

WATER AND SEWER INFRASTRUCTURE: WPCP CAPITAL SUSTAINMENT PROGRAM

10 YEAR CATEGORY SUMMARY (in \$1,000s)

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	10 Year Total
1. Activated Sludge Effluent Pump Station 1 (ASE1)	800	1,550	2,675	4,970	1,655	0	0	0	0	0	11,650
2. Asset Management System Replacement	1,000	1,035	265	0	0	0	0	0	0	0	2,300
3. Blue Plains Capital Improvements	1,210	1,705	1,825	2,775	3,010	2,605	2,130	1,455	885	1,555	19,155
4. Grit System Upgrades	300	595	1,175	635	0	0	0	0	0	0	2,705
5. Improvements to Eads St Property	0	10	0	10	0	10	0	10	0	10	50
6. Odor Control	0	0	0	550	550	0	0	0	0	0	1,100
7. Re-Gen Phase II	10,600	4,865	0	0	0	0	0	0	0	0	15,465
8. Re-Gen Phase III	17,200	58,030	62,925	50,575	21,755	0	0	0	0	0	210,485
9. Secondary Clarifiers	0	0	0	0	0	0	1,140	5,170	7,755	4,145	18,210
10. USACE Coastal Storm Resiliency	200	0	0	0	0	0	5,700	0	0	0	5,900
11. WPCP Maintenance Capital	2,000	2,070	2,140	2,210	2,210	2,280	2,280	2,350	2,350	2,420	22,310
12. WPCP Technology Enhancements	3,500	2,070	535	550	550	570	570	585	585	605	10,120
Total Recommendation	36,810	71,930	71,540	62,275	29,730	5,465	11,820	9,570	11,575	8,735	319,450

CATEGORY FUNDING SOURCES (in \$1,000s)

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	10 Year Total
New Funding											
Federal Funding	0	0	0	0	0	0	0	0	0	0	0
State Funding	0	0	0	0	0	0	0	0	0	0	0
Developer Contributions	485	665	690	715	715	735	735	865	1,950	2,010	9,565
New Bond Issue	0	1,285	2,590	12,335	19,430	0	5,675	4,290	6,435	3,440	55,480
PAYG	990	3,423	4,180	4,810	5,040	4,240	3,760	3,030	1,370	2,060	32,903
Short Term Finance	0	0	0	0	0	0	0	0	0	0	0
Stormwater Utility Fee Revenue	0	0	0	0	0	0	0	0	0	0	0
Other Funding	6,030	11,935	11,855	10,125	4,545	490	1,650	1,385	1,820	1,225	51,060
Subtotal New Funding	7,505	17,308	19,315	27,985	29,730	5,465	11,820	9,570	11,575	8,735	149,008
Previously Approved Funding											
Authorized but Unissued Bonds	20,740	52,205	52,225	34,290	0	0	0	0	0	0	159,460
Issued but Unspent Bonds	0	0	0	0	0	0	0	0	0	0	0
Other Previously Approved Funds	8,565	2,417	0	0	0	0	0	0	0	0	10,982
Subtotal Previously Approved Funding	29,305	54,622	52,225	34,290	0	0	0	0	0	0	170,442
Total Funding Sources	36,810	71,930	71,540	62,275	29,730	5,465	11,820	9,570	11,575	8,735	319,450



1. ACTIVATED SLUDGE EFFLUENT PUMP STATION 1 (ASE1)

Project Highlights:

- The Activated Sludge Effluent #1 (ASE1) pump station project will replace all the pumping equipment, valves and piping within the station, as well as the associated electrical equipment. Additionally, other components will also be evaluated such as equipment and personnel access, pump station storage tanks condition, and controls equipment. Relocating the station to an adjacent area will be considered so the existing pumps can remain in service during construction, rather than using a long-term bypass pump system while the existing station is being overhauled. More efficient pumps will be specified for the upgrades, resulting in energy savings.
- ASE1 continuously pumps partially treated wastewater to the filtration and disinfection treatment processes.
- This facility was constructed in the 1970s and partially rehabbed in the 1990s and is due for a complete upgrade given the current condition of the infrastructure and its criticality.

Associated Plan(s):

WPCP Master Plan

Neighborhood(s):

Arlington Ridge
Aurora Highlands

Funding Notes: Other Funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
New Bond Issue		1,285	1,685	4,125	1,375						8,470
PAYG	280		535								815
Other Funding	135	265	455	845	280						1,980
Previous Funding											
Other Previously Approved Funds	385										385
Total Funding	800	1,550	2,675	4,970	1,655	0	0	0	0	0	11,650
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Condition Assessment Summer 2024 - Spring 2025
- Design Summer 2025 - Summer 2026
- Construction Spring 2027 - Spring 2029

Changes from Prior CIP:

The project is new to the FY 2025 - 2034 CIP.



2. ASSET MANAGEMENT SYSTEM REPLACEMENT

Project Highlights:

- This project implements a new asset management system which will allow better monitoring of equipment performance and maintenance of systems in a timely fashion, while at the same time determining when to replace aging equipment in a proactive manner.
- The new system will include changes to asset classification, organization, and will streamline planning of maintenance activities and asset analysis.

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity. Other Previously Approved Funds includes PAYG balances.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG		30	220								250
Other Funding	170	175	45								390
Previous Funding											
Other Previously Approved Funds	830	830									1,660
Total Funding	1,000	1,035	265	0	0	0	0	0	0	0	2,300
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Operations Costs (+/-)				200	210	221	232	243	255	268	1,629
Total Impact	0	0	0	200	210	221	232	243	255	268	1,629

Critical Milestones:

- Procurement & Software Selection Fall 2022 - Fall 2024
- Implementation Spring 2025 - Spring 2027

Changes from Prior CIP:

Timing of expenditures has pushed one year from the previous CIP.



3. BLUE PLAINS CAPITAL IMPROVEMENTS

Project Highlights:

- DC Water's Blue Plains Advanced Wastewater Treatment Plant processes a portion of Arlington County's sewage after transmission through Fairfax County mains.
- Arlington's share of funds is based on the County's reserved capacity and supports Blue Plains capital improvements and improvements to the associated sewage conveyance system.

Funding Notes: Other Previously Approved Funds include existing PAYG balances. Blue Plains Advanced Water Treatment Plant is owned by DC Water.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG	710	1,705	1,825	2,775	3,010	2,605	2,130	1,455	885	1,555	18,655
Previous Funding											
Other Previously Approved Funds	500										500
Total Funding	1,210	1,705	1,825	2,775	3,010	2,605	2,130	1,455	885	1,555	19,155
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Changes from Prior CIP:

The current CIP reflects Arlington County's share (based on reserved capacity) of the current complement of projects anticipated to be undertaken by DC Water at the Blue Plains treatment facility.



4. GRIT SYSTEM UPGRADES

Project Highlights:

- This project will evaluate and rehabilitate/ improve the grit collection and disposal system in the Preliminary Treatment Building to improve removal of the abrasive material and protect downstream equipment.
- Preliminary engineering, initiated in FY 2024, will study the condition of the grit collection tanks, piping, classifiers, and other related equipment. Detailed design and construction will follow.

Associated Plan(s):

Community Energy Plan

Neighborhood(s):

Arlington Ridge
Aurora Highlands

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ partner's portion of the cost is based on its reserved capacity. Other previously approved funds include existing PAYG balance.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
New Bond Issue			905	525							1,430
PAYG		18	70								88
Other Funding	50	100	200	110							460
Previous Funding											
Other Previously Approved Funds	250	477									727
Total Funding	300	595	1,175	635	0	0	0	0	0	0	2,705
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Grit System - Condition Assessment Winter 2024 (3Q FY2024) - Fall 2024
- Grit System Upgrades - Design Fall 2024 - Fall 2025
- Grit System Upgrades - Construction Spring 2026 - Summer 2028

Changes from Prior CIP:

The project name (previously Primary Clarifiers Upgrades) and scope has changed to better reflect the planned improvements. The scope will focus on rehabilitating the grit removal process to improve removal of the abrasive material and protect downstream equipment.



5. IMPROVEMENTS TO EADS ST PROPERTY

Project Highlights:

- The Eads Street property serves as the WPCP's off-site warehouse and is used for storage of larger and less frequently used items. Additionally, Arlington Transit (ART) has some offices within the facility, as well as partial use of the warehouse.
- Maintenance capital and capital improvements (HVAC upgrades, roof replacements, etc.) are addressed under this project.

Associated Plan(s):

WPCP Master Plan

Neighborhood(s):

Arlington Ridge
Aurora Highlands

Funding Notes: Both Transit Bureau and IJ Partner contributions are included in 'Other Funding'. The Inter-Jurisdictional (IJ) Partners share in a portion of the capital costs at the facility. The Transit Bureau also contributes a prorate share of applicable capital costs at the Eads Street facility, consistent with its share of the space used there and the terms of the MOU.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG		5		5		5		5		5	25
Other Funding		5		5		5		5		5	25
Previous Funding											
Total Funding	0	10	0	10	0	10	0	10	0	10	50
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Changes from Prior CIP:

No change from the previous CIP.



6. ODOR CONTROL

Project Highlights:

- Due to the location of the WPCP, it is necessary to tightly control and limit odors by collecting and treating odorous air.
- The Preliminary Treatment Building ventilation and odor control improvements were constructed in FY 2022 - FY 2024 in conjunction with Re-Gen Phase I. Additional odor control needs will be assessed in future years.

Associated Plan(s):

WPCP Master Plan

Neighborhood(s):

Arlington Ridge
 Aurora Highlands

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) Partners revenue. Each partner's portion of the cost is based on its reserved capacity.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG				455	455						910
Other Funding				95	95						190
Previous Funding											
Total Funding	0	0	0	550	550	0	0	0	0	0	1,100
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Study with recommendations for system Winter 2028 (3Q FY 2028)
 Winter 2029 (3Q FY 2029)

Changes from Prior CIP:

No change from the previous CIP.



7. RE-GEN PHASE II

Project Highlights:

- Re-Gen focuses on upgrades to the WPCP's solids treatment facilities to provide long-term resource recovery and prioritize safe and sustainable operations that provide quality end products for use in our community. The program was broken into three phases for implementation over a number of years. Phase I was completed in 2024.
- Re-Gen Phase II includes projects that need to be completed in advance of Phase III. This may involve additional equipment replacement or demolition of unused facilities in preparation for the Phase III construction.
- Funds will be used to demolish existing unused facilities and relocate in-service process piping in advance of Phase III upgrades.

Associated Plan(s):

Community Energy Plan
WPCP Master Plan

Neighborhood(s):

Arlington Ridge
Aurora Highlands

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity. Other Previously Approved Funds include existing PAYG balances.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Other Funding	1,800	825									2,625
Previous Funding											
Authorized but Unissued Bonds	7,145	4,040									11,185
Other Previously Approved Funds	1,655										1,655
Total Funding	10,600	4,865	0	0	0	0	0	0	0	0	15,465
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Design & Construction Spring 2023 - Fall 2025

Changes from Prior CIP:

Timing of expenditures has pushed out one year from the previous CIP.

Project Links:

- <https://www.arlingtonva.us/Government/Projects/Project-Types/Uncategorised/Water-Pollution-Control-Plant-Solids-Master-Plan>
- <https://arlingtonregen.com/>



8. RE-GEN PHASE III

Project Highlights:

- Re-Gen focuses on upgrades to the WPCP's solids treatment facilities to provide long-term resource recovery and prioritize safe and sustainable operations that provide quality end products for use in our community. The program was broken into three phases for implementation over a number of years. Phase I was completed in 2024.
- Re-Gen Phase III includes implementation of Thermal Hydrolysis Pretreatment followed by Anaerobic Digestion (THP/AD), as well as replacing or upgrading the remaining solids handling equipment, as recommended in the Solids Master Plan. This will result in a higher quality biosolids product suitable for gardens, forests, farms, and lawns.
- Methane from the digestion process will be used to produce renewable natural gas (RNG). Gas handling facilities will be constructed to optimize the utilization of the RNG.
- The scope also includes rehabbing the existing gravity thickeners to renew their service life.

Associated Plan(s):

Community Energy Plan
WPCP Master Plan

Neighborhood(s):

Arlington Ridge
Aurora Highlands

Project Links:

- <https://www.arlingtonva.us/Government/Projects/Project-Types/Uncategorised/Water-Pollution-Control-Plant-Solids-Master-Plan>
- <https://arlingtonregen.com/>

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity. Other Previously Approved Funds include existing PAYG balances.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
New Bond Issue				7,685	18,055						25,740
Other Funding	2,925	9,865	10,700	8,600	3,700						35,790
Previous Funding											
Authorized but Unissued Bonds	13,595	48,165	52,225	34,290							148,275
Other Previously Approved Funds	680										680
Total Funding	17,200	58,030	62,925	50,575	21,755	0	0	0	0	0	210,485
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Anticipated FTEs (+/-)		2	2	2	2						8
Personnel (\$)		230	460	750	1,030	1,082	1,136	1,192	1,252	1,315	8,447
Total Impact	0	232	462	752	1,030	1,082	1,136	1,192	1,252	1,315	8,447

Critical Milestones:

- Design & Construction Winter 2024 (3Q FY2024) – Spring 2029

Changes from Prior CIP:

Funding has increased based on current design efforts and reflects cost growth in commodities affecting Re-Gen. Program has been delayed approximately one year.



9. SECONDARY CLARIFIERS

Project Highlights:

- Rehabilitation and/or replacement of three secondary clarifiers, originally built in the 1960s, will restore the tanks to full working condition.
- The timeline for this project has been pushed out due to existing adequate capacity within the six available secondary clarifiers with respect to current plant flows.

Associated Plan(s):

WPCP Master Plan

Neighborhood(s):

Arlington Ridge
Aurora Highlands

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
New Bond Issue							945	4,290	6,435	3,440	15,110
Other Funding							195	880	1,320	705	3,100
Previous Funding											
Total Funding	0	0	0	0	0	0	1,140	5,170	7,755	4,145	18,210
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Changes from Prior CIP:

Timing of expenditures: nine years later than the previous CIP.



10. USACE COASTAL STORM RESILIENCY

Project Highlights:

- The U.S. Army Corps of Engineers (USACE) is conducting a study to reduce long-term coastal flood risk to vulnerable populations, properties, infrastructure, and environmental and cultural resources in Northern Virginia within the Middle Potomac River watershed.
- The project will study a potential floodwall that would be constructed along the northern bank of Four Mile Run between the Four Mile Run bike trail and the WPCP.

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity. Other previously approved funds include existing PAYG balances. Future assets in this program may be owned by the County or the USACE.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
New Bond Issue							4,730				4,730
Other Funding	15						970				985
Previous Funding											
Other Previously Approved Funds	185										185
Total Funding	200	0	0	0	0	0	5,700	0	0	0	5,900
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Changes from Prior CIP:

The project is new to the FY 2025 – FY 2034 CIP.



11. WPCP MAINTENANCE CAPITAL

Project Highlights:

- Funding covers a wide variety of one-to-one capital replacements and capital maintenance associated with the Water Pollution Control Plant's assets, including items such as HVAC overhauls, major equipment rehabilitation or replacements, and capital repairs to process structures such as tanks or pipes.

Associated Plan(s):

Community Energy Plan

Neighborhood(s):

Arlington Ridge
 Aurora Highlands

Funding Notes: A portion of the annual funding will be from infrastructure availability fees (developer contributions). Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity. Other previously approved funds include existing PAYG balances.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Developer Contributions	485	665	690	715	715	735	735	865	1,950	2,010	9,565
PAYG		540	1,085	1,120	1,120	1,155	1,155	1,085			7,260
Other Funding	340	350	365	375	375	390	390	400	400	410	3,795
Previous Funding											
Other Previously Approved Funds	1,175	515									1,690
Total Funding	2,000	2,070	2,140	2,210	2,210	2,280	2,280	2,350	2,350	2,420	22,310
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Changes from Prior CIP:

No significant change from the previous CIP.



12. WPCP TECHNOLOGY ENHANCEMENTS

Project Highlights:

- This program includes a comprehensive suite of projects to address needed upgrades to the WPCP's Process Control System (PCS) and associated technology infrastructure.
- Technology upgrades are necessary to prevent failures, improve reliability, and protect the Water Pollution Control Plant from potential cyber-security threats.

Neighborhood(s):
VARIOUS

Funding Notes: Other funding includes Inter-Jurisdictional (IJ) revenue. Each IJ Partner's portion of the cost is based on its reserved capacity. Other previously approved funds include existing PAYG balances.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG		1,125	445	455	455	475	475	485	485	500	4,900
Other Funding	595	350	90	95	95	95	95	100	100	105	1,720
Previous Funding											
Other Previously Approved Funds	2,905	595									3,500
Total Funding	3,500	2,070	535	550	550	570	570	585	585	605	10,120
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Changes from Prior CIP:

FY 2025 and FY 2026 expenditures reflect an increase due to current priorities.