

# Proposed Capital Improvement Plan (CIP)

FY 2025 – FY 2034

Submission of a 10-Year Plan  
for Stormwater & Utilities  
Programs





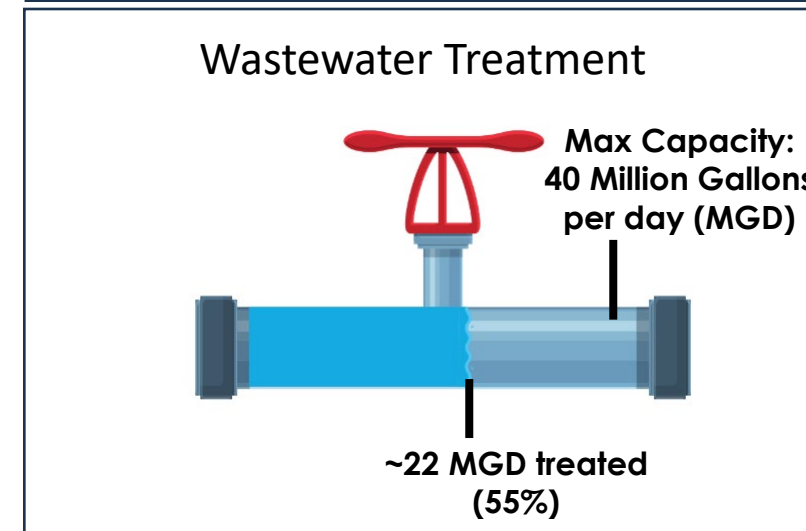
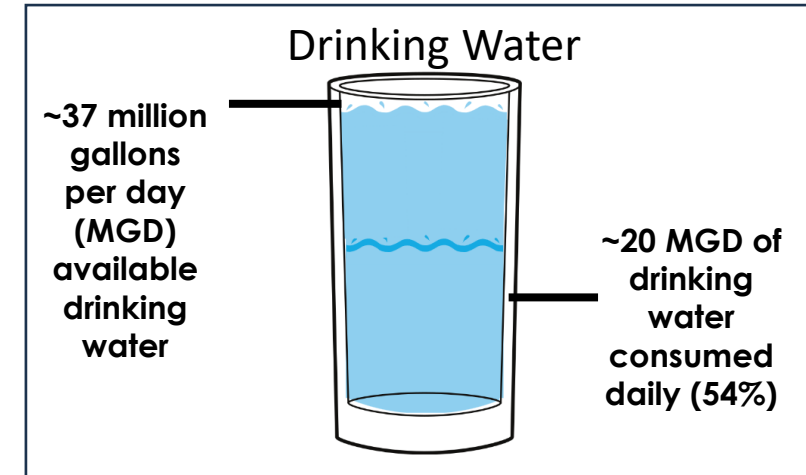
# Infrastructure Capacity vs. Planned Development

## Water and Sanitary Sewer (Collection & Treatment) Systems have sufficient capacity capable of handling growth.

- Master planning in 1970s thru 1990s resulted in capacity based on forecasted demand which is more than sufficient for expected growth thru 2040
  - Increasing population offset by declining household consumption due to conservation practices, decreasing household size, and efficient fixtures
  - Successful implementation of Infiltration & Inflow (I&I) program mitigates need for treatment capacity expansion

## Condition and function of County's natural and engineered stormwater systems is driven mostly by existing impervious surfaces and land use.

- Impervious surface growth very incremental in nature (<1% annually) relative to existing high levels of impervious areas already in place (45%).
- County's stormwater regulatory programs for land development focus on mitigating some of these incremental impacts.
- Also impacts from unregulated activities which fall below regulatory and zoning thresholds. Priority area for future study (e.g., low residential).





# Proposed Capital Improvement Plan (CIP)

FY 2025 – FY 2034

Submission of a 10-Year  
Plan for Stormwater





# Stormwater Overview

## Guiding Principles

- Systems adaptation & resiliency
- Environmental management & improvement
- Risk mitigation

## Guiding Plans and Commitments

- Stormwater Master Plan (2014)
  - Storm Sewer Capacity Study
  - County-wide stream assessment
  - Watershed retrofit assessment
- Risk Assessment & Management Plan (2024)
- Chesapeake Bay Preservation Plan (2023)
- Virginia DEQ MS4 permitting/Chesapeake Bay TMDL
- National Flood Insurance Program (NFIP) (FEMA)

# Stormwater Program Elements



## Streams & Water Quality

- Stream resilience and repair, outfall repair, pond projects, green streets
- MS4 permit (regulatory TMDLs), pollution prevention, training and outreach, monitoring
- LDA and RPA program implementation
- Routine maintenance



## Stormwater System

- Modeling, assessment, plan reviews
- Capacity projects
- Local drainage projects
- System repairs
- Channel maintenance
- Routine maintenance

# System Snapshot



**270**  
**miles**  
of pipes



**18,452**  
structures

*Includes:*  
8940 catch basins  
6780 manholes  
1251 grate inlets  
707 yard inlets  
774 end sections  
& end walls



**32**  
**miles**  
of streams



**45%**  
of County  
covered by  
impervious  
area



**243**  
public  
SWMFs

*\*included in  
'structures' total*



**8,017**  
private  
SWMFs

SWMF = Storm Water Management Facilities

# CIP Impacts on the Programs



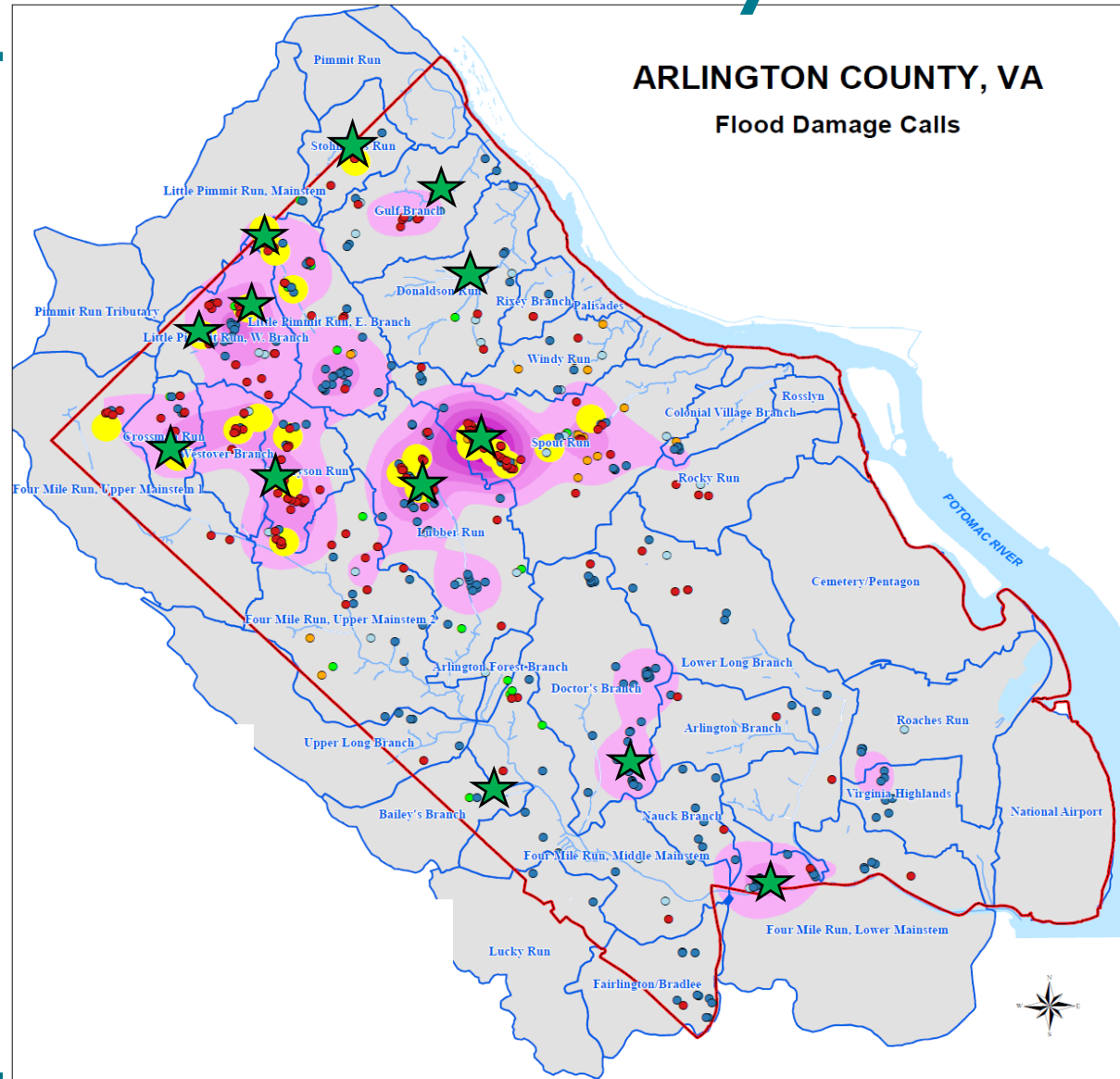
## Streams & Water Quality

- ✓ Increased resiliency of stream system and co-located infrastructure
- ✓ Local water quality protection and improvement
- ✓ Expansion of green infrastructure in urban spaces to mitigate stormwater and heat impacts
- ✓ Achievement of MS4 permit and Chesapeake Bay pollution reduction targets
- ✓ Cross-leveraging water quality projects with capacity benefits

## Stormwater Infrastructure

- ✓ Resiliency across critical government/civic assets
- ✓ Increased system capacity and reduced flood risk
- ✓ Improved life-cycle repairs to aged infrastructure
- ✓ Insurability, market, and property stability
- ✓ Risk mitigation and management
- ✓ Cross-leveraging capacity/capital maintenance projects with water quality benefits

# Flood Risk Reduction Priority Areas



The five Critical Watersheds with the highest flood damage calls since June 2006:

- Torreyson Run/Westover
- Crossman Run
- Little Pimmit East and West
- Lubber Run
- Spout Run



# Major Projects Completed

**Four Mile Run Dredging**



**Ballston Wetland**



**Headwaters of Donaldson Run Tributary B**



**Cardinal School Detention Vault – Construction**



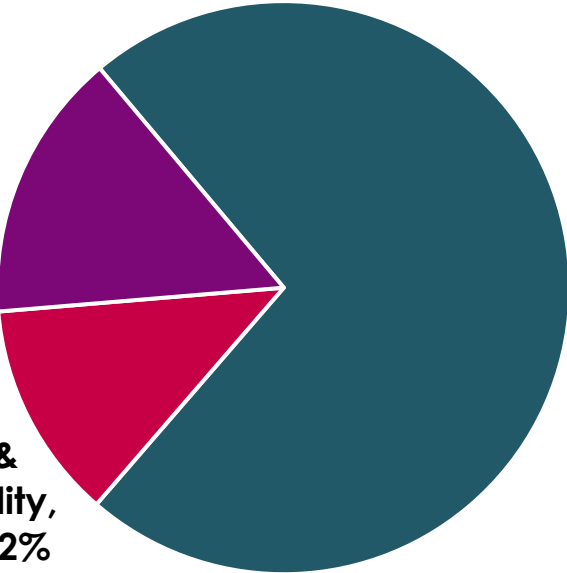
**Cardinal School Detention Vault – Complete**

# Stormwater Programs & Funding Sources (\$000s)

## \$334,255 over 10 years

### Program Totals

Maintenance  
Capital,  
\$50,865 , 15%



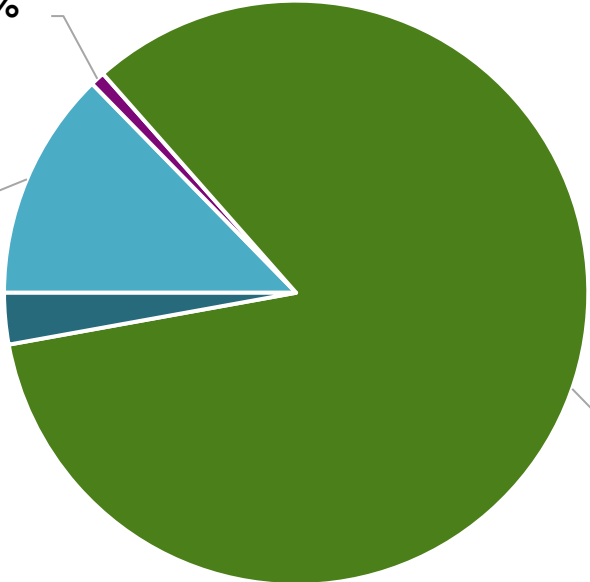
Capacity  
Improvements,  
\$242,185 , 73%

### Funding Sources

Interest Income,  
\$2,700 , 1%

Stormwater  
Utility Fee,  
\$42,410 , 13%

Grants,  
\$9,500 , 3%



Bonds,  
\$279,645 ,  
83%

*\*Notional grants of \$5.75M included within Grants*



# FY 2025-2034 CIP – Capacity Infrastructure

## Spout Run Watershed Capacity



**Total budget: \$70.0 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Establishment of overland relief pathway to reduce risk of repetitive flooding

## Columbia Pike/ South Greenbrier St.

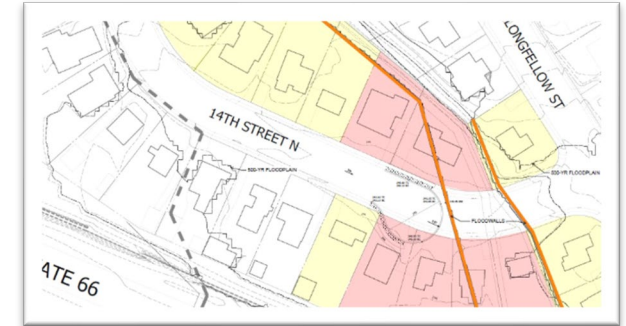


**Total budget: \$17.2 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Floodwalls, additional inlets, pipe upgrades, and detention to mitigate repetitive flooding
- FY24 Design
- FY25 Construction

## Torreyson Run Watershed



**Total budget: \$17.7 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Floodwalls, road realignment, pipe upgrades, additional detention to mitigate repetitive flooding

# Voluntary Property Acquisition Program

- Some properties are at a higher risk of flooding due to their location in former floodplains (low topography areas)
- Program introduced in 2022, letters sent to some property owners – Real Estate Bureau maintains contact with owners
- Overall, six properties have been acquired (four in Spout Run, one in Crossman Run and one in Torreyson Run).
- Properties will be used for overland relief flow paths, access to existing infrastructure, or space for future infrastructure or stormwater facilities

**Rendering of Overland Relief**

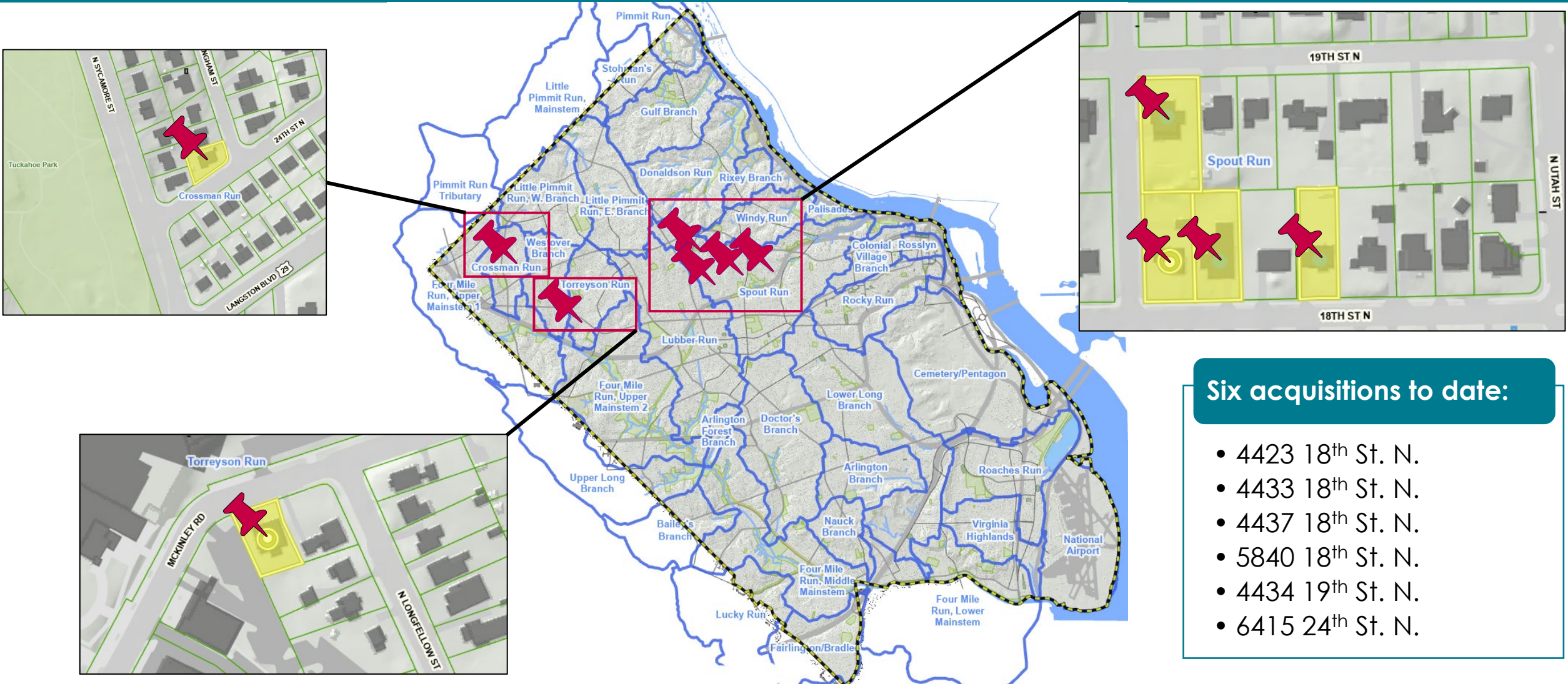


**Demolition of 4437 18th St. N**





# Land Acquisition Update



## Six acquisitions to date:

- 4423 18<sup>th</sup> St. N.
- 4433 18<sup>th</sup> St. N.
- 4437 18<sup>th</sup> St. N.
- 5840 18<sup>th</sup> St. N.
- 4434 19<sup>th</sup> St. N.
- 6415 24<sup>th</sup> St. N.

# FY 2025-2034 CIP – Capacity Infrastructure

## Lubber Run Watershed Capacity

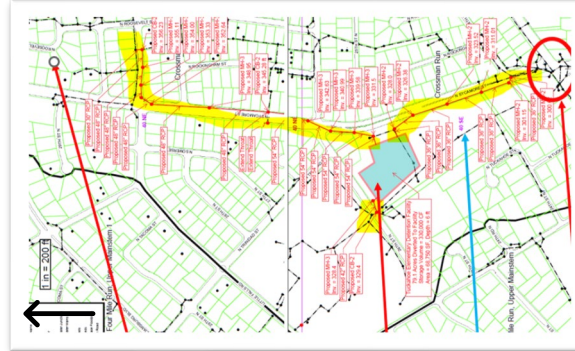


**Total budget: \$70.0 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Establishment of overland relief pathway to reduce risk of repetitive flooding

## Crossman Run Watershed Capacity

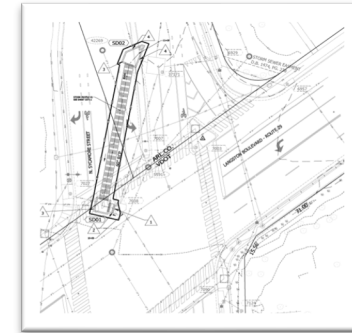


**Total budget: \$36.6 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Additional inlets, pipe upgrades, and detention to mitigate repetitive flooding

## Langston Blvd. Culvert @ N. Sycamore Street




**Total budget: \$0.4 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Pipe upgrades to mitigate repetitive flooding (requires coordination with VDOT)
- FY25 Construction



# FY 2025-2034 CIP Capacity Infrastructure

STORMWATER 		
Project Name	Total 10-Year Budget (\$000s)	Project Description
Flood Risk Reduction Program	14,250	Implements the capacity and flood risk reduction project priorities identified in the 2014 Stormwater Master Plan for areas which have experienced repeated flooding.
33 <sup>rd</sup> Street North to Williamsburg Capacity	4,720	Watershed-scale project in the Little Pimmit Run watershed to increase capacity by connecting previously constructed storm drain improvements from the cul-de-sac at 33 <sup>rd</sup> St N to Williamsburg Blvd.
Lower Long Branch Flood Risk Reduction Project	3,470	Reduces risk of flooding along Lower Long Branch from South Glebe Road to 26 <sup>th</sup> Street South, including Troy Park.
Williamsburg at North Underwood Capacity	3,105	Reduces the hydraulic grade line in Williamsburg Boulevard and increase capacity of the storm drain system to address area flooding.
North Thomas Street	2,255	Increases capacity of the storm drain system along North Thomas Street to mitigate flooding during severe storms.
Stohman's Run Watershed Capacity Improvements	2,075	Increases capacity of the storm drainage system in Stohman's Run watershed along 39 <sup>th</sup> Street North where there is no overland relief.
Miscellaneous Expansion/ Capacity Projects	1,670	Design and construction of pipe extensions needed to address localized drainage problems.
Capacity Project Feasibility Studies	1,660	Planning and feasibility studies provide an integrated approach to proper scoping of potential projects.
Flood Resiliency Design & Construction Guidelines	150	Addresses both residential and commercial design and construction measures, techniques, policies and mechanisms. Includes active engagement with the public and key stakeholders in real estate, architecture, construction, appraisals and insurance.

# Capacity Infrastructure Summary: \$242M

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
1. 33 <sup>rd</sup> Street North to Williamsburg Capacity	-	160	1,115	1,175	1,010	1,260	-	-	-	-	4,720
2. Capacity Project Feasibility Studies	150	155	160	165	165	170	170	175	175	175	1,660
3. Columbia Pike at South Greenbrier Street	1,000	1,190	820	8,980	5,200	-	-	-	-	-	17,190
4. Crossman Run Watershed Capacity Improvements	-	3,420	3,140	1,600	15,425	12,990	-	-	-	-	36,575
5. Flood Resiliency Design & Construction Guidelines	150	-	-	-	-	-	-	-	-	-	150
6. Flood Risk Reduction Program	1,500	1,590	1,995	2,205	1,070	1,100	1,130	1,190	1,220	1,250	14,250
7. Langston Boulevard Culvert at North Sycamore	440	-	-	-	-	-	-	-	-	-	440
8. Lower Long Branch Flood Risk Reduction Project	-	-	-	-	-	645	665	700	720	740	3,470
9. Lubber Run Watershed Capacity Improvements	1,500	3,610	3,075	1,260	6,455	6,560	6,240	14,870	13,385	10,005	66,960
10. Miscellaneous Expansion/ Capacity Projects	-	310	-	325	-	335	-	345	-	355	1,670
11. North Thomas Street	255	875	1,125	-	-	-	-	-	-	-	2,255
12. Spout Run Watershed Capacity Improvements	7,900	8,130	8,630	8,340	7,630	7,805	6,920	5,815	4,490	4,305	69,965
13. Stohman's Run Watershed Capacity Improvements	250	515	1,310	-	-	-	-	-	-	-	2,075
14. Torreyson Run Watershed Capacity Improvements	1,725	4,140	4,860	5,340	1,635	-	-	-	-	-	17,700
15. Williamsburg at North Underwood Capacity	-	155	865	960	1,125	-	-	-	-	-	3,105
<b>Total Recommendation</b>	<b>14,870</b>	<b>24,250</b>	<b>27,095</b>	<b>30,350</b>	<b>39,715</b>	<b>30,865</b>	<b>15,125</b>	<b>23,095</b>	<b>19,990</b>	<b>16,830</b>	<b>242,185</b>



# FY 2025-2034 CIP – Maintenance Capital

## Dumbarton Culvert - Upstream



**Total budget: \$5.09 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Prevents road from being flooded and damaged

### **Related Projects:**

- Waterline upgrades in Dumbarton St.

## Dumbarton Culvert - Downstream



**Total budget: \$4 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Prevents road from being flooded and damaged

### **Related Projects:**

- Water main upgrades in Dumbarton St.

## Military Road Culvert



**Total budget: \$3.12 M**  
**Comp Plan or Strategic initiative:**  
**Stormwater Master Plan**

### **Community benefits:**

- Prevents road from being flooded and damaged

### **Related Projects:**

- Gulf Branch stream resiliency

# Condition of Assets

## Storm Drainage Pipes and Structures

Inspected



on a 20-year cycle  
(5% inspected/year)

Approx.

10%

of inspected assets  
scheduled for  
maintenance

3-5 years



of maintenance  
work currently  
scheduled

Future years



will increase rate of  
scheduled  
maintenance work



# FY 2025-2034 CIP Maintenance Capital

## STORMWATER



Project Name	Total 10-Year Budget (\$000s)	Project Description
Stormwater Mains Rehabilitation & Replacement	26,965	Rehabilitation and replacement of existing storm drainage pipes within the system.
Manhole & Catch Basin Rehabilitation	2,760	Rehabilitation and replacement of manholes and catch basins that have been damaged or are in need of maintenance. This is completed through lining and/or structural rebuilds when necessary.
Stormwater Frames and Covers	2,760	Program funds the required adjustments to stormwater structure frames and covers in conjunction with annual paving operations, raising or lowering a casting or precast top from its existing elevation to align with the adjacent grade, pavement, curb, etc.
Terra Cotta/ Corrugated Metal Pipe Upgrades	2,410	Replacement of existing, poor condition terra cotta (TC) and corrugated metal pipe (CMP) with reinforced concrete pipe or other modern pipe materials, which have longer life spans.
Detention Vaults & Overland Relief Maintenance	1,100	Underground detention facilities and overland relief paths require continued capital maintenance efforts to ensure they remain effective.
Floodplain Channel & Split Stream Maintenance	1,100	Floodplain channels must be maintained in order to ensure efficiency of the existing conveyance system.
Four Mile Run Flood Control Project Maintenance	1,005	Routine capital maintenance of the Four Mile Run Flood Control Project area, as required by U.S. Army Corps of Engineers.
Sidewalk Underdrains	555	Installs underdrains on sidewalks, which are necessary in some locations to prevent unsafe conditions on sidewalks and reduces hazards to pedestrians.

# Maintenance Capital Summary: \$51M

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
1. Detention Vaults & Overland Relief Maintenance	100	105	105	110	110	110	110	115	115	120	1,100
2. Dumbarton Street Culvert-Downstream	3,000	1,545	-	-	-	-	-	-	-	-	4,545
3. Dumbarton Street Culvert-Upstream	3,000	1,545	-	-	-	-	-	-	-	-	4,545
4. Floodplain Channel & Split Stream Maintenance	100	105	105	110	110	110	110	115	115	120	1,100
5. Four Mile Run Flood Control Project Maintenance	500	50	55	55	55	55	55	60	60	60	1,005
6. Manhole & Catch Basin Rehabilitation	250	260	265	275	275	280	280	290	290	295	2,760
7. Military Road Culvert at Gulf Branch	2,090	1,030	-	-	-	-	-	-	-	-	3,120
8. Sidewalk Underdrains	50	50	55	55	55	55	55	60	60	60	555
9. Stormwater Frames and Covers	250	260	265	275	275	280	280	290	290	295	2,760
10. Stormwater Mains Rehabilitation & Replacement	1,000	1,545	2,120	2,455	2,725	3,080	3,250	3,450	3,565	3,775	26,965
11. Terra Cotta/ Corrugated Metal Pipe Upgrades	205	215	225	240	240	250	250	260	260	265	2,410
<b>Total Recommendation</b>	<b>10,545</b>	<b>6,710</b>	<b>3,195</b>	<b>3,575</b>	<b>3,845</b>	<b>4,220</b>	<b>4,390</b>	<b>4,640</b>	<b>4,755</b>	<b>4,990</b>	<b>50,865</b>



# Condition of Assets – Streams & Water Quality

- **Stormwater Master Plan: 2014 Baseline Stream Condition Assessment**
  - > 6 miles of streams with severe erosion
  - Approx. 40 stormwater outfalls in failing condition
- **Erosion and damage continue and create new needs**
- **Since the 2014 Baseline Assessment:**
  - Approx. 1 mile of stream erosion fixed and 13 outfalls
  - 1 stream project in design; 13 outfall projects in planning/design
  - Priority outfalls assessed/updated in 2020 to inform CIP programming
  - Priority stream reaches to be assessed/updated during the next 5 years



Gulf Branch: In design 



Windy Run: Completed 



Donaldson Run  
Tributary B: Completed 

# 2014 Stream Condition Assessment

## Erosion severity map

Erosion is widely distributed overall, with intensity in steeper terrain in Potomac gorge watersheds.

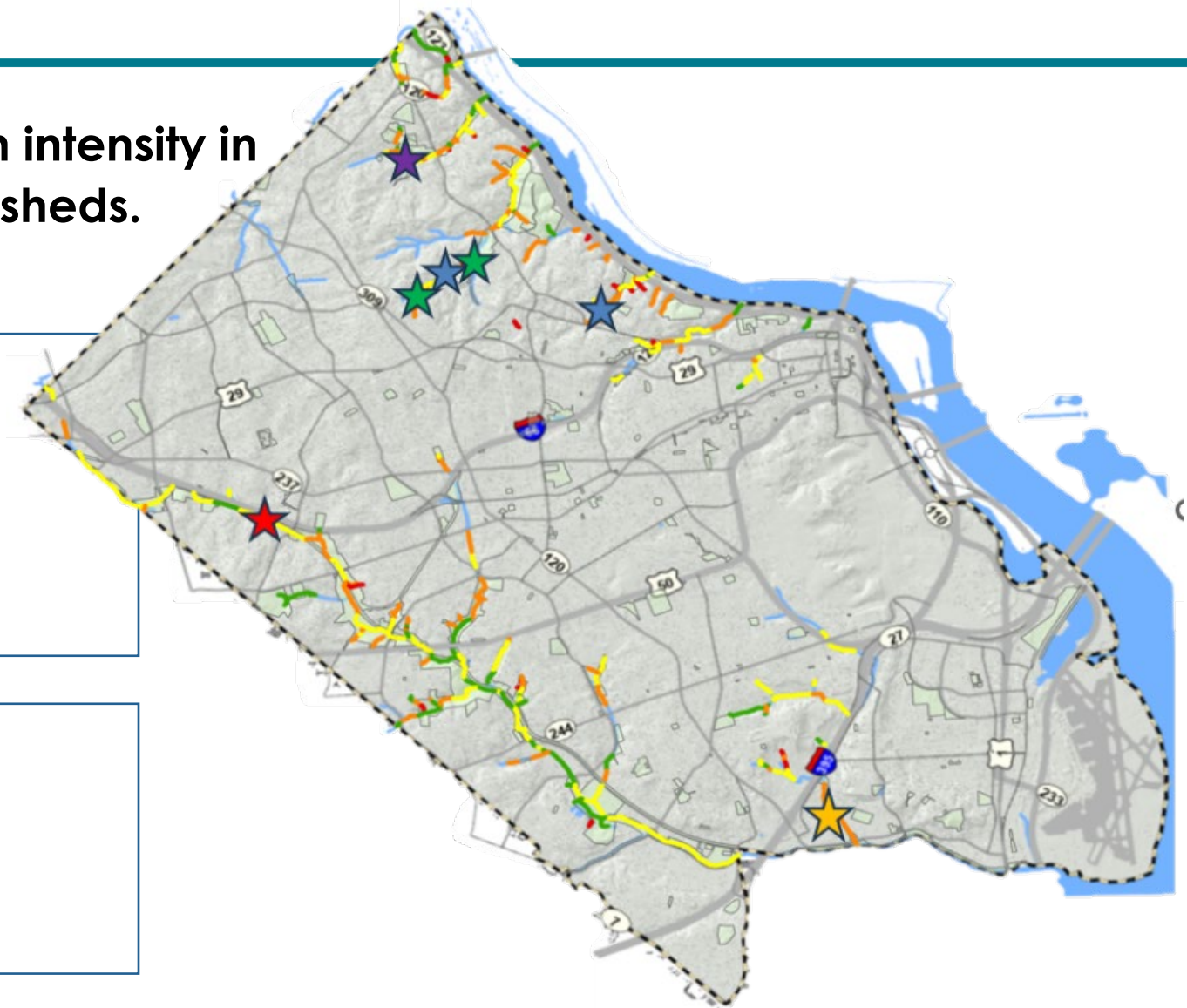
### Projects

- ★ Completed since 2014
- ★ Completed before 2014
- ★ Gulf Branch in design
- ★ Emergency Four Mile Run repair
- ★ Four Mile Run tidal restoration project (*for reference*)

### Erosion Severity

Better  
↑  
↓  
Worse

- Stable - I/V; IV/V
- Partially Stable - III/IV; IV
- Widening - II/III; III
- Downcutting (II)

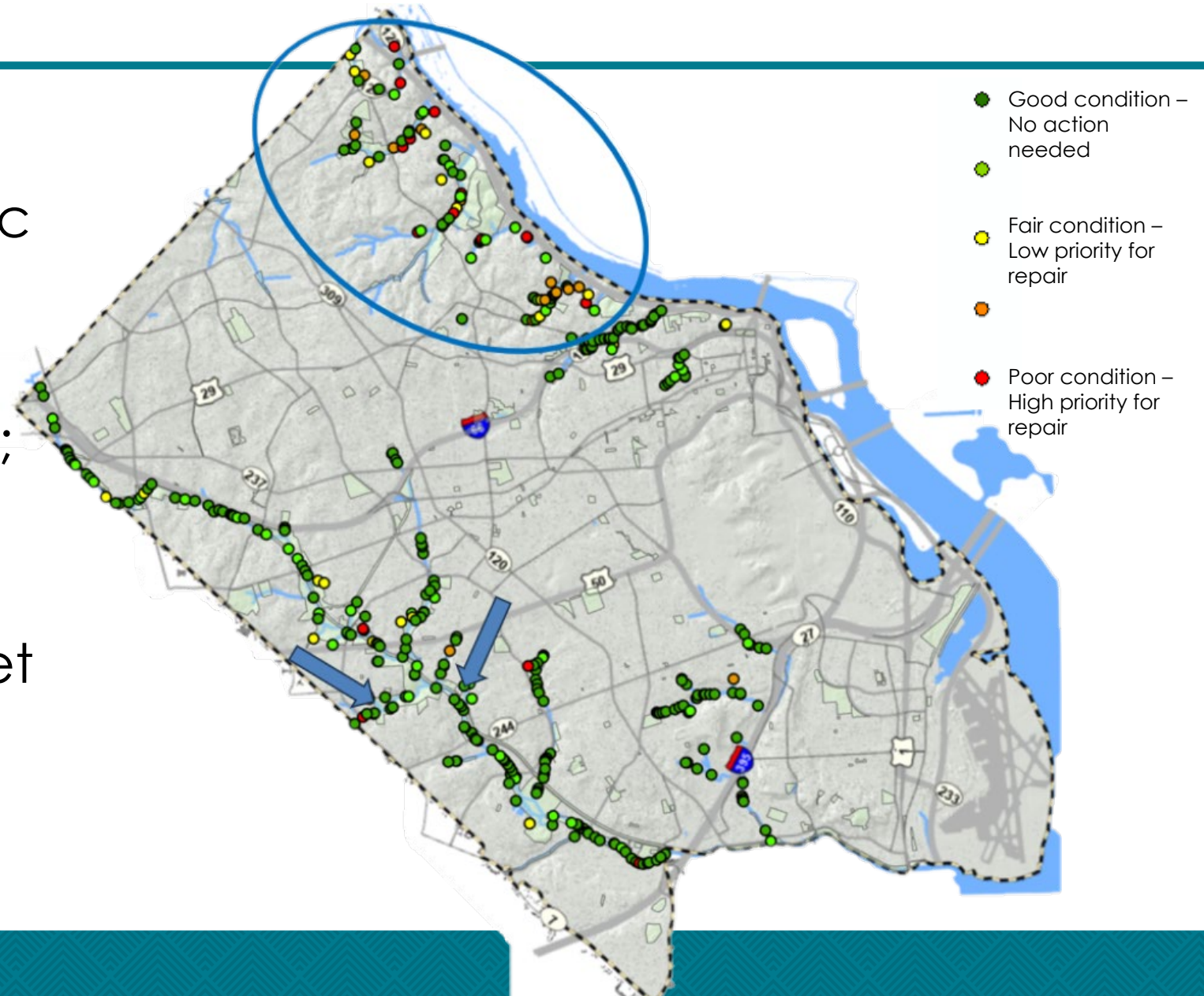




# 2014 Stream Condition Assessment

## Outfall condition map

- Most damage also in steeper terrain in Potomac gorge watersheds
- 13 completed projects concentrated in this area; most co-located with stream projects
- CIP projects will also target other areas of damage (blue arrows)





# Donaldson Run Tributary B

## Sampling of benefits

- Repair failed streambanks and adjacent trails
- Protect 30" water main serving 20,000 residents
- Repair multiple failed outfalls
- Protect near stream trees
- Plant more native vegetation
- Contribute to MS4 permit compliance





# FY 2025-2034 CIP – Streams & Water Quality

## Gulf Branch Stream Resiliency



**Total CIP budget: \$3.1 M**  
**Comp Plan or Strategic initiative:**  
Stormwater Master Plan

### Community benefits:

- Sanitary and nature center infrastructure protection, environmental improvement
- FY25 Final Design
- FY26 Construction

## Concord Mews Watershed Retrofit



**Total CIP budget: \$1.8 M**  
**Comp Plan or Strategic initiative:**  
Stormwater Master Plan

### Community benefits:

- Asset failure rehabilitation, environmental improvement, reduce street flooding
- FY24-FY25 Design
- FY26 Construction

## Upper Long Branch Outfall

NEW



**Total CIP budget: \$0.8 M**  
**Comp Plan or Strategic initiative:**  
Stormwater Master Plan

### Community benefits:

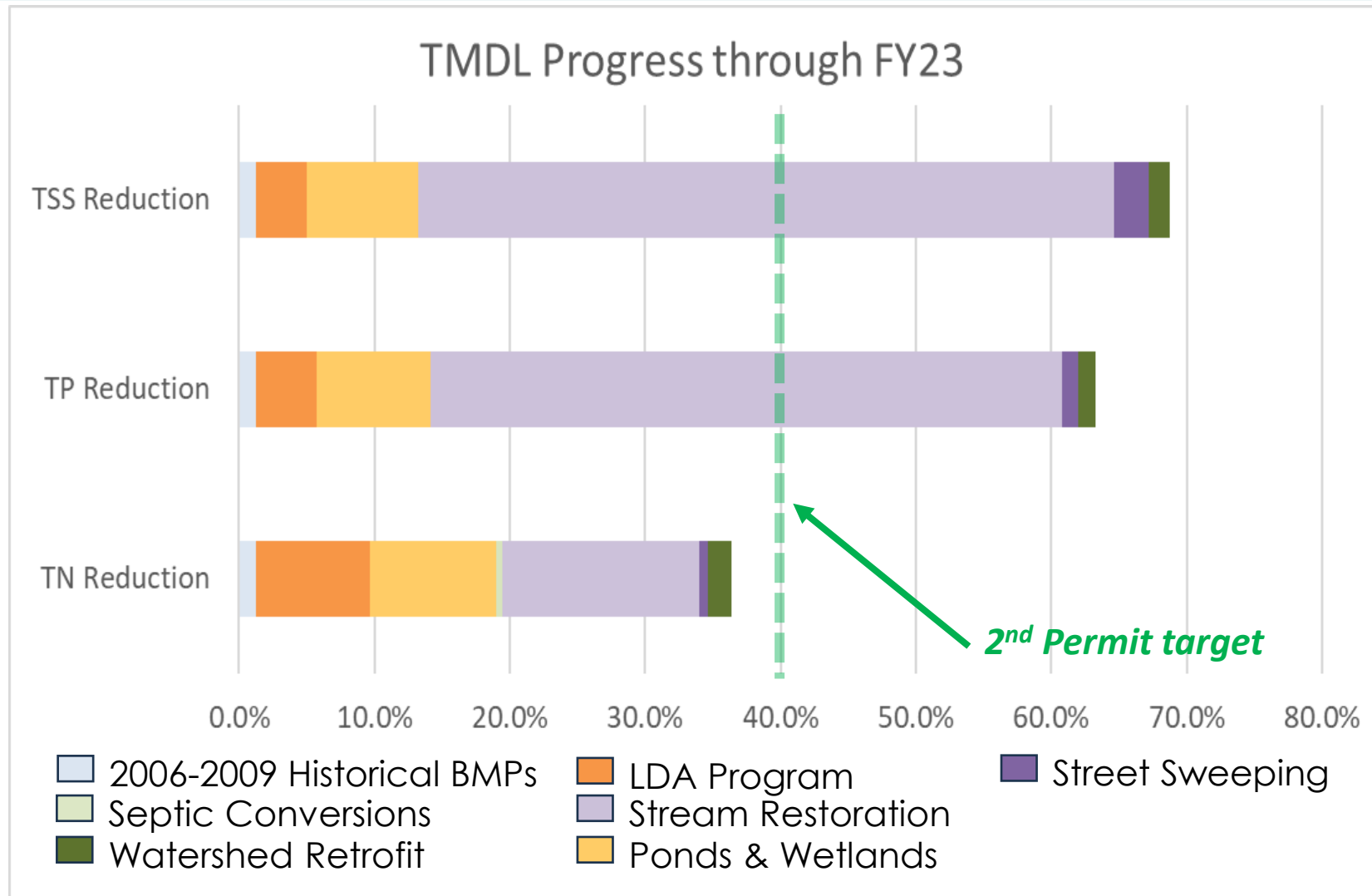
- Infrastructure rehabilitation, erosion mitigation, environmental improvement
- FY24-25 Design
- FY25-26 Construction

# MS4 permit compliance – 2<sup>nd</sup> permit

- On track for 40% reductions required by end of 2<sup>nd</sup> cycle (FY 2026)
- Additional compliance helps mitigate fiscal impact of reaching 100% in 3<sup>rd</sup> cycle (FY 2028)

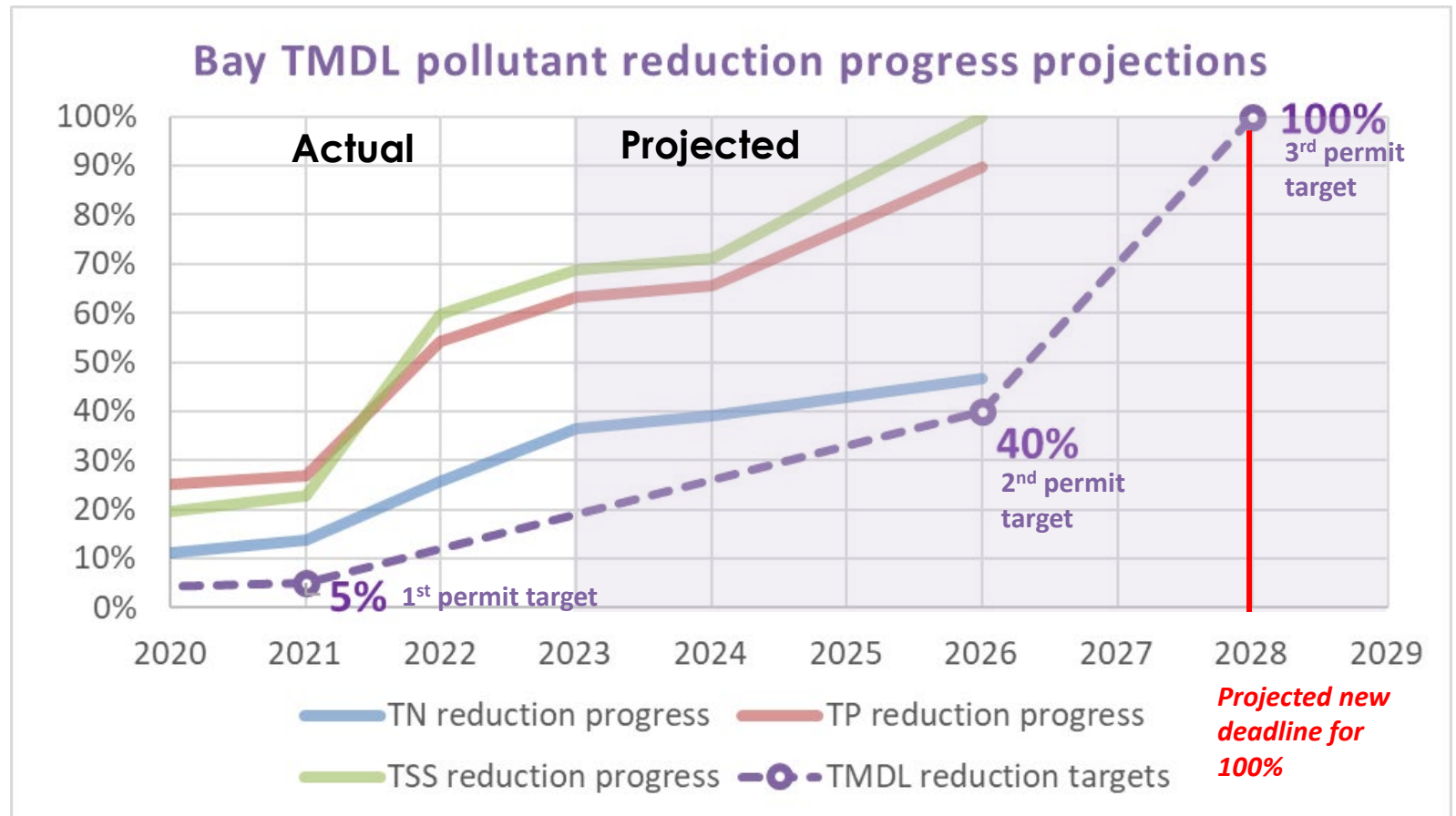
MS4 permit TMDL (Total Maximum Daily Load) reductions required for:

- TSS (Total Suspended Solids)
- TP (Total Phosphorus)
- TN (Total Nitrogen)



# MS4 permit compliance – projected 3<sup>rd</sup> permit

- Two CIP projects key to achieving 100% targets for TSS and TP
  - Sparrow Pond (in construction)
  - Gulf Branch (90% design)
- Additional compliance from outfall repair, pond projects, and LDA program
- Credits from Plant required for 100% nitrogen goal





# FY 2025-2034 CIP Streams & Water Quality

## STORMWATER



Project Name	Total 10-Year Budget (\$000s)	Project Description
Outfall Rehabilitation Program	14,030	Outfall rehabilitation and repair projects are necessary to protect other public and private infrastructure and increase the resiliency of the integrated stream and stormwater network.
Stream Resiliency Program	13,810	Repair eroding and acutely degraded stream channels and protect critical infrastructure such as sanitary sewer mains.
Green Streets & Infrastructure Program	4,190	Re-construction and enhancement of existing stormwater ponds to improve water quality performance and "green streets" streetscape bioretention. The projects within this program help offset the continued increase in impervious cover in our community.
Water Quality Project Feasibility & Concept Design	1,660	Planning and feasibility studies provide an integrated approach to proper scoping of potential projects.
Washington Boulevard Pond Retrofit	950	Improves Washington Boulevard Pond, an existing dry detention pond, to enhance performance.
Gulf Branch and South Walter Reed Green Streets	750	Four streetscape green infrastructure projects will be installed in the Gulf Branch Watershed downstream of Military Road. Two additional projects will be installed on S. Walter Reed Dr. in coordination with street improvements.
Quebec Street Outfall Rehabilitation	450	Rehabilitate the outfall and address slope erosion on Quebec Street adjacent to the Dover Run Pumping Station.
Sparrow Pond Watershed Retrofit	450	Re-construction of an existing wet pond due to eroded sediment filling the pond. Re-vegetation will help to restore the pond's function and address concerns about public safety and flood storage.

# Streams & Water Quality Summary: \$41M

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
1. Concord Mews Pond Retrofit	250	1,545	-	-	-	-	-	-	-	-	1,795
2. Green Streets & Infrastructure Program	375	235	425	435	435	445	445	460	460	475	4,190
3. Gulf Branch and South Walter Reed Green Streets	540	-	210	-	-	-	-	-	-	-	750
4 Gulf Branch Stream Resiliency	800	2,320	-	-	-	-	-	-	-	-	3,120
5. Quebec Street Outfall Rehabilitation	450	-	-	-	-	-	-	-	-	-	450
6. Outfall Rehabilitation Program	925	1,725	1,305	875	1,475	1,510	1,510	1,555	1,555	1,595	14,030
7. Sparrow Pond Watershed Retrofit	450	-	-	-	-	-	-	-	-	-	450
8. Stream Resiliency Program	250	260	2,915	275	3,000	280	3,080	290	3,165	295	13,810
9. Washington Boulevard Pond Retrofit	-	155	795	-	-	-	-	-	-	-	950
10. Water Quality Project Feasibility & Concept Design	150	155	160	165	165	170	170	175	175	175	1,660
<b>Total Recommendation</b>	<b>4,190</b>	<b>6,395</b>	<b>5,810</b>	<b>1,750</b>	<b>5,075</b>	<b>2,405</b>	<b>5,205</b>	<b>2,480</b>	<b>5,355</b>	<b>2,540</b>	<b>41,205</b>

# Program Summary: \$267M

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
Capacity Improvements	14,870	24,250	27,095	30,350	39,715	30,865	15,125	23,095	19,990	16,830	242,185
Streams & Water Quality	4,190	6,395	5,600	1,750	5,285	2,405	5,205	2,480	5,355	2,540	41,205
Maintenance Capital	10,545	6,710	3,195	3,575	3,845	4,220	4,390	4,640	4,755	4,990	50,865
<b>Sub-Total</b>	<b>29,605</b>	<b>37,355</b>	<b>35,890</b>	<b>35,675</b>	<b>48,845</b>	<b>37,490</b>	<b>24,720</b>	<b>30,215</b>	<b>30,100</b>	<b>24,360</b>	<b>334,255</b>
Implementation Adjustment (20%)	(5,920)	(7,470)	(7,180)	(7,135)	(9,770)	(7,495)	(4,945)	(6,045)	(6,020)	(4,875)	(66,855)
<b>Total Recommendation</b>	<b>23,685</b>	<b>29,885</b>	<b>28,710</b>	<b>28,540</b>	<b>39,075</b>	<b>29,995</b>	<b>19,775</b>	<b>24,170</b>	<b>24,080</b>	<b>19,485</b>	<b>267,400</b>

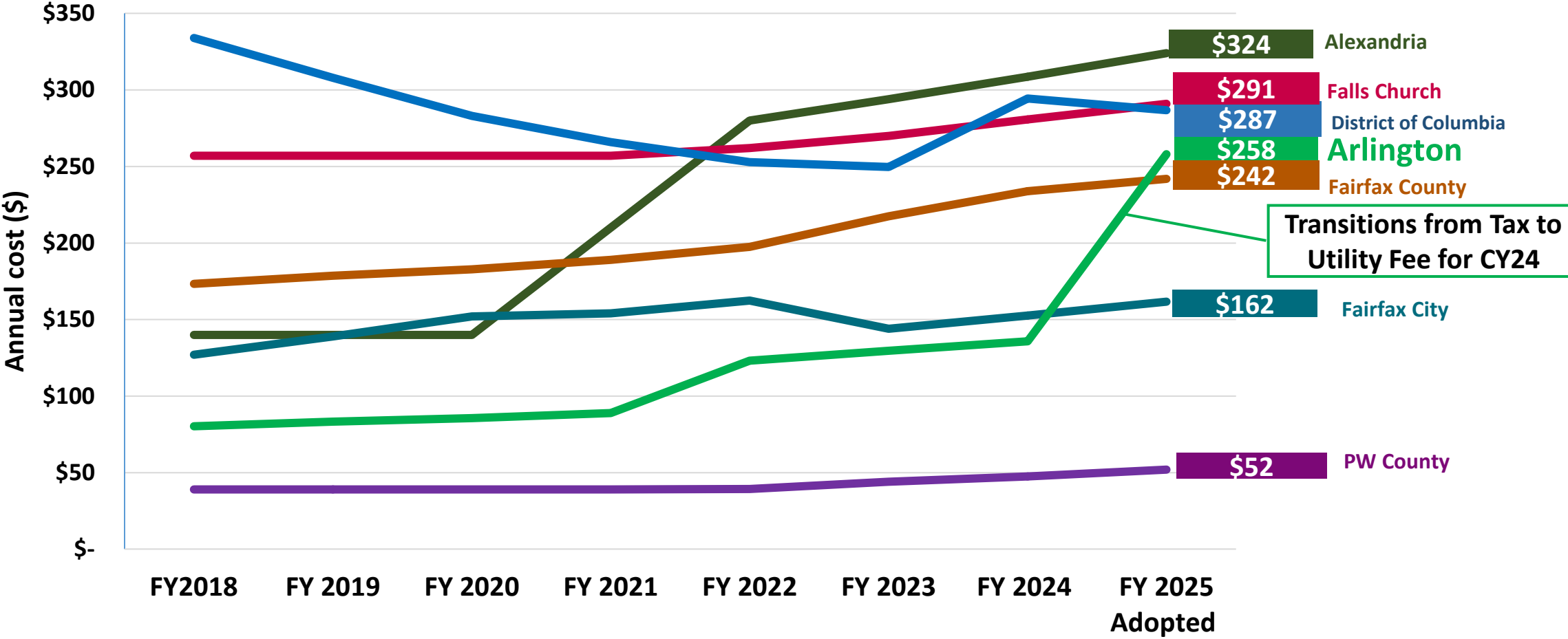


# Funding Summary

	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	10 Year Total
<b>New Funding</b>											
Federal Funding	3,540	-	-	4,000	210	-	-	-	-	-	<b>7,750</b>
State Funding	-	-	1,750	-	-	-	-	-	-	-	<b>1,750</b>
Stormwater Utility Fee Revenue	3,835	3,910	3,435	3,945	3,840	4,500	4,295	4,865	4,615	5,170	<b>42,410</b>
New Bond Issue	-	155	23,825	27,480	44,545	32,740	20,175	25,100	25,235	18,940	<b>218,195</b>
Other Funding	450	250	250	250	250	250	250	250	250	250	<b>2,700</b>
<b>Subtotal New Funding</b>	<b>7,825</b>	<b>4,315</b>	<b>29,260</b>	<b>35,675</b>	<b>48,845</b>	<b>37,490</b>	<b>24,720</b>	<b>30,215</b>	<b>30,100</b>	<b>24,360</b>	<b>272,805</b>
<b>Previously Approved Funding</b>											
Authorized but Unissued Bonds	21,780	33,040	6,630								<b>61,450</b>
<b>Subtotal Previously Approved Funding</b>	<b>21,780</b>	<b>33,040</b>	<b>6,630</b>								<b>61,450</b>
<b>Total Funding Sources</b>	<b>29,605</b>	<b>37,355</b>	<b>35,890</b>	<b>35,675</b>	<b>48,845</b>	<b>37,490</b>	<b>24,720</b>	<b>30,215</b>	<b>30,100</b>	<b>24,360</b>	<b>334,255</b>
Implementation Adjustment (20%)	(5,920)	(7,470)	(7,180)	(7,135)	(9,770)	(7,495)	(4,945)	(6,045)	(6,020)	(4,875)	(66,855)
<b>Total Recommendation</b>	<b>23,685</b>	<b>29,885</b>	<b>28,710</b>	<b>28,540</b>	<b>39,075</b>	<b>29,995</b>	<b>19,775</b>	<b>24,170</b>	<b>24,080</b>	<b>19,485</b>	<b>267,400</b>

**November 2024 Bond Referendum is not needed due to existing unissued balances on 2020 & 2022 Bond Referenda**

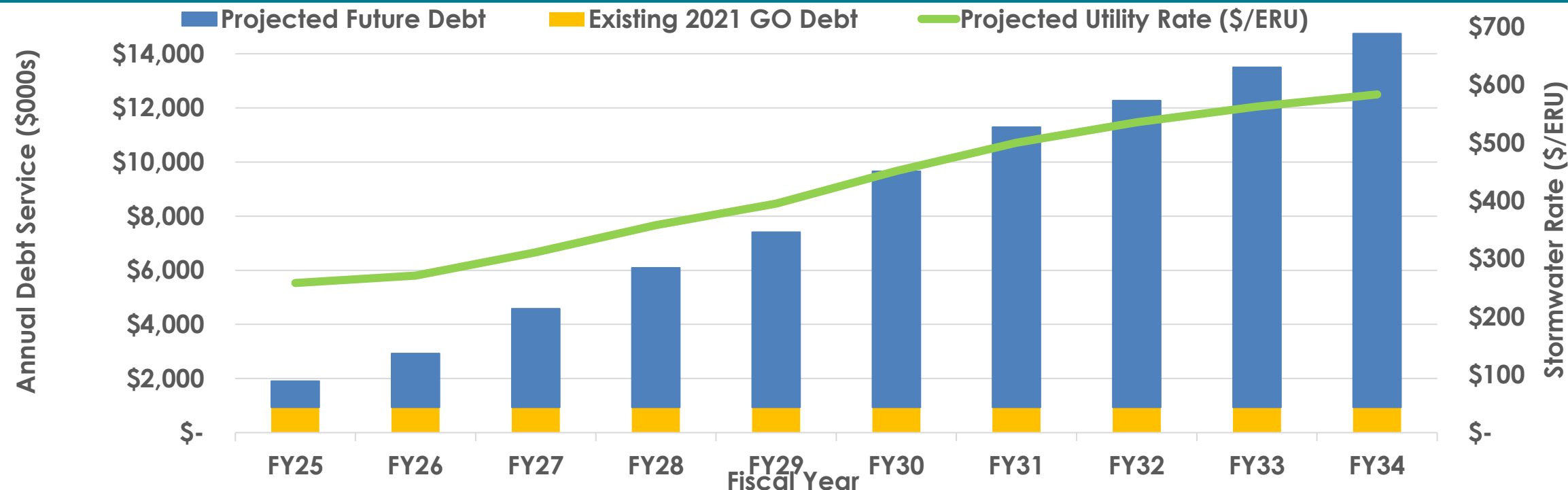
# Stormwater Utility Rate Regional Comparison (Average Household)



*Fairfax County is the only jurisdiction still assessing a tax rate to fund stormwater.  
Fairfax City transitioned to a utility in FY2023*

*In CY 2024, burden shifts from Real Estate Assessment-based stormwater tax to an Impervious Area-based Stormwater Utility Fee.  
Fee will continue to increase to support the debt service/bonds issued in support of CIP.*

# Projected Debt & Rate Impact



	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34
Projected Annual Rate per ERU	\$258	\$271	\$311	\$356	\$389	\$445	\$494	\$529	\$556	\$577
Projected Annual Debt Service (\$000s)	1,905	2,925	4,585	6,090	7,410	9,660	11,290	12,275	13,500	13,505
Debt Coverage Ratio (req. 1.25)	<b>2.41</b>	<b>1.65</b>	<b>1.42</b>	<b>1.44</b>	<b>1.38</b>	<b>1.36</b>	<b>1.38</b>	<b>1.40</b>	<b>1.34</b>	<b>1.38</b>



# Summary & Conclusion

## Work in Progress:

- Flood Resilient Design and Construction Guidelines
- Investment in capital maintenance / systems maintenance (SGR)
- **Long-term:** Need to consider zoning overlays for climate-facing design and construction

## Challenges:

- Timing/ adjacency with voluntary property acquisition program
- Public expectations and urgency vs. public tolerance of significant disruption
- Space constraints
- Lack of easements to access conveyance system
- Policy decisions that are integral to design and execution
- Impacts of continuing climate change



# Proposed Capital Improvement Plan (CIP)

FY 2025 – FY 2034

Submission of a 10-Year  
Plan for Stormwater

