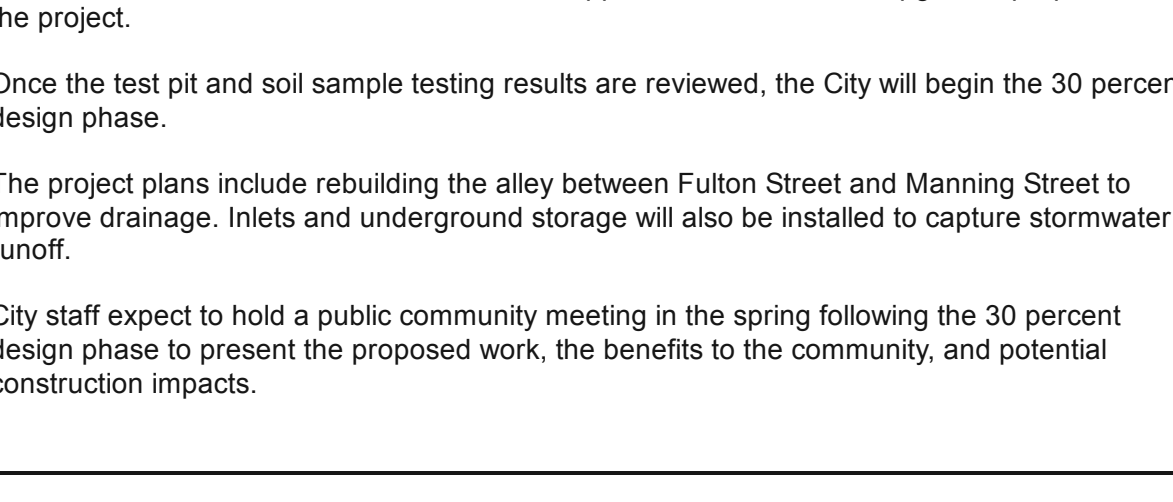
- **Relocation of Underground Utilities:** Essential utility lines, including water, gas, and power, will need to be moved to make way for construction.
- **Complex Infrastructure Systems:** The new drainage system must coordinate with major infrastructure elements, including the King Street Metro Station and Metrorail lines. This requires coordination with multiple agencies and will not disrupt service.
- **Space Constraints:** The urban setting limits available construction space, presenting logistical challenges including the relocation of utilities.
- **High Cost:** Engineering solutions that prioritize public safety, minimize disruptions, and involve utility relocation contribute to high project costs.

The project team is working through these challenges to design a solution that alleviates flood risk while maintaining conditions in surrounding areas.

[See More Large Capacity Projects](#)

SPOT IMPROVEMENT PROJECTS

Clifford, Fulton, Manning (CFM) Storm Sewer Improvement Project Begins Design Phase



The above photo shows the alley to be rebuilt as part of the CFM project.

The storm sewer improvement project to provide flood mitigation to townhomes along Fulton Street and Manning Street is now in the design phase.

In October, the City completed the preliminary designs of the project and a topographic survey of the alley between the two streets. Utility test pits and soil samples were also completed in the project area.

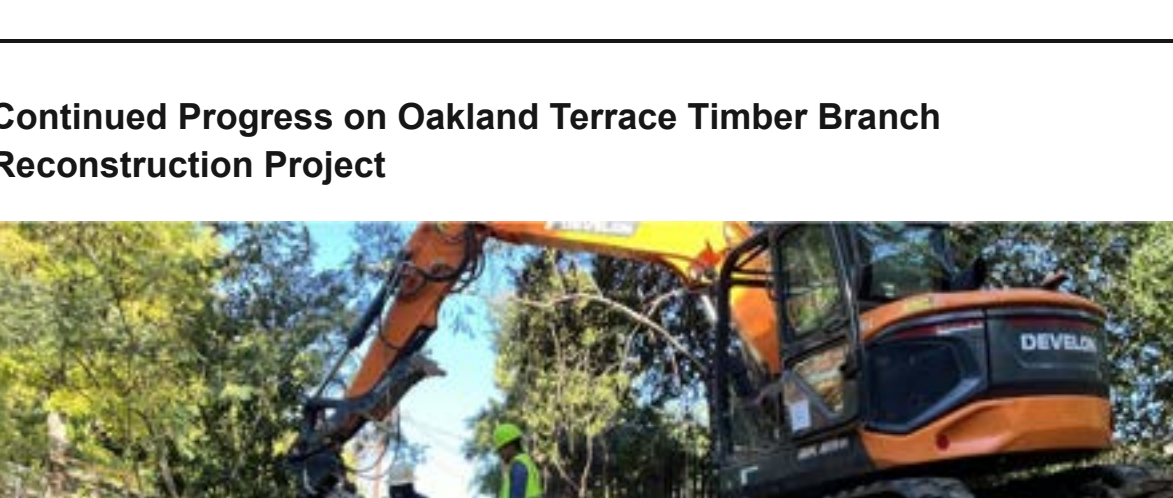
This work is done to locate utility, gas, and sewer lines in the project area. The soil samples are tested to determine whether the soil can support the infrastructure upgrades proposed in the project.

Once the test pit and soil sample testing results are reviewed, the City will begin the 30 percent design phase.

The project plans include rebuilding the alley between Fulton Street and Manning Street to improve drainage. Inlets and underground storage will also be installed to capture stormwater runoff.

City staff expect to hold a public community meeting in the spring following the 30 percent design phase to present the proposed work, the benefits to the community, and potential construction impacts.

Construction Phase Begins on Mt. Vernon Cul-de-Sac Inlet and Alley Improvement Project



City engineers speak with residents in the project area during a meeting in October.

City staff members are working towards final approvals in order to begin construction on a project to reduce flooding to townhomes along the Mt. Vernon Cul-de-Sac.

Crews will be installing inlets and underground storage vaults on Mt. Vernon Ave. and the adjacent alleyway. The alleyway will also be regraded to improve drainage.

The City is working with utility providers in the project area to finalize relocation plans.

In October project leaders held a community meeting to share information about the project, the work included, and what to expect during construction. Presentation materials are available on the project webpage.

The first stage of the project will be to relocate utilities and is expected to begin early next year.

Public notices will be issued to residents in the area before this work begins.

Continued Progress on Oakland Terrace Timber Branch Reconstruction Project



Crews work to build a new environmentally friendly retaining wall along Timber Branch.

The City is making strides to complete a project to rebuild the retaining wall of a portion of Timber Branch near Oakland Terrace.

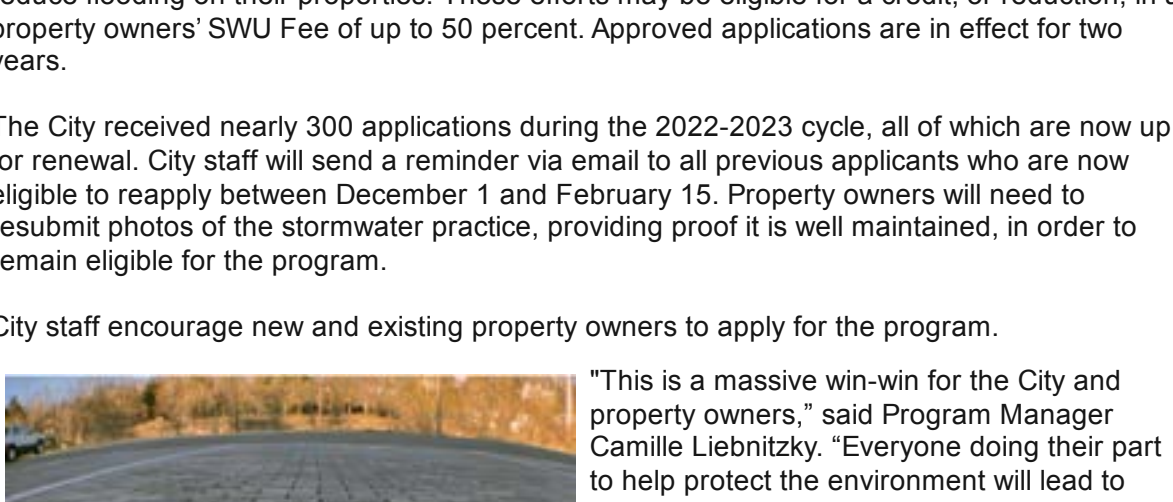
The previously existing concrete wall has been removed, and more than 100 feet of a new vegetative wall, called an Envirotek wall, has been installed.

The wall is an environmentally friendly reinforced soil slope and used as a sustainable alternative to concrete. Once installed, vegetation will be planted along the bank.

The purpose of the project is to help prevent further erosion, protect the nearby sewer line, and reduce flooding for homeowners near Oakland Terrace.

The project is expected to be completed by the end of December 2024.

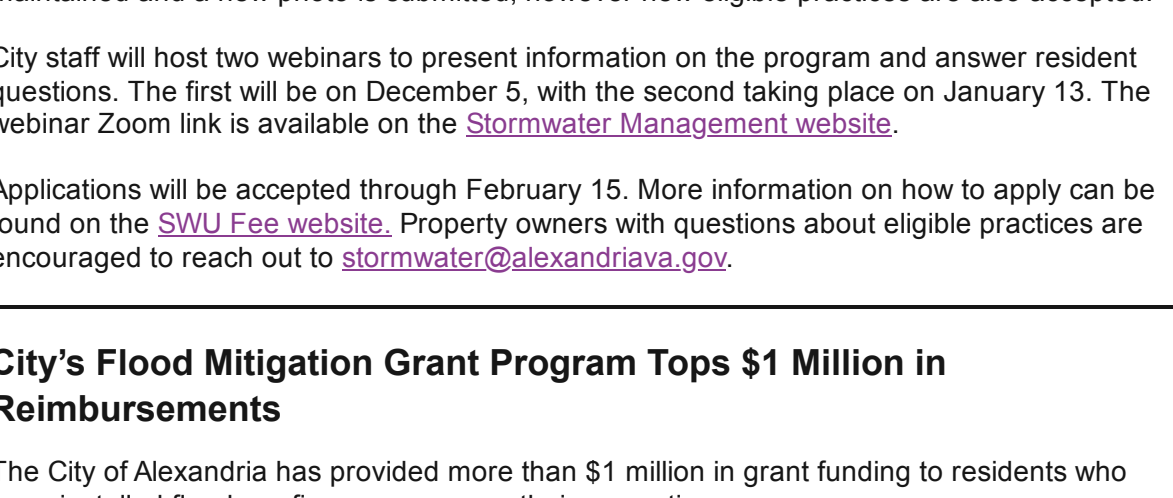
[See More Spot Improvement Projects](#)



alexandriava.gov/floodaction

NEWS

Application Window Now Open for Stormwater Utility Fee Credit Program



Alexandria Residents participated in a Four-Over Rain Barrel event hosted by the City and Alexandria Library and TREC Stormwater Management.

Property owners can use eligible flood mitigation and stormwater quality protection practices to receive a reduction to their Stormwater Utility (SWU) Fee by applying for the SWU Fee Credit Program through February 15.

The SWU Fee was adopted to provide funding for stormwater management services and capital projects, including large capacity and spot improvement projects, operations and maintenance of public stormwater infrastructure, and other stormwater quality initiatives. The program is designed to reduce the burden on property owners who have real estate tax bills that are half in October. Fees are based on property type, like a single-family home, townhome, or commercial building, and the amount of impervious surface on the property.

The credit program aims to encourage residents to take action in improving water quality and reduce flooding on their properties. These efforts may be eligible for a credit, or reduction, in a property owner's SWU Fee of up to 50 percent. Accepted applications are in effect for two years.

The City received nearly 300 applications during the 2022-2023 cycle, all of which are now up for renewal. City staff will send a reminder via email to all previous applicants to help them be eligible to reapply between December 1 and February 15. Property owners will need to resubmit photos of the stormwater practice, providing proof it is well maintained, in order to remain eligible for the program.

City staff encourage new and existing property owners to apply for the program.



"This is a massive win-win for the City and property owners," said Program Manager Camille Labrizsky. "Everyone doing their part to help protect the environment will lead to cleaner water flowing into the Potomac River and ultimately the Chesapeake Bay."

There are many different solutions property owners can use as part of the program, including outdoor practices like tree planting, conservation landscaping, or installing permeable pavement; to floodproofing practices like a French drain, elevated utilities, basement waterproofing, sump pump installations, and battery backup sump pumps.

A full list of eligible practices is included in the SWU Fee Credit Program Manual available on the City website.

Recurring applications may use the same practice as previous applications, as long as it is maintained and a new photo is submitted, however new eligible practices are also accepted.

City staff will host two webinars to present information on the program and answer resident questions. The first will be on December 5, with the second taking place on January 13. The webinar Zoom link is available on the Stormwater Management website.

Applications will be accepted through February 15. More information on how to apply can be found on the SWU Fee website. Property owners with questions about eligible practices are encouraged to reach out to stormwater@alexandriava.gov.

City's Flood Mitigation Grant Program Tops \$1 Million in Reimbursements

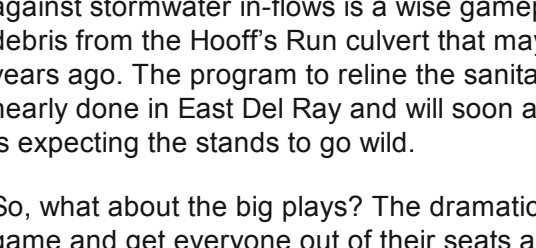
The City of Alexandria has provided more than \$1 million in grant funding to residents who have installed floodproofing measures on their properties.

Launched in August 2021, the Flood Mitigation Grant Program provides reimbursement grant funding of up to 50 percent, or \$5,000, of the total cost of eligible floodproofing practices. It's meant to incentivize property owners to install these measures in order to protect properties and families while the City is working on flood mitigation capital projects.

Since that time, the City has received 344 applications, paying out just under \$1,075,000.

In October 2023, Alexandria City Council voted to expand the program with two changes. The first was to remove the requirement for homeowners to provide proof of previous flooding no earlier than July 2019. The second change increased the maximum grant from \$5,000 to \$25,000 for measures taken on condominium or homeowner's associations common areas.

The eligible practices include a variety of weathering measures implemented outside and inside a home or business. City staff say the most common practices they have received in applications include French drains, waterproofing basements, sump pump installations, and battery backup sump pumps.



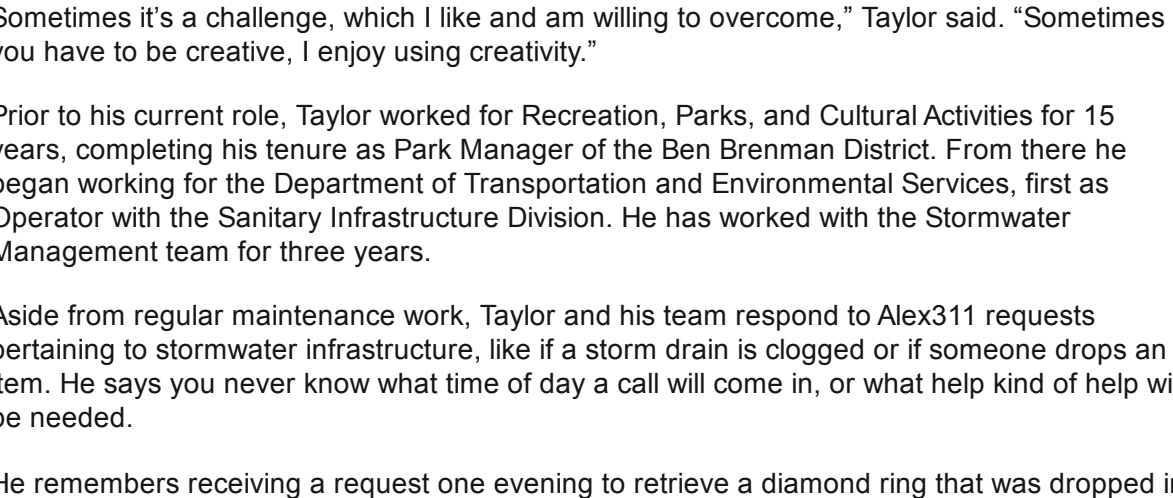
French drains are one of the most common flood mitigation practices received in grant applications.

The program is open to both private and commercial property owners, however of the more than 340 applications City staff received, only three have been business owners. Program managers are encouraging more business owners to apply for the grant.

Interested property owners are encouraged to contact the Stormwater Management Division prior to starting work in order to confirm they meet eligibility requirements.

More information on the program and how to apply is available on the Flood Mitigation Grant Program website.

COMMUNITY MAINTENANCE WORK



Work to Begin on Hooffs Run Culvert Maintenance Project

The Street and Sewer Maintenance Division is expected to begin maintenance work on the Hooffs Run Culvert this month.

City staff has selected a contractor to repair the culvert and remove debris from Linden Street to the south of the culvert.

Removing debris blockages can improve the flow of water and reduce the risk of flooding. This work also helps to reduce the need for larger scale corrective work and emergency repairs.

SNAPSHOT



FROM THE FLOOD ACTION ADVISORY GROUP

Alexandria's Flood Action Program is following Tom Brady's Playbook

I generally try to avoid sports analogies – but this time it's unavoidable. During this week's Stormwater Advisory Committee meeting, I couldn't help but think of the New England Patriots (back when they advanced to win games, of course).

Just as Tom Brady advanced the ball down the field with steady and reliable short passes, Alexandria is steadily completing small to mid-sized flood mitigation projects, one after the other. Like Brady's games, there are few dramatic big plays. At times, it's going to be watch. Regardless, the progress is undeniable.

Now, bringing us back to stormwater, since 2021, nine of the smallest flood mitigation projects have been completed. With that yardage gained, Alexandria has moved on to eight mid-sized projects that will complete design in 2025. These mid-sized projects have a construction cost between \$500 thousand and \$2.2 million each – bigger and more complex than the small projects that have been completed to date. All of these will begin construction in 2025. Because they aren't mega projects, the construction bidding process is streamlined, and actual construction should last about one year. Each one is a solid ten-yard pass.

The mid-sized projects are at Loyola Avenue, Bellefonte Avenue, Clifford-Fulton-Manning, Edison Street, Hume Avenue, Reed Avenue, Mt Vernon or Edison, Valley Drive. Together, they represent about \$17 million in total construction activity. To learn more, go to the City of Alexandria Infrastructure Projects Map.

And since we are on the topic of no-drama plays, let's talk about maintenance. Like a good solid defense, keeping culverts free of blockages and the sanitary sewer system water-tight against stormwater inflows is a wise game plan. In December, Alexandria will clear out any debris from the Hooffs Run culvert that may have collected since the last cleaning, only two-years ago. The program to reline the sanitary sewers and replace leaky manhole covers is nearly-done in East Del Ray and will soon advance to West Del Ray. Good football, but no one is expecting the stands to go wild.

So, what about the big plays? The dramatic 50-yard passes that change the tempo of the game and get everyone out of their seats and cheering wildly? For Flood Action, those would be the big \$50+ million projects at Commonwealth Ashby Glebe and Hooffs Run. Those plays are still being designed and refined while the team is moving the ball down the field a yard at a time. Stay tuned, sports fans. It's going to be a long game – we're going in the first quarter.

John Hill

Chair, Stormwater Utility and Flood Mitigation Advisory Committee

STORMWATER STEWARD

John Taylor helps keep the City moving.

Taylor works as a Stormwater Labor Supervisor ensuring infrastructure in the City is functioning properly.

"I make sure the maintenance and repairs are current and up to date," Taylor said. "I am proactive on it, occasionally we do get service requests from citizens to look at something."

Taylor leads a team which inspects and maintains stormwater infrastructure, including inlets, catch basins, and Best Management Practices (BMPs).

Being in the field every day can be hard work, but Taylor says it's rewarding to complete a job that makes a difference for Alexandrians.

"It's always different, nothing is the same every day except for coming to the building. Sometimes it's a challenge, which I like and am willing to overcome," Taylor said. "Sometimes you have to be creative, enjoy using creativity."

Prior to his current role, Taylor worked for Recreation, Parks, and Cultural Activities for 15 years, completing his tenure as Park Manager of the Ben Brennan District. From there he began working for the Department of Transportation and Environmental Services, first as Operator with the Sanitary Infrastructure Division. He has worked with the Stormwater Management team for three years.

Aside from regular maintenance work, Taylor and his team is logged to Alex311 requests pertaining to stormwater infrastructure, like if a storm drain is clogged or if someone drops an item. He says you never know what time of day a call will come in, or what kind of help will be needed.

He remembers receiving a request one evening to retrieve a diamond ring that was dropped in a storm drain.

"We didn't have the equipment, so we said we'd be back. You don't want to leave something like that." Taylor said. "They were so grateful, that was one of the most rewarding things I've done working for the City. They were really, really appreciative."

Taylor says he's proud to be part of a small team that works hard everyday to improve and maintain the City's infrastructure.

"There's only three of us, and we maintain all the BMPs and storm drains in the City," Taylor said. "We keep it moving, we keep the flow."

Having received certifications in stormwater, erosion, and sediment control, Taylor is focused on continuing his trainings to further his education and career in the City.

Outside his time with the City, Taylor is a bass player in a band and enjoys landscape design and climbing trees.

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

