Proposed Capital Improvement Plan (CIP)

FY 2027 – FY 2036

Submission of a 10-Year Plan for Utilities

May 2026

ARLINGTON
VIRGINIA

Utilities Overview

Guiding Principles

- System resiliency, redundancy, and sustainability
- Reinvestment in infrastructure

Guiding Plans and Commitments

- Water Distribution System Master Plan (2014)*
- Water Supply Resiliency Report (2023)
- Sanitary Sewer Collection System Plan (2024)
- Water Pollution Control Plant Solids Master Plan (2018)
- Investments at Washington Aqueduct & DC Water's Blue Plains Advanced Wastewater Treatment Plant

**Currently being updated*

Overview

Re-Gen

Source water resiliency

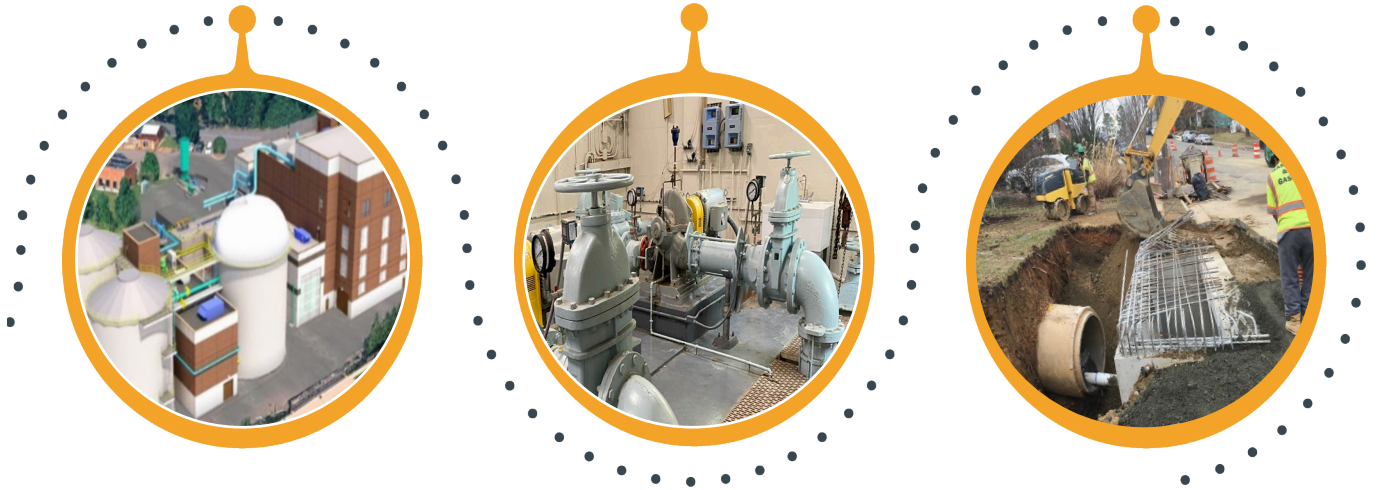
Maintain and modernize our system

Address future risk

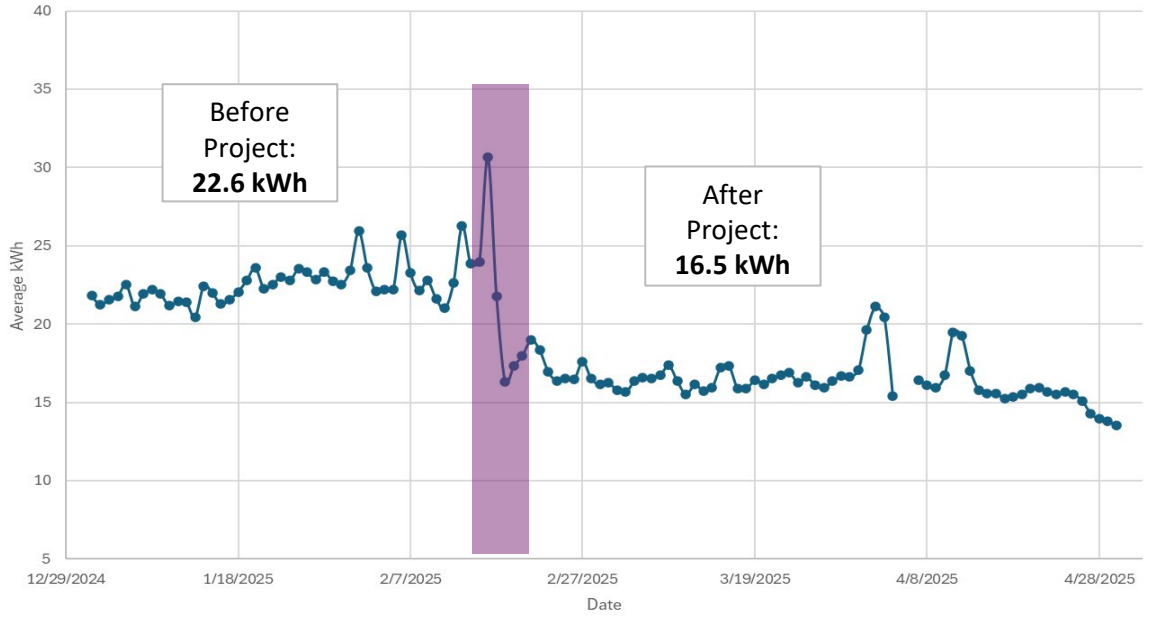
Program	10-Year ($000s)
Water-Sewer Maintenance Capital	**408,375**
Sewer Improvements	**2,850**
Water Distribution	**182,970**
Water Pollution Control Plant Capital Sustainment	**377,520**
Total **(before implementation adjustment)**	**971,715**

Environmental Sustainability

- System design and operation maximize the use of gravity, less pumping needed
- Maintenance capital projects replace aging equipment with more efficient equipment and materials
- Re-Gen will recover energy from wastewater stream and be net energy positive



Four Mile Run Pump Station Average Energy Use

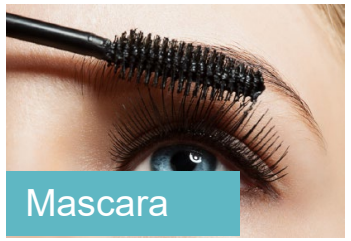


Per- and Polyfluoroalkyl substances (PFAS)

A large family of human-made chemicals increasingly linked to harmful health outcomes.

Durable chemicals found in **common household and workplace products** that repel water, resist stains, prevent sticking, or last a long time.

Industry



Environment and Human Exposure

Other sources: manufacturing, industrial activities, tire shine, furniture, clothing, electronics, lipstick, nail polish, stain guards, shampoo and dental floss

Per- and Polyfluoroalkyl Substances (PFAS)

A large family of human-made chemicals increasingly linked to harmful health outcomes.

Drinking Water

- Testing since 2021
- All sampling results below federal regulatory limits
- With Washington Aqueduct, working group to discuss future treatment

Wastewater

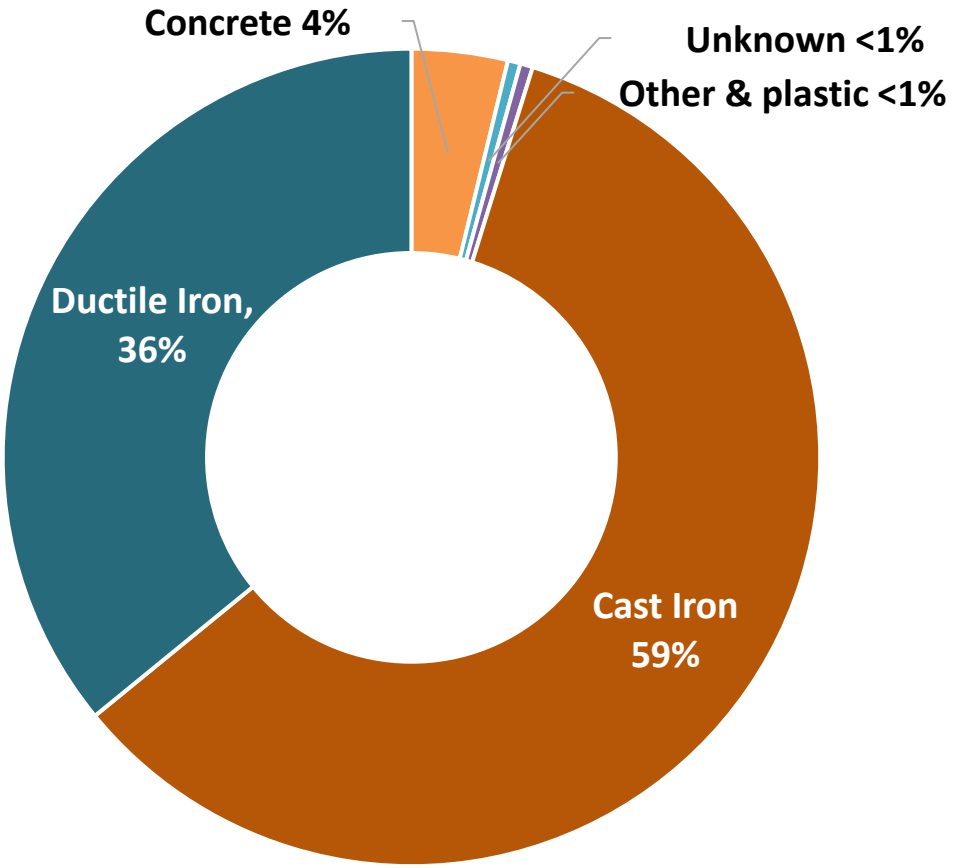
- Low levels relative to industry benchmarks
- State regulations on biosolids start January 2027
  - Recent biosolids testing results are below regulated levels
- Participating in research on emerging technologies for PFAS removal
- Monitoring regional facility for advanced biosolids treatment

County's proactive approach:

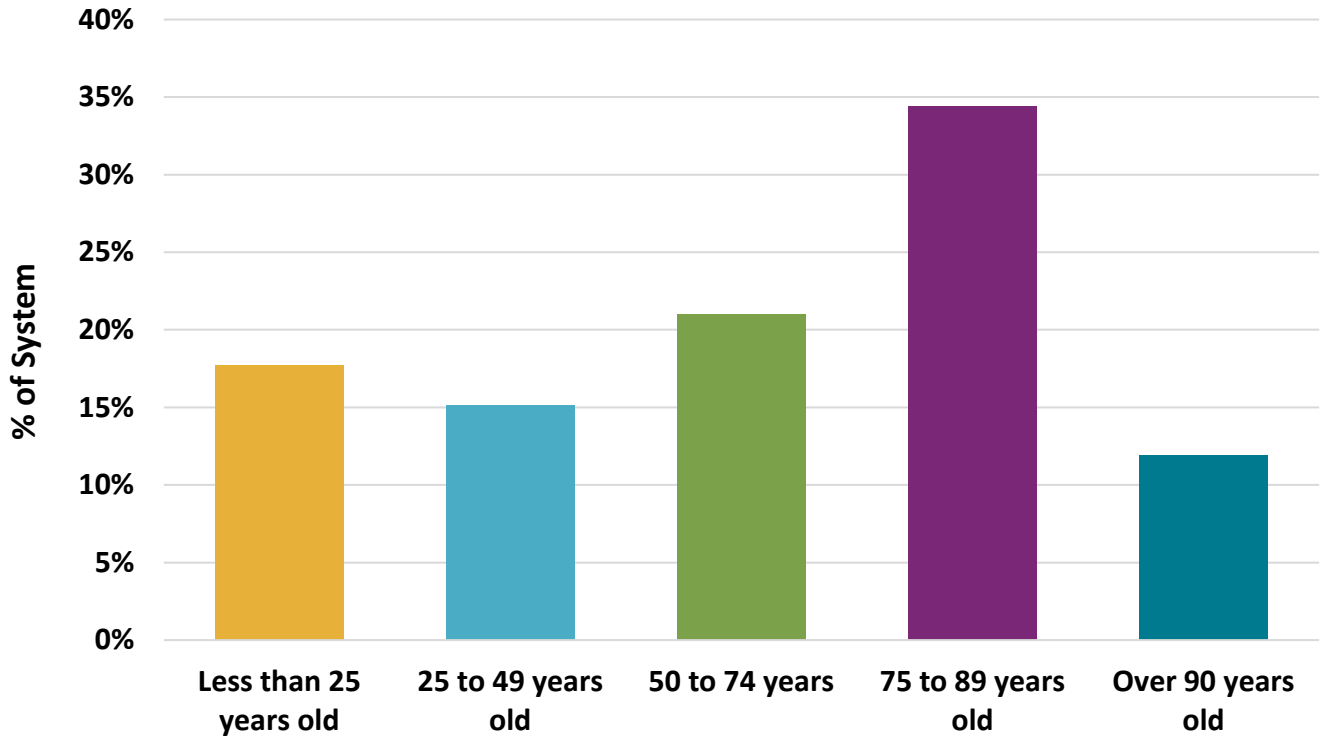
- ✓ Regular, ongoing monitoring for common PFAS.
- ✓ Tracking regulatory developments.
- ✓ Supporting research.
- ✓ Educating to encourage source control / advocating source control.

Water Assets by Age

Water Mains by Material



Small Diameter (12” and smaller) Water Main Age



**Targeted replacement schedule of 1% of the water distribution system per year*

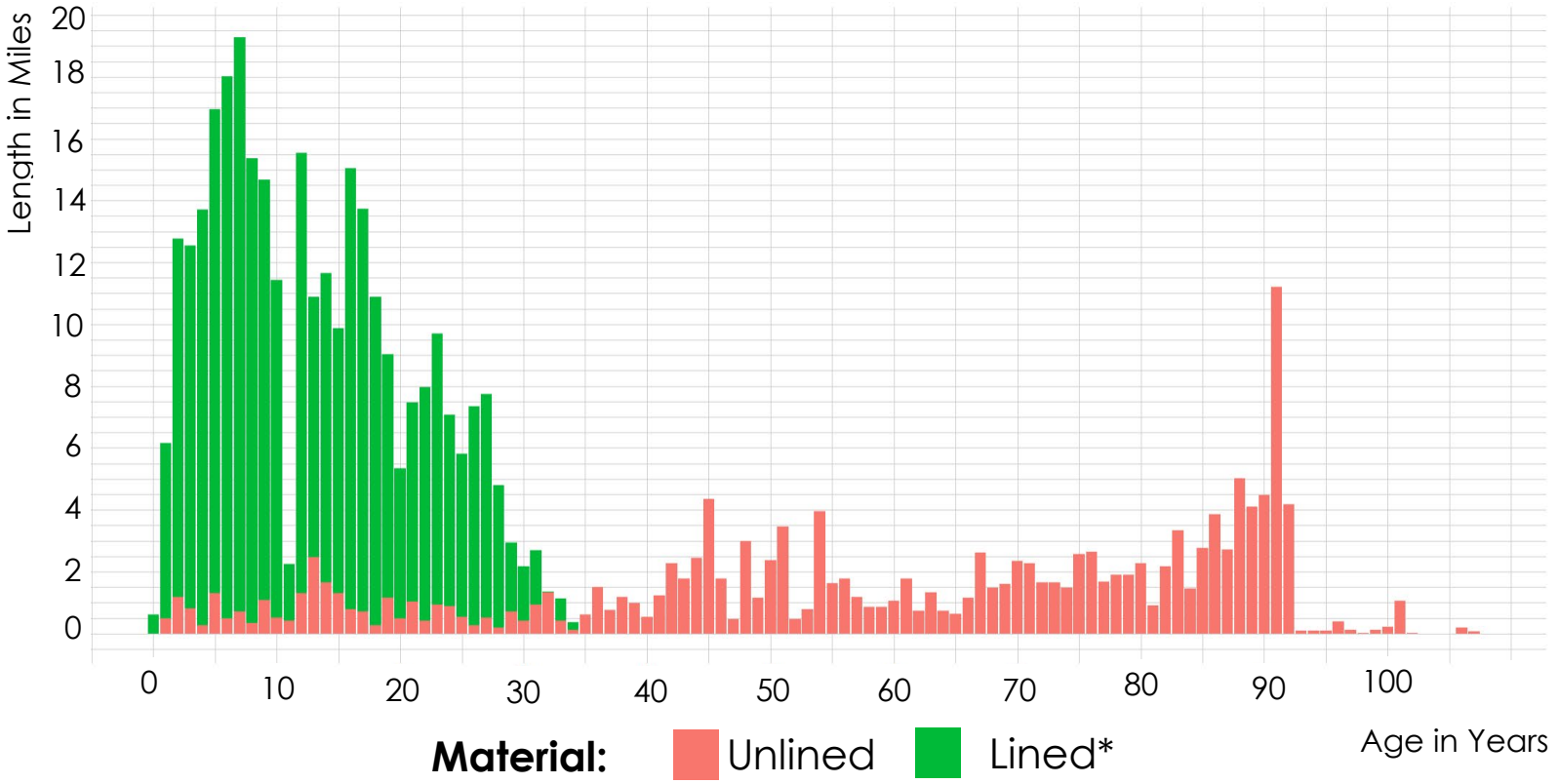
46% of the distribution system is 75+ years old

Sanitary Sewer Collection System Plan

Key initiatives:

- Proactive maintenance programs to ensure system reliability and capacity
- Accelerate rehabilitation of large diameter (15" & larger) sewers
- Rebooted manhole rehab program
- Stream crossing inspection program
- Improved data and asset management
- Updated design standards & specs

Total Length (in Miles) by Age of Arlington County's Sewer Mains



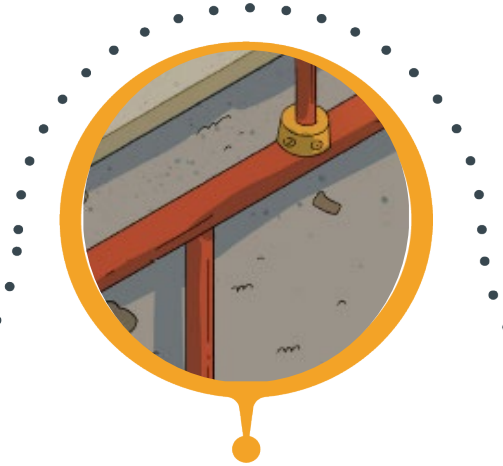
459 Miles of Sewer Mains

* once a pipe is lined, its age starts at 0 and appears in green

Utilities CIP Programs

Water-Sewer Maintenance Capital

Capital maintenance of water system, sanitary sewer collection system, and capital contributions to the Washington Aqueduct



Water Distribution

Includes completing sections of new water main in conjunction with development, pump station improvements, and water resiliency and redundancy projects

Sanitary Sewer Improvements

Small segments of sewer main and other work done in conjunction with development work

Water Pollution Control Plant

Projects that rehabilitate, replace, and/or upgrade infrastructure at the Plant and off-site stations

Highlights of Completed Projects Since Last CIP

N Lexington St Water & Sewer Improvements

Fort Barnard Water Tank Rehabilitation

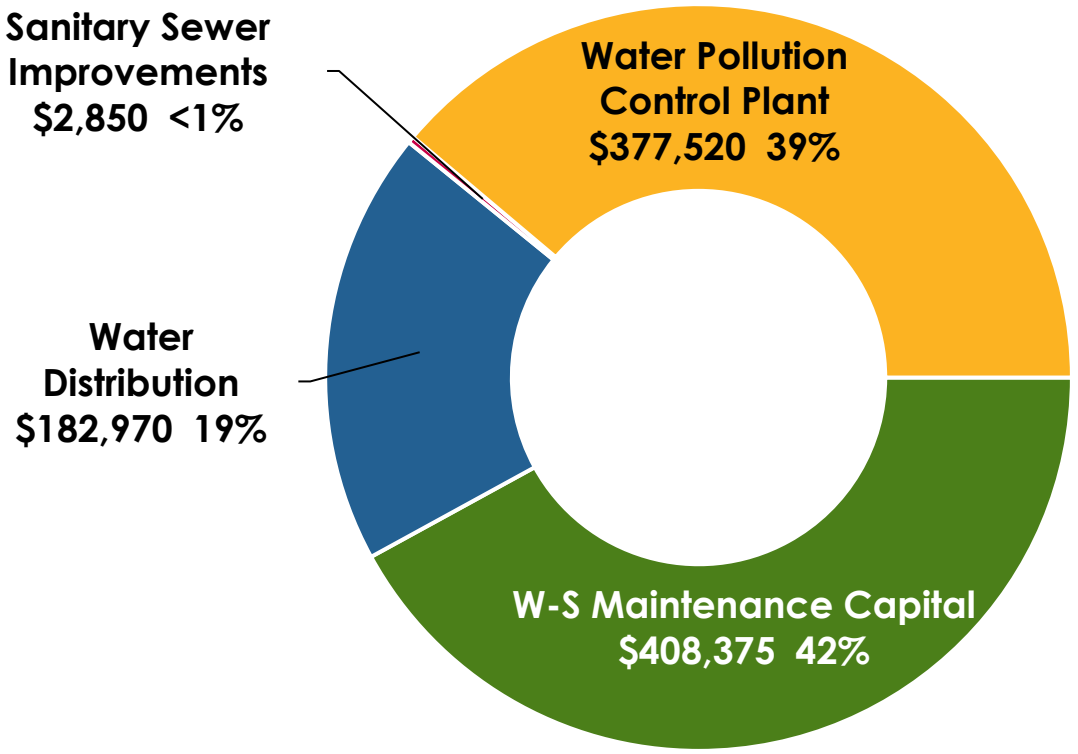
Fiberglass Reinforced Plastic Chemical Tanks Replacement

Sodium Hypochlorite Fill Station Rehabilitation

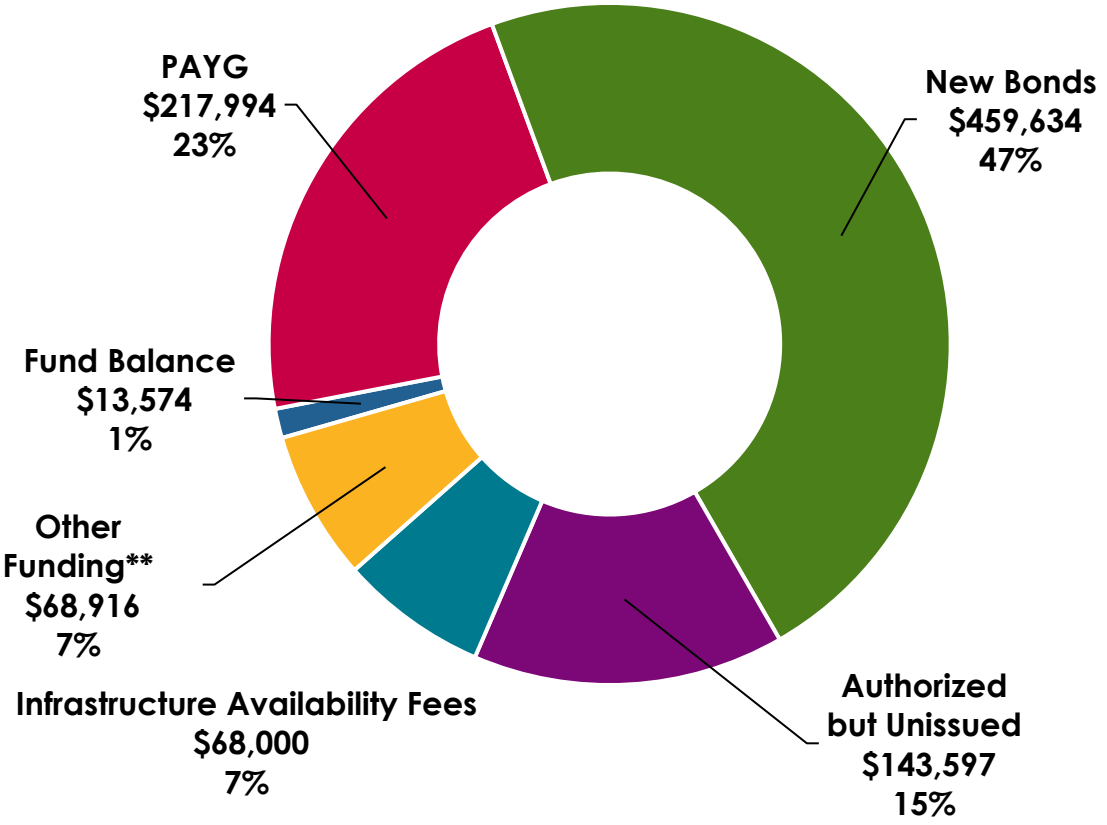
Programs & Funding Sources

$972M* over 10 years

Program Totals ($000s)



Funding Sources ($000s)



* Before Implementation Adjustment

** Other Funding includes interest, grants ($750k), and General Fund and Inter-Jurisdictional Partner contributions

FY 2027-2036 CIP – W-S Maintenance Capital

Water Main Replacements Program

Total 10-year CIP: $109.0M
Comp Plan or Strategic initiative:
Water Distribution Master Plan

Community benefits:
- Service reliability
- Non-revenue water loss reduction
- Improved water quality

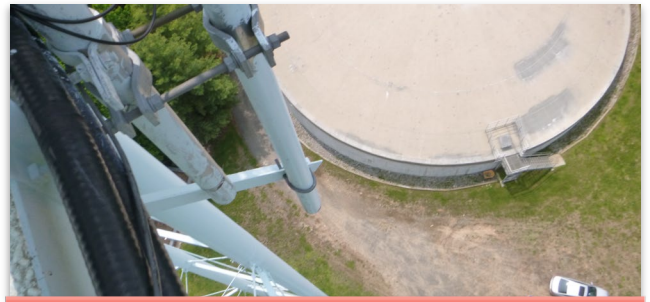
Related Projects:
- Water Main Cleaning & Lining

Sewer Force Mains (Gulf Run Force Main)

Total 10-year CIP: $3.2M
Comp Plan or Strategic initiative:
Sanitary Sewer Collection System Plan

Community benefits:
- Increased capacity to serve future demands
- Increased redundancy for the Gulf Run Lift Station
- Improved O&M

Related Projects:
- WPCP Maintenance Capital



Water Tank Rehabilitation

Total CIP: $3.8M
Comp Plan or Strategic initiative:
Water Distribution Master Plan

Community benefits:
- Improved water quality
- Corrosion resistant
- Extend service life 30 years

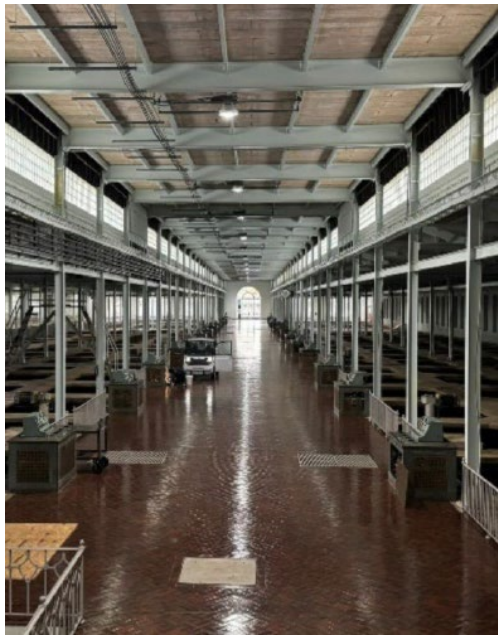
Related Projects:
- Pump Station Rehabilitation
- Pump Station Improvements

Washington Aqueduct

Total 10-Year CIP: $151.5M

- ~$8-9M/year for base funding
- Possibility to leverage federal borrowing/T-Notes (instead of County debt)
- Additional notional funding included in FY32-36 for advanced treatment
- Risks: DC Water's attempt to purchase

Old Conduit

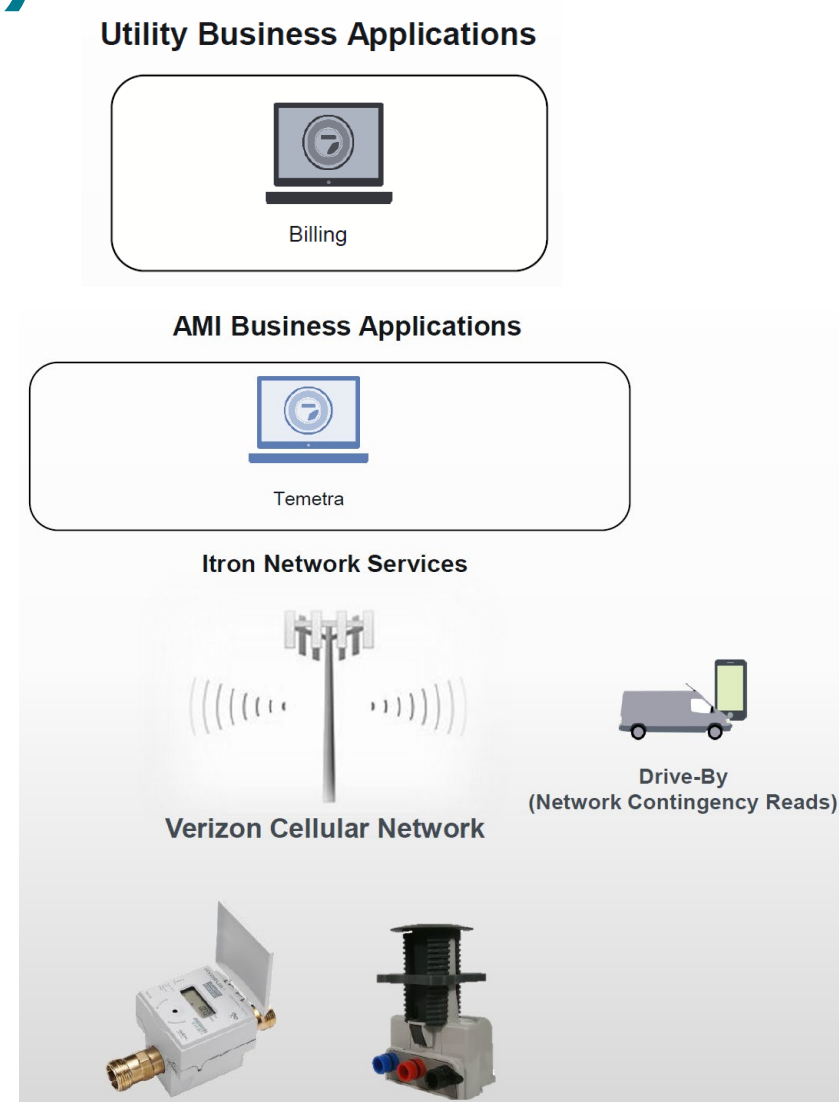


E Filter Building

Technology Enhancements: Advanced Metering Infrastructure (AMI) Pilot

Multi-year program to transition the County from Automated Meter Reading to AMI

- **FY24 – FY26 Pilot Program**
- **FY26 – FY27 Commercial Transition**
- **Transition Residential over 4 years: FY28 – FY31**
  - Includes meter replacement costs for residential meters approaching their end-of-service life



Benefits

- Real-time monitoring and reporting of water usage
- Water loss reduction
- Reduced carbon footprint by reducing vehicle miles traveled (VMT)

Total Budget = $12M

Sewer - Large Diameter Main Rehabilitation

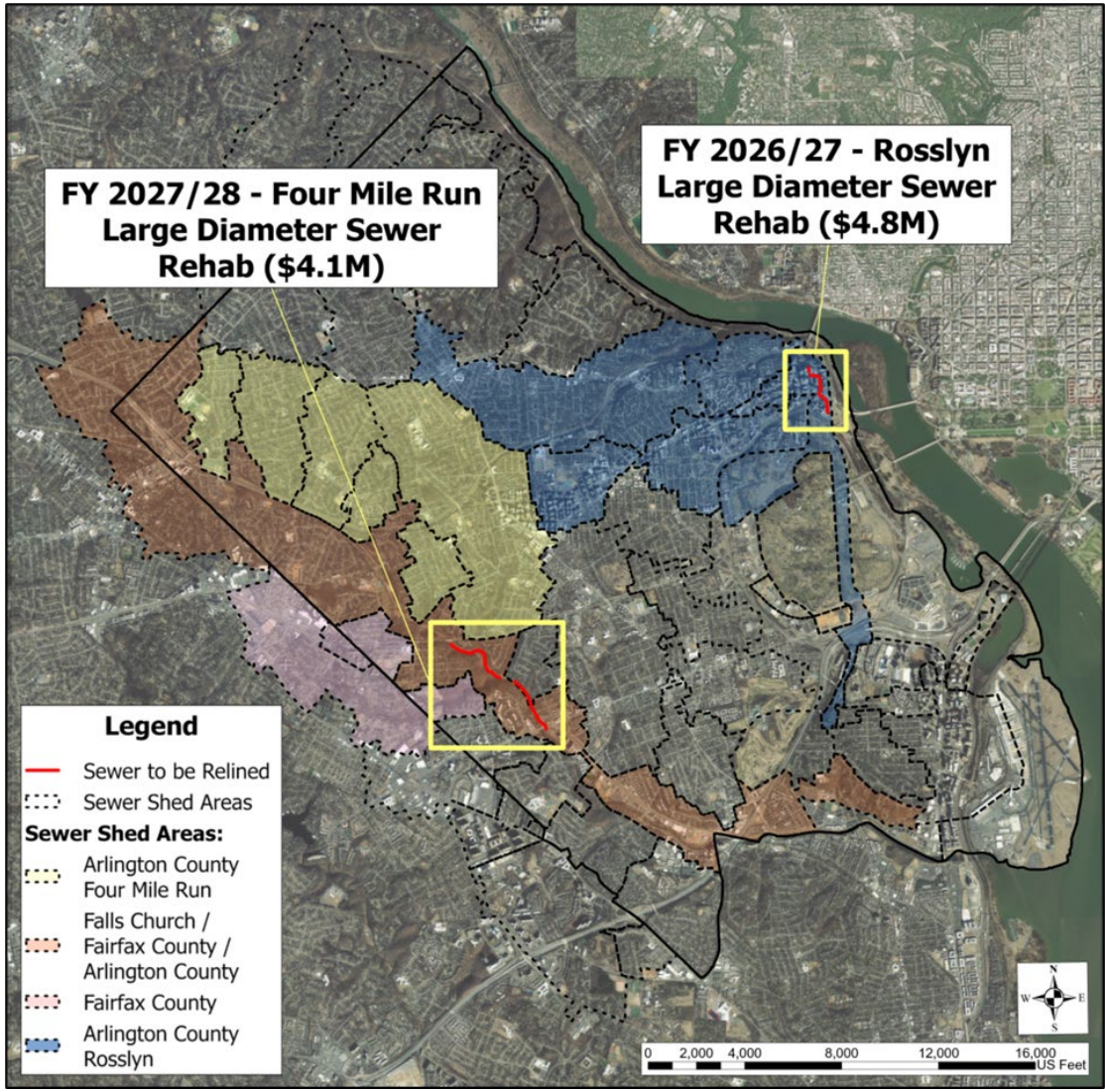
Federal Grants Projects for Large Diameter Sewer

Comprehensive Plan Goal

Maintenance of sewage collection system

- **Rosslyn** – originally planned FY25, Construction contract executed in Feb 2026
  $750k HUD grant, FY26-27 construction

- **Four Mile Run –** originally planned FY26; will follow Rosslyn in FY27
  $750k HUD grant



FY 2027-2036 CIP – W-S Maintenance Capital

WATER & SEWER			
Project Name	**Total 10-Year Budget ($000s)**	**Comp Plan or Strategic Initiative**	**Project Description**
Water-Main Cleaning and Lining Program	15,400	Water Distribution Master Plan	Rehabilitates small diameter (8-inch and below) pre-1960s cast iron water mains
Water-Large Diameter Main & Valve Rehabilitation	8,955	Water Distribution Master Plan	Rehabilitates large diameter (20-36-inch) water mains and rehab/replacement of 16-inch or larger valves
Water-Small Diameter Valve Rehabilitation & Replacements	4,160	Water Distribution Master Plan	Rehabilitates and/or replaces small diameter water valves
Water-Large Meter Vault Rehabilitation & Replacements	2,270	Water Distribution Master Plan	Replaces the piping and valves located within commercial meter vaults. Will also rehabilitate and/or replace the structural walls and frame & cover of the vault as necessary
Water-Pump Station Rehabilitation	1,545	Water Distribution Master Plan	Maintenance capital and rehabilitation of various water pump stations

FY 2027-2036 CIP – W-S Maintenance Capital

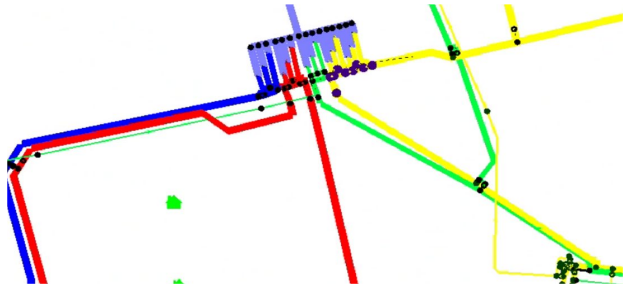
WATER & SEWER			
Project Name	**Total 10-Year Budget ($000s)**	**Comp Plan or Strategic Initiative**	**Project Description**
Sewer Main Rehabilitation & Replacement Program	22,700	Sanitary Sewer Collection System Plan	Replaces smaller diameter sewer mains when lining is not viable
Sewer - Infiltration & Inflow	18,575	Sanitary Sewer Collection System Plan	Lines the small diameter (<15-inch) sanitary sewer lines to eliminate the intrusion of rain, ground, or surface water
Manhole Rehabilitation	11,350	Sanitary Sewer Collection System Plan	Rehabilitates sanitary sewer manholes through epoxy lining and structural rebuilds
Water/Sewer Frames & Covers	10,310	Water Distribution Master Plan; Sanitary Sewer Collection System Plan	Adjusts the elevation of water valves and/or water/sewer manhole frames and covers in conjunction with the annual paving program
Trades Center Equipment & Improvements	1,545	Community Energy Plan, Water System Master Plan	Funding for equipment and improvements at the Trades Center in support of Utilities operations

W-S Maintenance Capital ($000s)*

Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	10-Year Estimate
Water Main Rehab/Replacement	8,000	8,240	15,900	9,265	14,885	9,775	10,030	10,285	11,160	11,430	**108,970**
Water Main Cleaning & Lining	1,600	1,650	1,695	1,745	1,790	1,840	1,890	1,935	620	635	**15,400**
Large Diameter WM & Valve Rehab/Replace	950	775	795	820	840	1,095	885	910	930	955	**8,955**
Small Diameter Valve Rehab/Replace	300	310	320	325	335	345	355	365	745	760	**4,160**
Large Meter Vault Rehab/Replacement	200	205	210	220	225	230	235	240	250	255	**2,270**
Sewer Main Rehab/Replace; Sewer Force Mains	3,600	2,215	2,280	2,345	2,410	2,475	2,535	2,600	2,665	2,730	**25,855**
Water Tank Rehabilitation	100	2,165	25	1,090	30	115	30	120	30	125	**3,830**
Pump Station Rehabilitation	250	825	55	55	55	60	60	60	60	65	**1,545**
Infiltration & Inflow	2,500	2,575	2,650	2,725	2,800	2,875	590	605	620	635	**18,575**
Large Diameter Sewer Main Rehab	4,140	1,650	4,875	3,925	110	3,050	2,360	2,515	2,070	5,080	**29,775**
WS Frames & Covers; Manhole Rehab	1,750	1,805	1,855	1,910	2,240	2,300	2,360	2,420	2,480	2,540	**21,660**
Water-Sewer Technology	550	3,295	3,075	3,270	3,530	115	120	120	125	125	**14,325**
Trades Center Equip & Improvements	-	1,545	-	-	-	-	-	-	-	-	**1,545**
Washington Aqueduct Capital	7,800	8,035	8,270	8,500	8,735	20,700	21,240	21,780	22,320	24,130	**151,510**
Total	**31,740**	**35,290**	**42,005**	**36,195**	**37,985**	**44,975**	**42,690**	**43,955**	**44,075**	**49,465**	**408,375**

*excluding implementation adjustment

FY 2027-2036 CIP – Water Distribution



Finished Water Reliability & Interconnections

Total 10-year CIP: $94.0M
Comp Plan or Strategic initiative:
Water Supply Resiliency Report

Community benefits:
- Resiliency and redundancy
- Ensures availability of drinking water during emergencies

Expected Timeline:
- FY23-FY27 Planning & Design
- FY28-FY31 Construction

Regional Source Water Resiliency

Total 10-year CIP: $63.2M
Comp Plan or Strategic initiative:
Potomac Secondary Source Feasibility Study

Community benefits:
- Regional effort for off-river storage, including federal funding
- Mitigates severe water shortages due to environmental impacts and/or source contamination
- Placeholder funding in FY32 and FY36

FY 2027-2036 CIP – Water Distribution Projects

WATER & SEWER			
Project Name	**Total 10-Year Budget ($000s)**	**Comp Plan or Strategic Initiative**	**Project Description**
Transmission Mains Resiliency	13,700	Water Distribution Master Plan	This program provides redundant water mains to back up existing transmission capacity.
Water-Improvements with Development	6,440	Water Distribution Master Plan	This program addresses opportunities to enhance the water distribution system in conjunction with nearby developments.
Water - Pump Station Improvements	5,200	Water Distribution Master Plan	This program ensures the pumps, control systems, and emergency generators at the five water pump stations continue to operate reliably.
River Crossing Inspection	360	Water Distribution Master Plan	This program provides funding to perform a pipe diver inspection of existing 48" river crossing.

Water Distribution Projects ($000s)*

Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	10-Year Estimate
Water-Improvements with Development	500	515	530	1,310	560	575	590	605	620	635	**6,440**
Transmission Mains Resiliency	500	515	3,180	3,270	3,360	2,875	-	-	-	-	**13,700**
Pump Station Improvements	2,500	1,145	1,060	120	-	125	-	135	-	140	**5,225**
Finished Water Reliability & Interconnections	500	775	1,060	10,900	22,400	23,000	35,400	-	-	-	**94,035**
Regional Source Water Resiliency	-	310	-	-	-	5,750	-	-	-	57,150	**63,210**
River Crossing Inspection	-	360	-	-	-	-	-	-	-	-	**360**
Total	**4,000**	**3,620**	**5,830**	**15,600**	**26,320**	**32,325**	**35,990**	**740**	**620**	**57,925**	**182,970**

*excluding implementation adjustment

Sanitary Sewer Improvements Summary: $2.9M

Sewer – Improvements with Development Program

- Provides funding for small segments of new sewer main installation and other work directly associated with development.
- Provides for extension of sewer improvements along the remainder of a block where the developer is only responsible for work immediately on the frontage of the site.

($000s)	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35	FY 36	10 Year Total
Improvements with Development	250	260	265	275	280	290	295	305	310	320	2,850

*excluding implementation adjustment

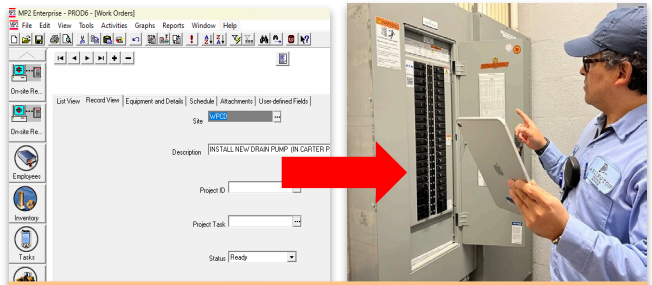
FY 2027-2036 CIP – WPCP Capital Sustainment

Activated Sludge Effluent Pump Station #1 (ASE1)

Total 10-year CIP: $8.7M

Community benefits:
- More efficient pumping infrastructure to handle a wide range of flows at the WPCP

Expected Timeline:
- FY26 Preliminary Engineering
- FY31 Design
- FY32-FY34 Construction



Asset Management System Replacement

Total 10-year CIP: $0.6M

Community benefits:
- Current software dates to 1990s and does not have modern functionality
- New software will help more proactively maintain the WPCP's assets in a state of good repair

Expected Timeline:
- FY24-FY27 Implementation

Gravity Thickener Rehab

Total 10-year CIP: $15.5M (Class 2 Estimate; Part of Re-Gen Phase 3)

Community benefits:
- Rehabilitates existing 1960s gravity sludge thickener tanks
- Provides better access to maintain equipment; separated spaces allow for improved safety
- Dedicated odor control system

Expected Timeline:
- FY26 Design
- FY27-FY30 Construction

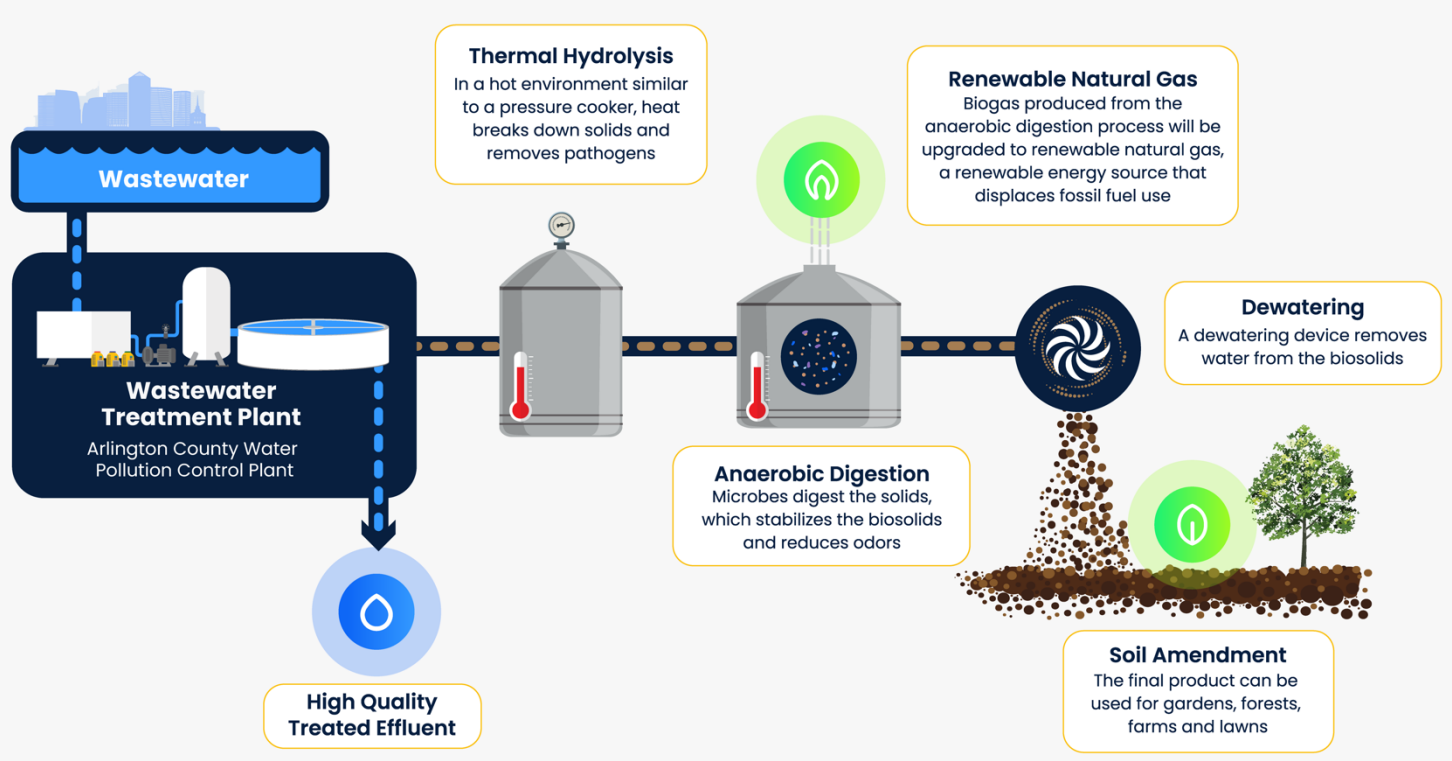
Re-Gen

ARLINGTON RE-GEN

Total budget: $307.6m (Phases 1, 2, and 3)
Total 10-year CIP: $261m (Phase 2, 3)

Estimated Completion: End of FY 2032
Comp Plan or Strategic Initiative: Solids Master Plan

- Significant investment and long-term sustainability in the Plant solids handling processes
- Addresses potential future regulatory changes while reducing community impacts
- Phase 1 completed in FY 2025.
- Contract with Design-Build team executed in early 2024.
  - Design in progress
  - Guaranteed Maximum Price (GMP) approval for construction expected to go to the Board in late 2026
- External stakeholder engagement ongoing to inform the community and gather feedback



Sustainability & Community Benefits

ARLINGTON RE-GEN

Fewer greenhouse gas emissions
5,700 metric tons per year reduced

Energy positive
20% more energy produced than consumed

Less chemical usage
Lime deliveries eliminated

Less truck traffic
Biosolids hauling cut in half

Less fossil fuel
Offsets 20,000 MMBtu per year

More resilient infrastructure

Re-Gen Supports 4 of the 6 Arlington Community Energy Plan Goals:

Increase energy and operational efficiency of all buildings	✓
Increase local energy supply and distribution efficiency in Arlington using District Energy	
Increase locally generated energy supply through use of renewable energy options	✓
Refine and expand transportation infrastructure and operations enhancements	✓
Integrate CEP goals into all County activities	✓
Advocate and support personal action through behavior change and effective education	

Re-Gen Open House 2025

Re-Gen Changes

- **Scope of work** is more defined as design has progressed.
  - Thermal hydrolysis process was moved inside building, digester support building went from octagonal to rectangular, etc.
- **Design decisions** (value engineering building reconfigurations, keeping existing process running while construction is ongoing) have lengthened the design phase by approximately 12 months.
- **Construction constraints** (tight site, sequencing constraints) have lengthened the construction phase by approximately 12 months.

Future Vision of the Plant

Post-construction design rendering

FY 2027-2036 CIP WPCP Capital Sustainment

WATER & SEWER		
Project Name	**Total 10-Year Budget ($000s)**	**Project Description**
WPCP Maintenance Capital	42,835	Capital replacements and capital maintenance associated with the Water Pollution Control Plant's assets
Blue Plains Capital Improvements	19,020	DC Water's Blue Plains Advanced Wastewater Treatment Plant processes a portion of Arlington County's sewage after transmission through Fairfax County mains
Secondary Clarifiers	19,040	Rehabilitation and/or replacement of three secondary clarifiers
WPCP Technology Enhancements	16,170	Projects to upgrade the WPCP's Process Control System and associated technology infrastructure
USACE Coastal Storm Resiliency	5,950	A potential floodwall between the Four Mile Run bike trail and the WPCP, managed by US Army Corps of Engineers
Grit System Upgrades	2,465	Rehabilitate/improve the grit collection and disposal system in the Preliminary Treatment Building
Odor Control	1,635	Projects to tightly control and limit odors by collecting and treating odorous air

WPCP Capital Sustainment Projects ($000s)

Project Name	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	10-Year
WPCP Maintenance Capital	5,740	7,105	4,980	6,540	3,305	3,795	3,185	2,660	2,730	2,795	**42,835**
Technology Enhancements	6,055	3,215	1,220	2,455	170	575	620	605	620	635	**16,170**
Asset Management System Replacement	625	-	-	-	-	-	-	-	-	-	**625**
Odor Control	-	515	530	-	280	-	-	-	310	-	**1,635**
Primary Clarifiers (Grit)	575	590	-	-	-	-	1,300	-	-	-	**2,465**
Secondary Clarifiers	-	-	-	-	-	-	1,180	5,325	8,185	4,350	**19,040**
Activated Sludge Effluent Pump Station #1 (ASE1)	-	-	-	-	1,120	2,875	4,130	605	-	-	**8,730**
USACE Coastal Storm Resiliency (Flood Wall)	200	-	-	-	-	5,750	-	-	-	-	**5,950**
Re-Gen, Phase 2	4,500	-	-	-	-	-	-	-	-	-	**4,500**
Re-Gen, Phase 3	42,150	63,200	62,200	62,000	25,000	2,000	-	-	-	-	**256,550**
Blue Plains Capital	1,705	2,585	2,890	2,490	2,095	1,420	890	1,555	1,610	1,780	**19,020**
Total	**61,550**	**77,210**	**71,820**	**73,485**	**31,970**	**16,415**	**11,305**	**10,750**	**13,455**	**9,560**	**377,520**

Utilities Program Summary: $829.6M

Program ($000s)*	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35	FY 36	10-Year Total
W-S Maintenance Capital	31,740	35,290	42,005	36,195	37,985	44,975	42,690	43,955	44,075	49,465	**408,375**
Water Distribution	4,000	3,620	5,830	15,600	26,320	32,325	35,990	740	620	57,925	**182,970**
Sanitary Sewer Improvements	250	260	265	275	280	290	295	305	310	320	**2,850**
WPCP Capital Sustainment	61,550	77,210	71,820	73,485	31,970	16,415	11,305	10,750	13,455	9,560	**377,520**
Sub-Total	**97,540**	**116,380**	**119,920**	**125,555**	**96,555**	**94,005**	**90,280**	**55,750**	**58,460**	**117,270**	**971,715**
Implementation Adj. 20%**	(10,180)	(10,635)	(11,545)	(12,710)	(14,310)	(18,400)	(18,055)	(11,150)	(11,690)	(23,455)	**(142,130)**
Total	**87,360**	**105,745**	**108,375**	**112,845**	**82,245**	**75,605**	**72,225**	**44,600**	**46,770**	**93,815**	**829,585**

* Costs shown are based on expenditure schedule. Some variances to funding schedule to accumulate sufficient funding and avoid rate spikes.
** 20% implementation adjustment is not applied to Re-Gen projects in FY27-36 CIP.

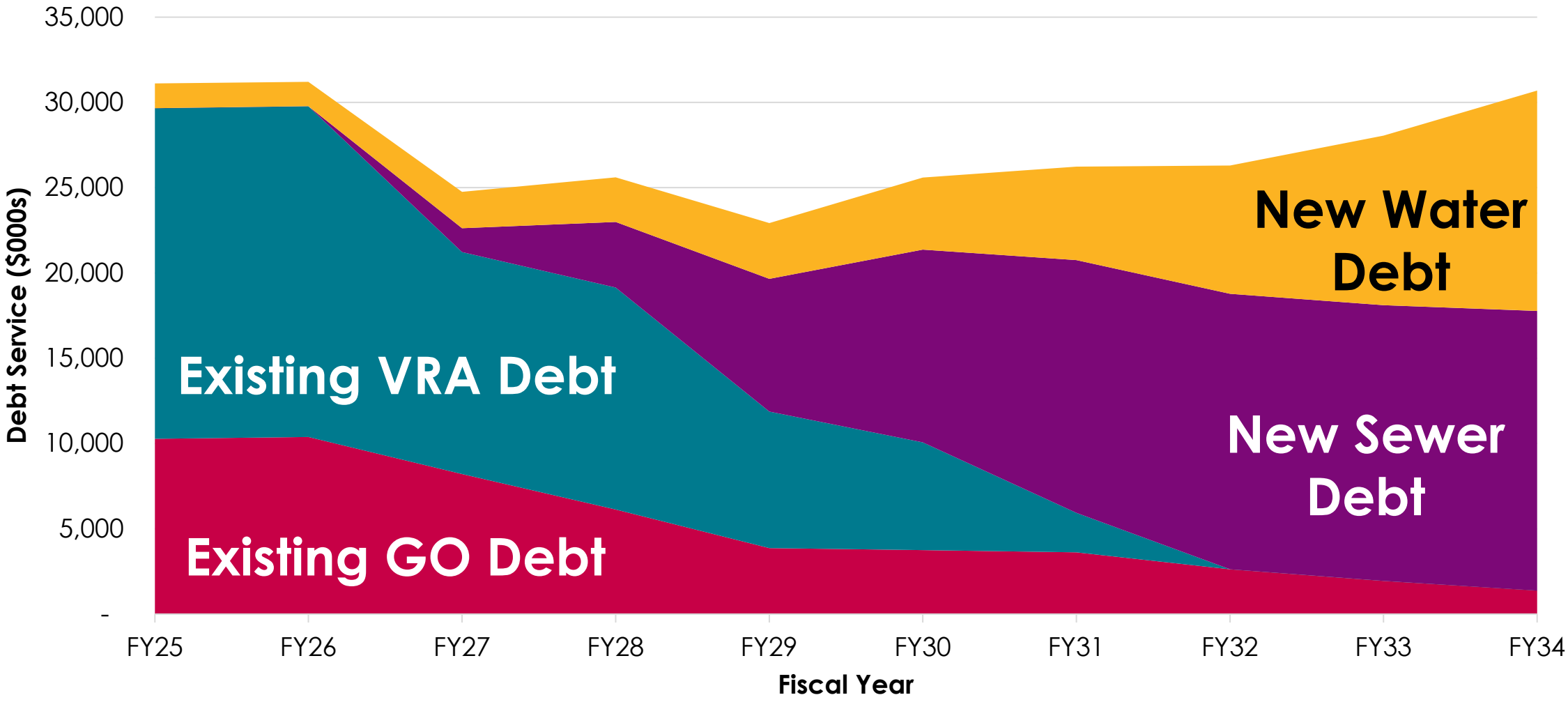
Program Summary ($000s)

	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35	FY 36	10 Year Total
New Funding											
Developer Contributions/ Infra. Availability Fees	6,300	6,500	6,500	6,700	6,700	6,900	6,900	7,100	7,100	7,300	**68,000**
Utilities PAYG	17,597	26,693	25,451	25,781	22,461	21,007	17,674	18,320	20,613	22,397	**217,994**
New Bond Issue	6,165	14,580	29,154	79,400	61,860	63,093	63,306	28,072	29,114	84,890	**459,634**
Other Funding	11,309	13,142	13,003	13,199	5,534	3,005	2,400	2,258	2,643	1,673	**68,166**
Subtotal New Funding	41,371	60,915	74,108	125,080	96,555	94,005	90,280	55,750	59,470	116,260	**813,794**
Previously Approved Funding											
Authorized but Unissued Bonds	44,354	52,956	46,287	-	-	-	-	-	-	-	**143,597**
Other Previously Approved Funds	12,315	2,009	-	-	-	-	-	-	-	-	**14,324**
Subtotal Previously Approved Funding	56,669	54,965	46,287	-	-	-	-	-	-	-	157,921
Subtotal Funding Sources	**98,040**	**115,880**	**120,395**	**125,080**	**96,555**	**94,005**	**90,280**	**55,750**	**59,470**	**116,260**	**971,715**
20% Implementation Adjustment	(10,280)	(10,535)	(11,640)	(12,615)	(14,310)	(18,400)	(18,055)	(11,150)	(11,895)	(23,250)	(142,130)
Total Funding	**87,760**	**105,345**	**108,755**	**112,465**	**82,245**	**75,605**	**72,225**	**44,600**	**47,575**	**93,010**	**829,585**

2026 Utilities Bond Referendum ($000s)

Utilities CIP Category	Projects/ Programs	Amount
W-S Maintenance Capital	Washington Aqueduct, Water Main Replacements, Water Tank Rehab, Trade Center Improvements	$20,745

Projected Utilities Fund Annual Debt Service



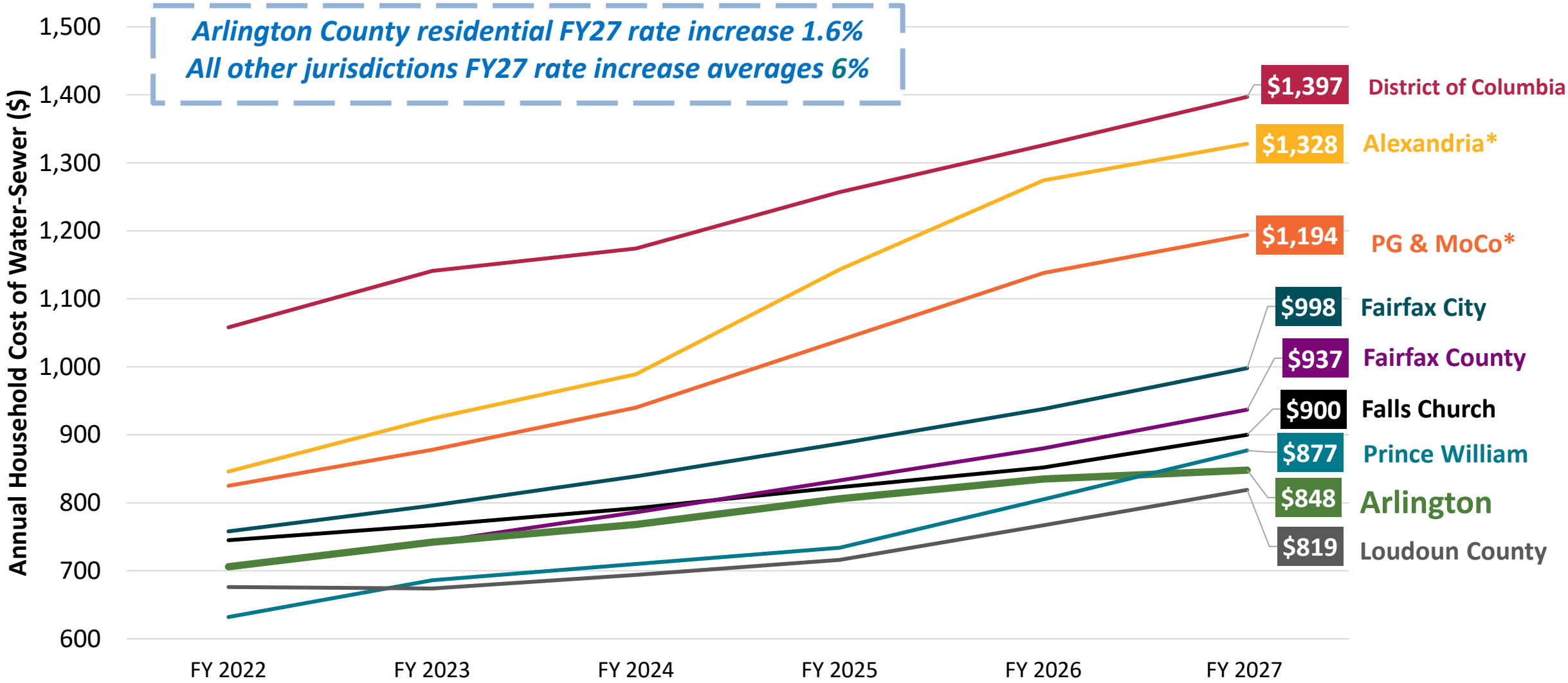
Utilities Rate 6-Year Forecast

	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032
W-S Projected Rate Increase from prior year*	1.5%	~5%	~5%	3-5%	4-6%	--
Annual increase to average homeowner using 48 Thousand Gallons (TG)	$17	~$40	$45	$30-40	$50-60	$--

** Rates are annually adopted by the County Board during the operating budget process. These are notional projections based on current economic conditions. Rate drivers include water consumption/ sales, personnel costs, chemicals, electricity, direct/ indirect/ overhead service charges, infrastructure investments, and alignment with financial policies.*

Residential Regional Comparison

Annual Typical Household Cost for Water & Sewer (48 TG)



Assumes 12TG/quarter normal usage; 11TG/quarter for Average Winter Water use
** Rate adoptions scheduled for June*

Future Rate Pressures, Issues, and Concerns

- Increasing construction costs
- Electricity Costs
- Finished Water Reliability and Regional Sourcewater Resiliency efforts
- PFAS
- Washington Aqueduct:
  - Restart of Advanced Treatment
  - Concerns about the future

Washington Aqueduct

Proposed Capital Improvement Plan (CIP)

FY 2027 – FY 2036

Submission of a 10-Year Plan for Utilities

May 2026

ARLINGTON
VIRGINIA