CITY OF TAKOMA PARK Stormwater

April 10, 2024

FY25 Budget Presentation

Presented by:

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PUBLIC WORKS



Mission

 The City is responsible for providing stormwater management services, including construction, maintenance, and repair of storm drain infrastructure including pipes, inlets, outfalls, and other structures.

Department Overview

- The City has a National Pollution Discharge Elimination System (NPDES) permit which requires these 7 mandatory measures:
 - Public Education & Outreach
 - Public Involvement & Participation
 - Illicit Discharge Detection and Elimination
 - Construction Run-Off Site Control
 - System Maintenance
 - Pollution Prevention & Good Housekeeping
 - Impervious Area Restoration (treatment for 20% of existing impervious surface)

STORMWATER SYSTEM

- The City inherited the stormwater system in 1988 from WSSC.
 - 19 miles of pipe
 - 715 Inlets
 - 75 Outfalls
- Since 2006 new treatment systems include:
 - Bioretention Facilities (69)
 - Modular Wetland/Filtera (13)
 - Permeable Infiltration Basins (6)
 - Green Roof (1)
 - Wet Ponds (2)
 - Stream Restoration (1,000 In ft)
 - Outfall Stabilization (400 In ft)
- The entire system is mapped in GIS and regularly updated as improvements are made



FY25 Budget Expenditures

Personnel

- Budget = \$126,938
- .75 FTE
 - 0.5 Engineer
 - 0.25 Construction Manager

Engineering Support

- Budget = \$70,000
- Contractual technical support, survey and design assistance.

Mandatory Services

- Budget = \$150,000
- Video inspection and cleaning of 1/5 of the system annually.
- Water quality testing of dry weather outfalls.
- Illicit Discharge detection and investigation.
- Contractual facility maintenance and inspection.

FY25 Budget Expenditrues

System Repair & Improvements

- Budget = \$200,000
- Repair of existing inlets, outfalls, pipes
- Projects identified for FY25 include:
 - Repairs to pipe system near Birch, Cedar & Barclay Avenue
 - Poplar Ave and Gude Outfall Repair
 - Poplar Avenue elevate sidewalk, driveway aprons and enlarge inlet openings (phase 2)
 - Plants & mulch for existing facilities

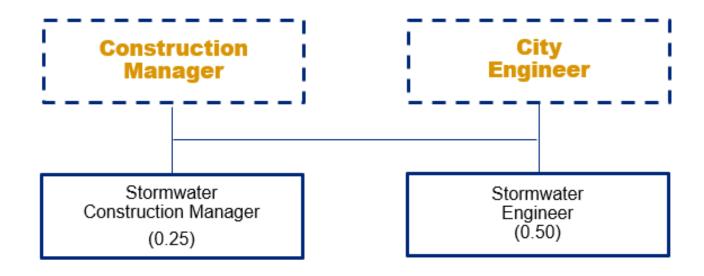
Capital Projects

- Budget = \$230,000
- Planned projects include:
 - Albany Ave & Baltimore Ave Treatment facilities
 - Garland Ave and Davis Ave project (LIDC recommendation)
 - Sligo Mill Road Erosion Control

Staff



Staff Organization



FY24 To Date Successes

Completed:

- Takoma Branch Stream Restoration
- Larch Avenue Two New Bioretention Facilities
- System Repairs:
 - Maple Avenue and Tulip Ave replaced collapsed pipe
 - Replaced broken pipe to outfall near New Hampshire Avenue Service Road and Linden Avenue
 - Repaired sink hole near Takoma Overlook
 - Made repairs to the pipe system Second Ave and Allegheny Ave
- Low Impact Development Centers (LIDC) Stormwater Resiliency Study Community meetings held on Nov 10, 2022, October 26, 2023, March 5, 2024
 - https://takomaparkmd.gov/government/public-works/stormwater-management-program/stormwater-resiliency-study/
 - RainPlan link active to identify ways to manage stormwater run-off and access free virtual session
 - Report on 20 flood prone sites and recommendations
 - Residents Stormwater Guide providing an overview of management options available for property owners

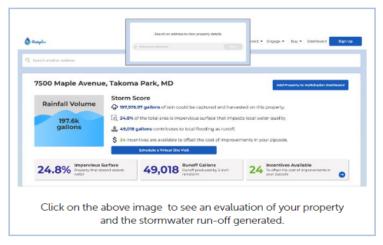
In Process:

- Brashear's Run Outfall Repair, notice to proceed mid-April
- Houston Ave and Ct Filtera Project (CBDG Funded) projected completion summer 2025
- Video inspection and cleaning of sub basin 2 and 3

Department Successes

New Resources for Residents

Introducing: Rainplan Stormwater Calculator



This tool created by Rainplan uses high resolution aerial imagery to calculate the amount of run-off a property generates based on impervious surfaces, tree cover and soil type. The tool also provides detailed information about possible ways to manage and reduce stormwater run-off. Rainplan offers a no cost virtual site to further discuss stormwater management measures, implementation costs and available contractors.

Use this link to see an evaluation of your property and the stormwater run-off generated: https://app.myrainplan.com/listing_detail

Takoma Park Homeowner's Guide to Residential Drainage



When it rains or snow melts, the water either soaks into the ground or flows downhill towards lowerlying areas where it enters the storm drain or local waterways.

"Soft" or "permeable" surfaces such as lawns, gardens, and forests allow water to soak into the ground. The composition of the underlying soil determines how quickly water will infiltrate. A sandy soil will allow rapid infiltration of rain, whereas soils with a higher clay content have a much slower infiltration rate.

In more developed areas such as Takoma Park, there are fewer opportunities for the rain or snowmelt to soak into the ground. Natural landscapes get replaced by buildings, roads, parking lots, and other impermeable surfaces, leaving the water with fewer places to go.



Many older cities and towns, such as Takoma Park, were built in steep stream valleys. Streams are dynamic, natural systems that can regularly flood above the normal low-flow level, shifting their position over time as banks erode and sediments are deposited in new locations. The land area into which water flows when it overtops streambanks is called the "floodplain."

Stormwater Resiliency Study

FY25 Budget – Revenues

Revenue Sources Associated With Stormwater Management

Projected FY25 Revenues include:

•	TOTAL	\$775,000
•	Penalties & Interest	\$ 2,500
•	Stormwater Utility Fees	\$768,000
•	Stormwater Permit Fees	\$ 4,500

- All City property owners are assessed a stormwater utility fee based on the amount of impervious surface on their property. The City Council revised the fee structure in Fiscal Year 2022 and all properties are billed based on a rate of \$25 per 500 square feet of impervious surface.
- Average stormwater utility fee paid by single family properties is \$125.
 - 41% of single family owners pay \$100 or less,
 - 45% pay \$125 \$175,
 - 9.6% pay \$200 \$250.
 - Highest fee paid by single family owner is \$475
- Every \$1 of stormwater fee generates \$31,000 of revenue

FY25 CIP

Stormwater Related CIP Items

Albany Ave and Baltimore Avenue Stormwater Treatment \$70,000

 This project will install treatment facilities, through Filtera or similar structures to the existing stormwater inlets located in this area

Project at Garland Avenue and Davis Avenue \$100,000

• This project, included in the Low Impact Development Centers evaluation, will address stormwater run-off from the street that is impacting private property. The project may include raising the driveway apron, regrading the roadway intersection to direct water away from private property, install a valley gutter, or installation of an inlet and stormwater pipe to connect to the existing system on Carroll Avenue

Sligo Mill Dead-end Erosion Control Project \$60,000

This project will address erosion affecting the Takoma Branch stream through reduction of impervious street surface, installation of natural erosion control measures which will enhance infiltration and removal of historic trash and debris that is facilitating run-off and erosion.

FY25 Council Priority Items

Environmentally Sustainable Community

Department Priorities

- Climate Change Mitigation: Work towards net-zero greenhouse gas emissions goal by 2035.
- Climate Change Resilience: Improve our ability to adapt and be resilient to local impacts of climate change.
- Manage our Community's Natural Resources Sustainably: Protect, maintain, and improve the health of our urban forest, natural resources, and water quality, with an emphasis on equity.

Emerging Issues & Challenges

Department Issues & **Challenges**

- Implementation of Low Impact Development Center Recommendation, development of projects, identification of needed funding and scheduling.
- Additional staffing or consulting service will be needed to increase number of stormwater projects beyond current pace.
- Stormwater Management program is funded through the utility fee. Any expansion of the program budget will require increasing the stormwater utility fee as well as possible successful grant funding requests.

CITY OF TAKOMA PARK



* MARYLAND